## CALIFORNIA ADOPTED THE FOLLOWING:

FINAL EXPRESS TERMS
FOR STATE AGENCY APPROVED CHANGES TO THE
2014 NATIONAL ELECTRICAL CODE (NEC)
FOR THE 2016 CALIFORNIA ELECTRICAL CODE (CEC) CALIFORNIA CODE OF
REGULATIONS (CCR), TITLE 24, PART 3

- THE CALIFORNIA BUILDING STANDARDS COMMISSION (BSC)
- THE DIVISION OF THE STATE ARCHITECT STRUCTURAL SAFETY (DSA-SS)
- THE DEPARTMENT OF HOUSING AND COMMUNITY DEVELOPEMENT (HCD)
- THE OFFICE OF STATE WIDE HEALTH PLANNING AND DEVELOPMENT (OSHPD)
- THE OFFICE OF THE STATE FIRE MARSHAL (SFM)

Disclaimer: All Final Express Terms for the above mentioned agencies are available and were obtained from the Building Standards Commission at the following link: http://www.bsc.ca.gov/Rulemaking/adoptcycle/2015CodeAdoptionCycle/ApprovedStandardsDecember2015.aspxhttp://www.bsc.ca.gov/Rulemaking/adoptcycle/2015CodeAdoptionCycle/ApprovedStandardsDecember2015.aspxhttp://www.bsc.ca.gov/Rulemaking/adoptcycle/2015CodeAdoptionCycle/ApprovedStandardsDecember2015.aspxhttp://www.bsc.ca.gov/Rulemaking/adoptcycle/2015CodeAdoptionCycle/ApprovedStandardsDecember2015.aspxhttp://www.bsc.ca.gov/Rulemaking/adoptcycle/2015CodeAdoptionCycle/ApprovedStandardsDecember2015.aspxhttp://www.bsc.ca.gov/Rulemaking/adoptcycle/2015CodeAdoptionCycle/ApprovedStandardsDecember2015.aspxhttp://www.bsc.ca.gov/Rulemaking/adoptcycle/2015CodeAdoptionCycle/ApprovedStandardsDecember2015.aspxhttp://www.bsc.ca.gov/Rulemaking/adoptcycle/2015CodeAdoptionCycle/ApprovedStandardsDecember2015.aspxhttp://www.bsc.ca.gov/Rulemaking/adoptcycle/2015CodeAdoptionCycle/ApprovedStandardsDecember2015.aspxhttp://www.bsc.ca.gov/Rulemaking/adoptcycle/2015CodeAdoptionCycle/ApprovedStandardsDecember2015.aspxhttp://www.bsc.ca.gov/Rulemaking/adoptcycle/2015CodeAdoptionCycle/ApprovedStandardsDecember2015.aspxhttp://www.bsc.ca.gov/Rulemaking/adoptcycle/2015CodeAdoptionCycle/ApprovedStandardsDecember2015.aspxhttp://www.bsc.ca.gov/Rulemaking/adoptcycle/2015CodeAdoptionCycle/ApprovedStandardsDecember2015.aspxhttp://www.bsc.ca.gov/Rulemaking/adoptcycle/2015CodeAdoptionCycle/ApprovedStandardsDecember2015.aspxhttp://www.bsc.ca.gov/Rulemaking/ApprovedStandardsDecember2015.aspxhttp://www.bsc.ca.gov/Rulemaking/adoptcycle/ApprovedStandardsDecember2015.aspxhttp://www.bsc.ca.gov/Rulemaking/adoptcycle/ApprovedStandardsDecember2015.aspxhttp://www.bsc.ca.gov/Rulemaking/adoptcycle/ApprovedStandardsDecember2015.aspxhttp://www.bsc.ca.gov/Rulemaking/adoptcycle/ApprovedStandardsDecember2015.aspxhttp://www.bsc.ca.gov/Rulemaking/ApprovedStandardsDecember2015.aspxhttp://www.bsc.ca.gov/Rulemaking/App

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(HCD 01/14)

4. THE OFFICE OF STATE WIDE HEALTH PLANNING AND DEVELOPMENT

(OSHPD 01/14)

5. THE OFFICE OF THE STATE FIRE MARSHAL

(SFM 01/14)

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# FINAL EXPRESS TERMS FOR PROPOSED BUILDING STANDARDS OF THE CALIFORNIA BUILDING STANDARDS COMMISSION (CBSC)

REGARDING PROPOSED CHANGES TO
THE 2014 NATIONAL ELECTRICAL CODE (NEC)
WITH EXISTING AMENDMENTS INTO
THE 2016 CALIFORNIA ELECTRICAL CODE (CEC)
CALIFORNIA CODE OF REGULATIONS, TITLE 24, PART 3

(The State agency shall draft the regulations in plain, straightforward language, avoiding technical terms as much as possible and using a coherent and easily readable style. The agency shall draft the regulation in plain English. A notation shall follow the express terms of each regulation listing the specific statutes authorizing the adoption and listing specific statutes being implemented, interpreted, or made specific. (PART 1 – ADMINISTRATIVE CODE)

### LEGEND FOR EXPRESS TERMS

- 1. Existing California amendments or code language being modified are in italics when they appear in the model code text: All such language appears in *italics*, modified language is <u>underlined</u>.
- 2. New California amendments: All such language appears underlined and in italics.
- 3. Repealed text: All such language appears in strikeout.

### **FINAL EXPRESS TERMS**

The Building Standards Commission (BSC) proposes to adopt the 2014 edition of the National Electrical Code (NEC) for codification and effectiveness into the 2016 edition of the California Electrical Code (CEC) as presented on the following pages, including any necessary amendments. BSC further proposes to:

- Repeal the 2011 edition of the NEC and the 2013 CEC;
- Repeal amendments to the model code that are no longer necessary, repeal or amend building standards that are not addressed by a model code;
- Relocate or codify existing adopted and necessary amendments to the model code into the format
  of the model code proposed for adoption, the action of which has no regulatory effect; adopt new
  necessary amendments to the model code proposed for adoption; and/or
- Adopt new building standards that are not addressed by the model code proposed for adoption

### PROPOSED REPEALS, ADOPTIONS AND NEW AMENDMENTS

<u>ITEM 1</u>. BSC proposes to bring forward existing California amendments in the Preface from the 2013 California Electrical Code for adoption into the 2016 edition of the California Electrical Code with additional amendments as follows:

### **Preface**

This document is the 3rd of 42-thirteen Parts of the official triennial compilation and publication of the adoptions, amendments and repeal of administrative regulations to *California Code* of *Regulations, Title 24*, also referred to as the *California Building Standards Code*. This Part is known as the *California Electrical Code* and incorporates, by adoption, the 2014 2014 edition of the *National Electrical Code* of the National Fire Protection Association with the California amendments.

The California Building Standards Code is published in its entirety every ...

### Acknowledgements

The 20136 California Building Standards Code (Code) was developed through the outstanding collaborative efforts of the Department of Housing and Community Development, the Division of the State Architect, the Office of the State Fire Marshal, the Office of Statewide Health Planning and Development, the California Energy Commission, the California Department of Public Health, the California State Lands Commission, the Board of State and Community Corrections, and the California Building Standards Commission (Commission).

This collaborative effort included the assistance of the Commission's Code Advisory Committees and many other volunteers who worked tirelessly to assist the Commission in the production if this Code.

Governor Edmund G. Brown Jr.

Members of the Building Standards Commission

Secretary Anna Caballaro Marybel Batjer - Chair James Barthman Steven Winkel - Vice-Chair

Stephen Jensen Elley Klausbruckner Randy Twist Larry Booth Richard Sawhill Kent Sasaki Rai Patel

Rose Conroy Cheryl Roberts
Sheila Lee-David Malcolm Carson
Richard Sierra
James Barthman
Erick Mikiten

Jim McGowan – Executive Director Michael L. Nearman – Deputy Executive Director

Notation:

Authority: Health and Safety Code §18934.5, 18949.6 References: Health and Safety Code §18934.5, 18949.6

Pedro Santillan

ITEM 2. BSC proposes to bring forward existing California amendments in Art. 89, Section 89.101 through 89.101.12 from the 2013 California Electrical Code for adoption into the 2016 edition of the California Electrical Code with additional amendments as follows:

## CALIFORNIA ARTICLE 89 GENERAL CODE PROVISIONS

### Section 89.101 General

- **89.101.1 Title.** These regulations shall be known as the California Electrical Code, may be cited as such and will be referred to herein as "this code." The California Electrical Code is Part 3 of twelve thirteen parts of the official compilation and publication of the adoptions, amendment, and repeal of electrical regulations to the California Code of Regulations, Title 24, also referred to as the California Building Standards Code. This part incorporates by adoption the 2014 2014 National Electrical Code of the National Fire Protection Association with necessary California amendments.
- **89.101.2 Purpose.** The purpose of this code is to establish the minimum requirements to safeguard the public health, safety and general welfare through structural strength, means of egress facilities, stability, access to persons with disabilities, sanitation, adequate lighting and ventilation, and energy conservation; safety to life and property from fire and other hazards attributed to the built environment; and to provide safety to fire fighters and emergency responders during emergency operations.
- **89.101.3 Scope.** The provisions of this code shall apply to the construction, alteration, movement, enlargement, replacement, repair, equipment, use and occupancy, location, maintenance, removal and demolition of every building or structure or any appurtenances connected or attached to such building or structures throughout the State of California.
  - **89.101.3.1 Nonstate-Regulated Buildings, Structures, and Applications.** Except as modified by local ordinance pursuant to Section 89.101.8, the building standards in the California Code of Regulations, Title 24, Parts 2, 2.5, 3, 4, 5, 6, 9,10 and 11 shall apply to all occupancies and applications not regulated by a state agency.
  - 89.101.3.2 State-Regulated Buildings, Structures, and Applications. The model code, state amendments to the model code, and/or state amendments where there are no relevant model code provisions, shall apply to the following buildings, structures, and applications regulated by state agencies as specified in Sections 89.102 through 89.114, except where modified by local ordinance pursuant to Section 89.101.8. When adopted by a state agency, the provisions of this code shall be enforced by the appropriate enforcing agency, but only to the extent of authority granted to such agency by the state legislature.

Note: See Preface to distinguish the model code provisions from the California provisions.

1. State-owned buildings, including buildings constructed by the Trustees of the California State University, and to the extent permitted by California laws, buildings designed and constructed by the Regents of the University of California, and regulated by the Building Standards Commission. See Section 89.102 for additional scope provisions.

- 2. <u>Section 89.103 is reserved for the Corrections Standards Authority Board of State and Community Corrections.</u> See Section 89.103 for additional scope provisions.
- 3. <u>Section 89.104 is reserved for the Reserved for the Department of Consumer Affairs.</u> See Section 89.104 for additional scope provisions.
- 4. <u>Section 89.105 is reserved for the Reserved for the California Energy Commission.</u> See Section 89.105 for additional scope provisions.
- 5. <u>Section 89.106 is reserved for the Reserved for the Department of Food and Agriculture.</u> See Section 89.106 for additional scope provisions.
- 6. Organized camps, laboratory animal quarters, public swimming pools, radiation protection, commissaries serving mobile food preparation vehicles and wild animal quarantine facilities regulated by the California Department of Public Health (DPH). See Section 89.107 for additional scope provisions.
- 7. Hotels, motels, lodging houses, apartment houses apartments, dwellings, dormitories, condominiums, shelters for homeless persons, congregate residences, employee housing, factory-built housing, and other types of dwellings containing sleeping accommodations with or without common toilets or cooking facilities. See Section 89.108.2.1.1 for additional scope provisions.
- 8. Accommodations for persons with disabilities in buildings containing newly constructed covered multifamily dwellings, new common use spaces serving existing covered multifamily dwellings, additions to existing buildings where the addition alone meets the definition of "COVERED MULTIFAMILY DWELLINGS," and <a href="new common-use spaces areas">new covered multifamily dwellings which are regulated by the Department of Housing and Community Development. See Section 89.108.2.1.2 for additional scope provisions.</a>
- 9. Permanent buildings and permanent accessory buildings or structures constructed within mobilehome parks and special occupancy parks regulated by the Department of Housing and Community Development. See Section 89.108.2.1.3 for additional scope provisions.
- 10. Accommodations for persons with disabilities regulated by the Division of the State Architect. See Section 89.109.1 for additional scope provisions.
- 11. Public elementary and secondary schools, community college buildings, and state-owned or state-leased essential service buildings regulated by the Division of the State Architect. See Section 89.109.2 for additional scope provisions.
- 12. Qualified historical buildings and structures and their associated sites regulated by the State Historical Building Safety Board with the Division of the State Architect. See Section 89.109.3 for additional scope provisions.
- 13. General acute care hospitals, acute psychiatric hospitals, skilled nursing and/or intermediate care facilities, clinics licensed by the California Department of Public Health (DPH) and correctional treatment centers regulated by the Office of Statewide Health Planning and Development. See Section 89.110 for additional scope provisions.

- 14. Applications regulated by the Office of the State Fire Marshal include, but are not limited to, the following in accordance with Section 89.111:
  - 1. Buildings or structures used or intended for use as an:
    - 1.1. Asylum, jail.
    - 1.2. Mental hospital, hospital, home for the elderly, children's nursery, children's home or institution, school or any similar occupancy of any capacity.
    - 1.3. Theater, dancehall, skating rink, auditorium, assembly hall, meeting hall, nightclub, fair building, or similar place of assemblage where 50 or more persons may gather together in a building, room or structure for the purpose of amusement, entertainment, instruction, deliberation, worship, drinking or dining, awaiting transportation, or education.
    - 1.4. Small family day care homes, large family day care homes, residential facilities and residential facilities for the elderly and residential care facilities.
    - 1.5. State institutions or other state-owned or state-occupied buildings.
    - 1.6. High rise structures.
    - 1.7. Motion picture production studios.
    - 1.8. Organized camps.
    - 1.9. Residential structures.
  - 2. Tents, awnings or other fabric enclosures used in connection with any occupancy.
  - 3. Fire alarm devices, equipment and systems in connection with any occupancy.
  - 4. Hazardous materials, flammable and combustible liquids.
  - 5. Public school automatic fire detection, alarm, and sprinkler systems.
  - 6. Wildland-Urban Interface (WUI) fire areas.
- 15. <u>Section 89.112 is reserved for the Reserved for the State Librarian. See Section 89.112 for additional scope provisions.</u>
- 16. <u>Section 89.113 is reserved for the Reserved for the Department of Water Resources.</u>

  See Section 89.113 for additional scope provisions.
- 17. <u>Section 89.114 is reserved for the Reserved for the California State Lands</u>
  Commission. <del>See Section 89.114 for additional scope provisions.</del>

### 89.101.3.3 Exempted from this Code. This code does not cover:

- (A) 1. Installations in ships, watercraft other than floating dwelling units, railway rolling stock, aircraft, automotive vehicles, commercial coaches, mobilehomes, and recreational vehicles.
- (B) 2. Installations underground in mines, mine shafts and tunnels.
- **(C)** 3. Installations of railways for generation, transformation, transmission, or distribution of power used exclusively for operation of rolling stock or installations used exclusively for signaling and communication purposes
- (D) 4. Installation of communication equipment under the exclusive control of communication utilities, located outdoors or in building spaces used exclusively for such installations.

## STATE OF CALIFORNIA BUILDING STANDARDS COMMISSION

(E) 5. Installations under the exclusive control of electrical utilities for the purpose of communication, or metering; or for the generation, control, transformation, transmission, and distribution of electrical energy located in buildings used exclusively by utilities for such purposes or located outdoors on property owned or leased by the utility or on public highways, streets, roads, etc., or outdoors by established rights on private property.

Exception to (D)4 and (E)5: In places of employment, the following shall apply: installations of conductors, equipment and associated enclosures subject to the jurisdiction of the California Public Utilities Commission, that are owned, operated and maintained by an electric, communications or electric railway utility, but not including conduit, vaults, and other like enclosures containing conductors and equipment of such a utility when located indoors or on premises not used exclusively for utility purposes, but do not apply to the utility's conductors and equipment therein.

- (F) 6. Installations on highways or bridges.
- 89.101.4 Annexes. Provisions contained in the annexes of this code shall not apply unless specifically adopted by a state agency or adopted by a local enforcing agency in compliance with Health and Safety Code Section 18901 et\_seq. for Building Standards Law, Health and Safety Code Section 17950 for State Housing Law and Health and Safety Code Section 13869.7 for Fire Protection Districts. See Section 89.101.8 of this code.
- 89.101.5 Referenced Codes. The codes, standards and publications adopted and set forth in this code, including other codes, standards and publications referred to therein are, by title and date of publication, hereby adopted as standard reference documents of this code. When this code does not specifically cover any subject related to building design and construction, recognized architectural or engineering practices shall be employed. The National Fire Codes, standards and the Fire Protection Handbook of the National Fire Protection Association are permitted to be used as authoritative guides in determining recognized fire prevention engineering practices.
- 89.101.6 Non-Building Standards, Orders and Regulations. Requirements contained in the National Electrical Code, or in any other referenced standard, code or document, which are not building standards as defined in Health and Safety Code Section 18909 shall not be construed as part of the provisions of this code. For nonbuilding standards, orders, and regulations, see other titles of the California Code of Regulations.

### 89.101.7 Order of Precedence and Use.

- **89.101.7.1 Differences**. In the event of any differences between these building standards and the standard reference documents, the text of these building standards shall govern.
- **89.101.7.2 Specific Provisions.** Where a specific provision varies from a general provision, the specific provisions shall apply.
- **89.101.7.3 Conflicts.** When the requirements of this code conflict with the requirements of any other part of the California Building Standards Code, Title 24, the most restrictive requirements shall prevail.

**Exception**: Detached one-and two-family dwellings, efficiency dwelling units, lodging houses, live/work units, townhouses not more than three stories above grade plane with a separate means

of egress, and their accessory structures, shall not be required to comply with the California Residential Code if constructed in accordance with the California Building Code.

### 89.101.8 City, County, or City and County Amendments, Additions or Deletions.

The provisions of this code do not limit the authority of city, county, or city and county governments to establish more restrictive and reasonably necessary differences to the provisions contained in this code pursuant to complying with Section 89.101.8.1. The effective date of amendments, additions, or deletions to this code by city, county or city and county filed pursuant to Section 89.101.8.1 shall be the date filed. However, in no case shall the amendments, additions or deletions to this code be effective any sooner than the effective date of this code.

Local modifications shall comply with Health and Safety Code Section 18941.5 for Building Standards Law, Health and Safety Code Section 17958 for State Housing Law or Health and Safety Code Section 13869.7 for Fire Protection Districts.

### 89.101.8.1 Findings and Filings.

1. The city, county, or city and county shall make express findings for each amendment, addition or deletion based upon climatic, topographical, or geological conditions.

**Exception:** Hazardous building ordinances and programs mitigating unreinforced masonry buildings.

- 2. The city, county, or city and county shall file the amendments, additions, or deletions expressly marked and identified as to the applicable findings. Cities, counties, cities and counties, and fire departments shall file the amendments, additions or deletions, and the findings with the California Building Standards Commission at 2525 Natomas Park Drive, Suite 130, Sacramento, CA 95833.
- 3. Findings prepared by fire protection districts shall be ratified by the local city, county, or city and county and filed with the California Department of Housing and Community Development, Division of Codes and Standards, P.O. Box 1407, Sacramento, CA 95812-1407 or at 1800 3rd Street, Room-260, Sacramento, CA 95814 2020 W. El Camino Avenue, Suite 250, Sacramento, CA 95833-1829.
- 89.101.8.2 Locally adopted energy standards California Energy Code, Part 6.

  In addition to the provisions of Section 89.101.8.1 of this Part, the provisions of this section applies to cities, counties, and city and county amending adopted energy standards affecting buildings and structures subject to the California Energy Code, Part 6.

Applicable provisions of Public Resources Code Section 25402.1 and applicable provisions of Chapter 10 of the California Administrative Code, Part 1 apply to local amendment of energy standards adopted by the California Energy Commission.

- 89.101.9 Effective Date of this Code. Only those standards approved by the California Building Standards Commission that are effective at the time an application for building permit is submitted shall apply to the plans and specifications for, and to the construction performed under, that permit. For the effective dates of the provisions contained in this code, see the History Note page of this code.
- **89.101.10 Availability of Codes.** At least one complete copy each of Titles 8, 19, 20, 24, and 25 with all revisions shall be maintained in the office of the building official responsible for the administration and enforcement of this code. Each state department concerned and each city, county or city and county shall

have an up-to-date copy of the code available for public inspection. See Health and Safety Code Section 18942 (d)(e)(1) and (2).

**89.101.11 Format.** This part fundamentally adopts the International Building Code by reference on a chapter-by-chapter basis. When a specific chapter of the International Building Code is not printed in the code and is marked "Reserved", such chapter of the International Building Code is not adopted as a portion of this code. When a specific chapter of the International Building Code is marked "Not adopted by the State of California" but appears in the code, it may be available for adoption by local ordinance.

**Note:** Matrix Adoption Tables at the front of each chapter may aid the code user in determining which chapter or sections within a chapter are applicable to buildings under the authority of a specific state agency, but they are not to be considered regulatory.

**89.101.12 Validity.** If any chapter, article, section, subsection, sentence, clause or phrase of this code is for any reason held to be unconstitutional, contrary to statute, exceeding the authority of the state as stipulated by statutes, or otherwise inoperative, such decision shall not affect the validity of the remaining portion of this code

ITEM 3. BSC proposes to bring forward existing California amendments in Section 89.102 from the 2013 California Electrical Code for adoption into the 2016 edition of the California Electrical Code with additional amendments as follows:

## SECTION 89.102 BUILDING STANDARDS COMMISSION

**89.102.1** <u>BSC</u> Specific scope of application of the agency responsible for enforcement, the enforcement agency, and the specific authority to adopt and enforce such provisions of this code, unless otherwise stated.

### 1. State Buildings for all occupancies.

Application – State buildings (all occupancies), including buildings constructed by the Trustees of the California State University and the Regents of the University of California where no state agency has the authority to adopt building standards applicable to such buildings.

Enforcing Agency – State or local agency specified by the applicable provisions of law.

Authority Cited – Health and Safety Code section 18934.5.

Reference – Health and Safety Code, Division 13, Part 2.5, commencing with section 18901.

## 2. University of California, California State Universities; and California Community Colleges.

Application – Standards for lighting for parking lots and primary campus walkways at the University of California, California State Universities, and California Community Colleges. Enforcing Agency – State or local agency specified by the applicable provisions of law. Authority Cited – Government Code section 14617.

Reference – Government Code section 14617.

3. Existing State-Owned Buildings, including those owned by the University of California

and by the California State University— Building seismic retrofit standards including abating falling hazards of structural and nonstructural components and strengthening of building structures. See also Division of the State Architect.

Enforcing Agency - State or local agency specified by the applicable provisions of law.

Authority Cited - Government Code section 16600

Reference - Government Code sections 16600 through 16604

### 4. Unreinforced Masonry Bearing Wall Buildings.

Application – Minimum seismic strengthening standards for buildings specified in Appendix Chapter 1A of the California Existing Building Code, except for buildings subject to building standards adopted pursuant to Part 1.5 (commencing with Section 17910)

**Enforcing Agency** – State or local agency specified by the applicable provisions of law. **Authority Cited** – Health and Safety Code section 18934.67

Reference – Health and Safety Code sections 18901 through 18949 Division 13, Part 2.5, commencing with Section 18901.

89.102.1.1 State building. For purposes of this code, a "state building" is a structure for which a state agency or state entity has authority to construct, alter, enlarge, replace, repair or demolish.

89.102.1.2 Enforcement. [CSU, UC, Judicial Council and CDCR] state agencies or state entities authorized to construct state buildings may appoint a building official who is responsible to the agency for enforcement of the provisions of the California Building Standards Code.

**Exception:** State buildings regulated by other sections of this code remain the enforcement responsibility of the designated entities.

### 89.102.1.3 Enforcement, Reserved for DGS.

**89.102.1.4** Adopting agency identification. The provisions of this code applicable to buildings identified in this section will be identified in the Matrix Adoption Tables under the acronym **BSC**.

89.102.2 BSC-CG. Specific scope of application of the agency responsible for enforcement, the enforcement agency, and the specific authority to adopt and enforce such provisions of this code, unless otherwise stated.

<u>Application</u> – All occupancies where no other state agency has the authority to adopt green building standards applicable to those occupancies.

<u>Enforcing agency</u> — State or local agency specified by the applicable provisions of law.

<u>Authority cited</u> — Health and Safety Code Sections 18930.5, 18938 and 18940.5.

<u>Reference</u> — Health and Safety Code, Division 13, Part 2.5, commencing with Section 18901.

89.102.23 Alternative Materials, Design and Methods of Construction and Equipment.

The provisions of this code are not intended to prevent the installation of any material or to prohibit any design or method of construction not specifically prescribed by this code, provided that any such alternative has been approved. An alternative material, design or method of construction shall be approved where the building official finds that the proposed design is satisfactory and complies with the intent of the provisions of this code, and that the material, method or work offered is, for the purpose intended, at least the equivalent of that prescribed in this code in quality, strength, effectiveness, fire resistance, durability and safety.

**89.102.23.1 Research reports.** Supporting data, where necessary to assist in the approval of materials or assemblies not specifically provided for in this code, shall consist of valid research reports from approved sources

**89.102.23.2 Tests.** Whenever there is insufficient evidence of compliance with the provisions of this code, or evidence that a material or method does not conform to the requirements of this code, or in order to substantiate claims for alternative materials or methods, the building official shall have the authority to require tests as evidence of compliance to be made at no expense to the jurisdiction. Test methods shall be as specified in this code or by other recognized test standards. In the absence of recognized and accepted test methods, the building official shall approve the testing procedures.

Tests shall be performed by an approved agency. Reports of such tests shall be retained by the building official for the period required for retention of public records.

ITEM 4. BSC proposes to bring forward existing California amendments in Section 89.103 through 89.114 from the 2013 California Electrical Code for adoption into the 2016 edition of the California Electrical Code with additional amendments as follows:

SECTION 89.103
RESERVED FOR CORRECTIONS STANDARDS AUTHORITY BOARD OF STATE AND COMMUNITY
CORRECTIONS

SECTION 89.104
RESERVED FOR THE DEPARTMENT OF CONSUMER AFFAIRS

SECTION 89.105
RESERVED FOR THE CALIFORNIA ENERGY COMMISSION

SECTION 89.106
RESERVED FOR THE DEPARTMENT OF FOOD AND AGRICULTURE

## SECTION 89.107 CALIFORNIA DEPARTMENT OF PUBLIC HEALTH

**89.107** Specific scope of application of the agency responsible for enforcement, the enforcement agency, and the specific authority to adopt and enforce such provisions of this code, unless otherwise stated.

Application – Commissaries serving mobile food preparation units and public swimming pools. Enforcing Agency – The California Department of Public Health and the local health agency. Authority Cited – Health and Safety Code sections 114304, 116050, and 131200. Reference – Health and Safety Code sections 114304, 116050, 116053, and 131200.

Notation

Authority: Health & Safety Code Sections 18928 and 18934.5

Reference(s): Health & Safety Code Sections 18928, 18928.1 and 18934.5

### ITEM 5. BSC proposes to Adopt NEC ARTICLE 90, without amendments

### **ARTICLE 90 - Introduction**

Notation

Authority: Health & Safety Code Sections 18928 and 18934.5

Reference(s): Health & Safety Code Sections 18928, 18928.1 and 18934.5

<u>ITEM 6.</u> BSC proposes the adoption of CHAPTER 1, ARTICLES 100 and 110 from the 2014 National Electrical Code with existing California amendments into the 2016 edition of the California Electrical Code:

## CHAPTER 1 GENERAL ARTICLE 100 Definitions

**Ballasted Solar Photovoltaic System [BSC]** A roof mounted system composed of solar photovoltaic panels and supporting members that are unattached or partially attached to the roof and must rely on their weight, aerodynamics and friction to counter the effect of wind and seismic forces.

Notation

Authority: Health & Safety Code Sections 18928 and 18934.5

Reference(s): Health & Safety Code Sections 18928, 18928.1 and 18934.5

## CHAPTER 1 GENERAL ARTICLE 110 Requirements for Electrical Installations

### **SECTION 110.13 Mounting and Cooling of Equipment**

(A) Mounting. Electrical equipment shall be firmly secured to the surface on which it is mounted. Wooded plugs driven into holes in masonry, concrete, plaster, or similar materials shall not be used.

**Exception:** [BSC] Roof mounted ballasted solar photovoltaic systems provided that the wiring and interconnections are designed to accommodate for maximum system displacement.

Notation

Authority: Health & Safety Code Sections 18928 and 18934.5

Reference(s): Health & Safety Code Sections 18928, 18928.1 and 18934.5

## <u>ITEM 7.</u> BSC proposes the adoption of Chapters 2 through 4 (All Articles) from the 2014 National Electrical Code:

CHAPTER 2 - Wiring Protection, CHAPTER 3 - Wiring Methods and Materials and CHAPTER 4 - Equipment for General Use

Notation

Authority: Health & Safety Code Sections 18928 and 18934.5

Reference(s): Health & Safety Code Sections 18928, 18928.1 and 18934.5

ITEM 8. BSC proposes to adopt Chapter 5- Special Occupancies- but not to adopt ARTICLES 517- (Health Care Facilities) or 550- (Mobile Homes)

## CHAPTER 5 Special Occupancies

Notation

Authority: Health & Safety Code Sections 18928 and 18934.5

Reference(s): Health & Safety Code Sections 18928, 18928.1 and 18934.5

ITEM 9. BSC proposes to adopt Chapter 6 of the 2014 NEC and to add a new amendment for BSC to Art. 625.

### **CHAPTER 6**

**Special Equipment** 

## ARTICLES 625 Electric Vehicle Charging Equipment

625.1.1 [BSC-CG] Electric Vehicle (EV) Charging for New Construction. In addition to requirements in this Article, electric vehicle charging shall comply with the California Green Building Standards Code (CALGreen) Chapter 5, Division 5.1.

625.13 [BSC] Electric Vehicle Supply Equipment Connection. Electric vehicle supply equipment shall be permitted to be cord- and plug-connected to the premises wiring system in accordance with one of the following:

- (A) Connections to 125-Volt, Single-Phase, 15- and 20-Ampere Receptacle Outlets. Electrical vehicle supply equipment intended for connection to nonlocking, 2-pole, 3-wire grounding-type receptacle outlets rated at 125 V, single phase, 15 and 20 amperes or from a supply of less than 50 volts dc.
- (B) Connections to Other Receptacle Outlets. Electric vehicle supply equipment that is rated 250 V maximum and complying with all of the following:
  - (1) It is intended for connection to nonlocking, 2-pole, 3-wire and 3-pole, 4-wire, grounding-type receptacle outlets rated not more than 50 amperes.
- (2) EVSE is fastened in place to facilitate any of the following:
- a. Ready removal for interchange
  - b. Facilitation of maintenance and repair
  - c. Repositioning of portable, movable, or EVSE fastened in place
- (3) Power-supply cord length for electric vehicle supply equipment fastened in place is limited to 1.8 m (6 ft).
- (4) Receptacles are located to avoid physical damage to the flexible cord.

All other electric vehicle supply equipment shall be permanently wired and fastened in place to the supporting surface, a wall, a pole, or other structure. The electric vehicle supply equipment shall have no exposed live parts.

**625.14 Rating.** [BSC] Electric vehicle supply equipment shall have sufficient rating to supply the load served. Electric vehicle charging loads shall be considered continuous loads for the purposes of this article. Where an automatic load management system is used, the maximum electric vehicle supply equipment load on a service and feeder shall be the maximum load permitted by the automatic load management system.

### Notation

Authority: Health & Safety Code Sections 18928 and 18934.5

Reference(s): Health & Safety Code Sections 18928, 18928.1 and 18934.5

## ITEM 10. BSC proposes the adoption of Chapters 7 through 9 (All Articles) from the 2014 National Electrical Code without amendment:

Notation

...

Authority: Health & Safety Code Sections 18928 and 18934.5

Reference(s): Health & Safety Code Sections 18928, 18928.1 and 18934.5

## ITEM 11. BSC proposes not to adopt the Annexes from the 2014 National Electrical Code:

Notation

Authority: Health & Safety Code Sections 18928 and 18934.5

Reference(s): Health & Safety Code Sections 18928, 18928.1 and 18934.5

## FINAL EXPRESS TERMS FOR PROPOSED BUILDING STANDARDS OF THE

DIVISION OF THE STATE ARCHITECT - STRUCTURAL SAFETY (DSA-SS AND DSA-SS/CC)

### REGARDING PROPOSED CHANGES TO CALIFORNIA ELECTRICAL CODE CALIFORNIA CODE OF REGULATIONS, TITLE 24, PART 3

The California Building Standards Code (California Code of Regulations, Title 24, Parts 1, 2, 2.5, 3, 4, 5, 6, 8, 9, 10, 11 and 12) is published in its entirety every three years and is applicable to all buildings for which an application for a building permit is made during the Code's effective period. Each triennial edition of the California Building Standards Code becomes effective 180 days after its publication.

These proposed regulations will make effective the 2014 edition of the National Electrical Code (NEC) as the 2016 edition California Electrical Code (CEC), for application by DSA-SS to public elementary and secondary schools, community colleges, and state-owned or state-leased essential services buildings.

These proposed regulations will also make effective the 2014 edition of the NEC as the 2016 edition CEC, for application by DSA-SS/CC (Division of the State Architect – Structural Safety/Community Colleges) to community colleges, which a community college district may elect to use in lieu of standards promulgated by DSA-SS (refer to Education Code Section 81053).

Further, these proposed regulations will repeal the 2011 edition NEC articles adopted as the 2013 edition CEC.

### LEGEND FOR EXPRESS TERMS

- 1. Existing California amendments or code language being modified are in italics when they appear in the model code text: All such language appears in *italics*, modified language is <u>underlined</u>.
- 2. New California amendments: All such language appears underlined and in italics.
- 3. Repealed text: All such language appears in strikeout.

### **EXPRESS TERMS**

## CALIFORNIA ELECTRICAL CODE CALIFORNIA ARTICLE 89 - GENERAL CODE PROVISIONS

Continue California Article 89 (General Code Provisions) of the 2013 triennial edition of the CEC for publication in the 2016 triennial edition of the CEC, with editorial amendments as show below:

Adopting Agency	DSA-SS	DSA-SS/CC	Comments
Adopt only those articles / sections that are listed below			
89.101.1 Title	Х	X	
89.101.2 Purpose	Х	Х	
89.101.3 Scope	Х	X	
89.101.4 Annexes	Х	Х	
89.101.5 Referenced Codes	Х	Х	
89.101.6 Non-Building Standards, Orders and Regulations	х	Х	

89.101.7 Order of Precedence and Use	Х	T X	
89.101.8 City, County, or City and			
County Amendments, Additions or	Х	. X	
Deletions			
89.101.9 Effective Date of this Code	X	X	
89.101.10 Availability of Codes	Х	X	
89.101.11 Format	Х	X	
89.101.12 Validity			
89.109.1 DSA-AC—Division of the			•
State Architect – Access Compliance			
89.109.2 DSA-SS—Division of the	Y		·
State Architect – Structural Safety			
89.109.2.2 DSA-SS/CC (Division of the			
State Architect – Structural		X	
Safety/Community Colleges)			

CALIFORNIA ARTICLE 89
GENERAL CODE PROVISIONS

(Note: Adopt only those sections listed in the Matrix Adoption Tables)

SECTION 89.101 GENERAL

89.101.1 Title. These regulations shall be known as the California Electrical Code, may be cited as such and will be referred to herein as "this code." The California Electrical Code is Part 3 of twelve parts of the official compilation and publication of the adoptions, amendment, and repeal of Electrical regulations to the California Code of Regulations, Title 24, also referred to as the California Building Standards Code. This part incorporates by adoption the 2014 National Electrical Code of the National Fire Protection Association with necessary California amendments.

89.101.2 Purpose. The purpose of this code is to establish the minimum requirements to safeguard the public health, safety and general welfare through structural strength, means of egress facilities, stability, access to persons with disabilities, sanitation, adequate lighting and ventilation, and energy conservation; safety to life and property from fire and other hazards attributed to the built environment; and to provide safety to fire fighters and emergency responders during emergency operations.

89.101.3 Scope. The provisions of this code shall apply to the construction, alteration, movement, enlargement, replacement, repair, equipment, use and occupancy, location, maintenance, removal and demolition of every building or structure or any appurtenances connected or attached to such building structures throughout the State of California.

89.101.3.1 Non-State-Regulated Buildings, Structures, and Applications. Except as modified by local ordinance pursuant to Section 89.101.8, the building standards in the California Code of Regulations, Title 24, Parts 2, 2.5, 3, 4, 5, 6, 9, 10 and 11 shall apply to all occupancies and applications not regulated by a state agency.

89.101.3.2 State-Regulated Buildings, Structures, and Applications. The model code, state amendments to the model code, and/or state amendments where there are no relevant model code provision, shall apply to the following buildings, structures, and applications regulated by state agencies as referenced in the Matrix Adoption Tables and as specified in Sections 89.102 through 89.114, except where modified by local ordinance pursuant to Section 89.101.8. When adopted by a state agency, the provisions of this

code shall be enforced by the appropriate enforcing agency, but only to the extent of authority granted to such agency by the state legislature.

Note: See Preface to distinguish the model code provisions from the California provisions.

- 1. State-owned buildings, ...
- 2. Reserved for Corrections Standards Authority. ...
- 3. Reserved for the Department of Consumer Affairs. ...
- 4. Reserved for the California Energy Commission. ...
- 5. Reserved for the Department of Food and Agriculture. ...
- Organized camps, ...
- 7. Hotels, motels, lodging houses, ...
- 8. Accommodations for persons with disabilities ...
- 9. Permanent buildings ...
- 10. Accommodations for persons with disabilities ...
- 11. Public elementary and secondary schools, community college buildings and state-owned or state-leased essential service buildings regulated by the Division of the State Architect. See Section 89.109.2 for additional scope provisions.
- 12. Qualified historical buildings ...
- 13. General acute care hospitals, ...
- 14. Applications regulated by Office of the State Fire Marshall ...
- 15. Reserved for the State Librarian. ...
- 16. Reserved for the Department of Water Resources. ...
- 17. Reserved for the California State Lands Commission. ...
- 89.101.3.3 Exempted from this Code. This code does not cover:
- (A) 1. Installations in ships, watercraft other than floating dwelling units, railway rolling stock, aircraft, automotive vehicles, commercial coaches, mobilehomes, and recreational vehicles.
- (B) 2. Installations underground in mines, mine shafts and tunnels.
- (C) 3. Installations of railways for generation, transformation, transmission, or distribution of power used exclusively for operation of rolling stock or installations used exclusively for signaling and communication purposes.
- (D) 4. Installation of communication equipment under the exclusive control of communication utilities, located outdoors or in building spaces used exclusively for such installations.
- (E) 5. Installations under the exclusive control of electrical utilities for the purpose of communication, or metering; or for the generation, control, transformation, transmission, and distribution of electrical energy located in buildings used exclusively by utilities for such purposes or located outdoors on property owned or leased by the utility or on public highways, streets, roads, etc., or outdoors by established rights on private property.

Exception to (D)4 and (E)5: In places of employment, the following shall apply: installations of conductors, equipment and associated enclosures subject to the jurisdiction of the California Public Utilities Commission, that are owned, operated and maintained by an electric, communications or electric railway utility, but not including conduit, vaults, and other like enclosures containing conductors and equipment of such a utility when located indoors or on premises not used exclusively for utility purposes, but do not apply to the utility's conductors and equipment therein.

(F) 6. Installations on highways or bridges.

- 89.101.4 Annexes. Provisions contained in the annexes of this code shall not apply unless specifically adopted by a state agency or adopted by a local enforcing agency in compliance with Health and Safety Code Section 18901et seq. for Building Standards Law, Health and Safety Code Section 17950 for State Housing Law and Health and Safety Code Section 13869.7 for Fire Protection Districts. See Section 89.101.8 of this code.
- 89.101.5 Referenced Codes. The codes, standards and publications adopted and set forth in this code, including other codes, standards and publications referred to therein are, by title and date of publication, hereby adopted as standard reference documents of this code. When this code does not specifically cover any subject related to building design and construction, recognized architectural or engineering practices shall be employed. The National Fire Codes and the Fire Protection Handbook of the National Fire Protection Association are permitted to be used as authoritative guides in determining recognized fire prevention engineering practices.
- 89.101.6 Non-Building Standards, Orders and Regulations. Requirements contained in the National Electrical Code, or in any other referenced standard, code or document, which are not building standards as defined in Health and Safety Code Section 18909 shall not be construed as part of the provisions of this code. For nonbuilding standards, orders, and regulations, see other titles of the California Code of Regulations.
- 89.101.7 Order of Precedence and Use.
  - 89.101.7.1 Differences. In the event of any differences between these building standards and the standard reference documents, the text of these building standards shall govern.
  - 89.101.7.2 Specific Provisions. Where a specific provision varies from a general provision, the specific provisions shall apply.
  - 89.101.7.3 Conflicts. When the requirements of this code conflict with the requirements of any other part of the California Building Standards Code, Title 24, the most restrictive requirements shall prevail.
- 89.101.8 City, County, or City and County Amendments, Additions or Deletions. ...
  - 89.101.8.1 Findings and Filings. ...
- 89.101.9 Effective Date of this Code. Only those standards approved by the California Building Standards Commission that are effective at the time an application for building permit is submitted shall apply to the plans and specifications for, and to the construction performed under, that permit. For the effective dates of the provisions contained in this code, see the History Note page of this code.
- 89.101.10 Availability of Codes. At least one entire copy each of Titles 8, 19, 20, 24, and 25 with all revisions shall be maintained in the office of the building official responsible for the administration and enforcement of this code. Each state department concerned and each city, county or city and county shall have an up-to-date copy of the code available for public inspection. See Health and Safety Code Section 18942 (d) (1) and (2).
- 89.101.11 Format. This part fundamentally adopts the National Electrical Code by reference on a chapter-by-chapter basis. Such adoption is reflected in the Matrix Adoption Table of each chapter of this part. When the Matrix Adoption Tables make no reference to a specific chapter of the National Electrical Code, such chapter of the National Electrical Code is not adopted as a portion of this code.

89.101.12 Validity. If any chapter, article, section, subsection, sentence, clause or phrase of this code is for any reason held to be unconstitutional, contrary to statute, exceeding the authority of the state as stipulated by statutes, or otherwise inoperative, such decision shall not affect the validity of the remaining portion of this code

SECTION 89.109 DIVISION OF THE STATE ARCHITECT

89.109.1 DSA-AC - Division of the State Architect-Access Compliance. ...

89.109.2 DSA-SS -- Division of the State Architect - Structural Safety

89.109.2.1. DSA-SS (Division of the State Architect – Structural Safety)

1. Application - Public elementary and secondary schools, community college buildings, and state-owned or state-leased essential services buildings.

Enforcing Agency - Division of the State Architect - Structural Safety (DSA-SS).

The Division of the State Architect has been delegated the responsibility and authority by the Department of General Services to review and approve the design and oversee the construction of public elementary and secondary schools, community colleges, and state-owned or state-leased essential services buildings.

Authority Cited - Education Code section 17310 and 81142, and Health & Safety Code section 16022.

Reference - Education Code Sections 17280 through 17317 and 81130 through 81147, and Health & Safety Code Sections 16000 through 16023.

89.109.2.2. DSA-SS/CC (Division of the State Architect – Structural Safety/Community Colleges)

Application - Community Colleges.

The Division of the State Architect has been delegated the authority by the Department of General Services to promulgate alternate building standards for application to community colleges, which a community college may elect to use in lieu of standards promulgated by DSA-SS in accordance with Section 89.109.2.1. Refer to Title 24, Part 2, Section 1.9.2.4.

Enforcing Agency - Division of the State Architect - Structural Safety/Community Colleges (DSA-SS/CC)

The Division of the State Architect has been delegated the authority by the Department of General Services to review and approve the design and oversee construction of community colleges electing to use the alternative building standards as provided in this section.

Authority Cited - Education Code Section 81053.

Reference - Education Code Sections 81052, 81053, and 81130 through 81147.

### CALIFORNIA ELECTRICAL CODE

### ARTICLE 90 - INTRODUCTION

Repeal Article 90 (Introduction) of the 2011 edition NEC.

Adopt Article 90 (Introduction) of the 2014 NEC without amendment for publication in the 2016 triennial edition of the CEC.

Adopting Agency	DSA-SS	DSA-SS/CC	Comments
Adopt Entire Article	Х	Х	

### CALIFORNIA ELECTRICAL CODE CHAPTER 1 – GENERAL

Repeal Chapter 1 (General) of the 2011 edition NEC.

Adopt Chapter 1 (General) of the 2014 edition NEC without amendment for publication in the 2016 triennial edition of the CEC.

Adopting Agency	DSA-SS	DSA-SS/CC	Comments
Adopt Entire Article	X	X	
Article 100 Definitions	X	X	
Article 110 Requirements for Electrical Installations	Х	Х	

## CALIFORNIA ELECTRICAL CODE CHAPTER 2 - WIRING AND PROTECTION

Repeal Chapter 2 (Wiring and Protection) of the 2011 NEC.

Adopt Chapter 2 (Wiring and Protection) of the 2014 NEC without amendment for publication in the 2016 triennial edition of the CEC.

Adopting Agency	DSA-SS	DSA-SS/CC	Comments
Adopt Entire Chapter	X	X	
Article 200 Use and Identification of Grounded	Х	Х	•
Connectors	,		
Article 210 Branch Circuits	Х	Х	
Article 215 Feeders	Х	Х	
Article 220 Branch-Circuit, Feeder, and Service	Χ	Х	
Calculations			
Article 225 Outside Branch Circuits and	Х	Х	
Feeders			
Article 230 Services	Х	Х	
Article 240 Overcurrent Protection	X	X	
Article 250 Grounding and Bonding	. X	X	
Article 280 Surge Arresters, Over 1000 Volts	Χ	X	
Article 285 Surge-Protective Devices (SPDs),	Χ	X	
1000 Volts or Less			

### CALIFORNIA ELECTRICAL CODE CHAPTER 3 - WIRING METHODS AND MATERIALS

Repeal Chapter 3 (Wiring Methods and Materials) of the 2011 NEC.

Adopt Chapter 3 (Wiring Methods and Materials) of the 2014 NEC without amendment for publication in the 2016 triennial edition of the CEC.

the 2016 triennial edition of the CEC.			
Adopting Agency	DSA-SS	DSA-SS/CC	Comments
Adopt Entire Chapter	X	X	
Article 300 General Requirements for Wiring Methods	X	X	
and Materials			
Article 310	X	X	
Conductors for General Wiring			
Article 312 Cabinets, Cutout Boxes, ad Meter Socket	Х	X	
Enclosures			
Article 314 Outlet, Device, Pull, and Junction Boxes;	Х	X	
Conduit Bodies; Fittings; and Hand hole Enclosures			
Article 320 Armored Cable: Type AC	Х	X	
Article 322 Flat Cable Assemblies: Type FC	Χ	Х	
Article 324 Flat Conductor Cable: Type FCC	Х	X	
Article 326 Integrated Gas Space Cable: Type IGS	X	Х	
Article 328 Medium Voltage Cable: Type MV	X	X	
Article 330 Metal-Clad Cable: Type MC	X	X	
Article 332 Mineral-Insulated, Metal-Sheathed Cable:	X	X	
Type MI	WARALANCE AND ARCHITECTURE OF THE STATE OF T		
Article 334 Nonmetallic-Sheathed Cable:	X	X	
Types NM, NMC, NMS			
Article 336 Power and Control Tray Cable: Type TC	X	X	
Article 338 Service-Entrance Cable: Types SE and USE	X X	X	
Article 340 Underground Feeder and Branch-Circuit	X	Х	
Cable: Type UF			
Article 342 Intermediate Metal conduit: Type IMC	X	X	
Article 344 Rigid Metal Conduit: Type RMC	X	Х	
Article 348 Flexible Metal Conduit: Type F,C	X	Х	
Article 350 Liquid tight Flexible Metal Conduit: Type	Х	Х	
LFMC			
Article 352 Rigid Polyvinyl Chloride Conduit: Type PVC	X	X	<del> </del>
Article 353 High Density Polyethylene Conduit:	Χ	Х	
Type HDPE Conduit			
Article 354 Nonmetallic Underground Conduit with	Χ	X	
Conductors: Type NUCC			
Article 355 Reinforced Thermosetting Resin Conduit:	Χ	Х	
Type RTRC			
Article 356 Liquid tight Flexible Nonmetallic Conduit:	X	Х	
Type LFNC	~~~~		
Article 358 Electrical Metallic Tubing: Type EMT	X	X	
Article 360 Flexible Metallic Tubing: Type FMT		X	
Article 362 Electrical Nonmetallic Tubing: Type ENT	X	X	
Article 366 Auxiliary Gutters	X	X	
Article 368 Bus ways	X	X	
Article 370 Cablebus	X	X	
Article 372 Cellular Concrete Floor Raceways	X	X	
Article 374 Cellular Metal Floor Raceways	X	X	
Article 376 Metal Wire ways	X	X	***************************************
Article 378 Nonmetallic Wire ways	X	X	

Article 380 Multi outlet Assembly	Х	Χ	
Article 382 Nonmetallic Extensions)	X	Χ	
Article 384 Strut-Type Channel Raceway	Х	Х	
Article 386 Surface Metal Raceways	X	X	
Article 388 Surface Nonmetallic Raceways	X	X	
Article 390 Underfloor Raceways	X	X	
Article 392 Cable Trays	X	Х	
Article 394 Concealed Knob-and-Tube Wiring	. X	X	
Article 396 Messenger-Supported Wiring	/ X	X	
Article 398 Open Wiring on Insulators	Х	X	
Article 399 Outdoor Overhead Conductors	<u>X</u>	<u>X</u>	
over 1000 Volts			

### CALIFORNIA ELECTRICAL CODE CHAPTER 4 - EQUIPMENT FOR GENERAL USE

Repeal Chapter 4 (Equipment for General Use) of the 2011 NEC.

Adopt Chapter 4 (Equipment for General Use) of the 2014 NEC without amendment for publication in the 2016 triennial edition of the CEC.

Adopting Agency	DSA-SS	DSA-SS/CC	Comments
Adopt Entire Chapter	X	X	
Article 400 Flexible Cords and Cables	Х	X	
Article 402 Fixture Wires	Х	X	
Article 404 Switches	Х	X	
Article 406 Receptacles, Cord Connectors, and	, X	X	
Attachment Plugs (Caps)			
Article 408 Switchboards, Switchgear and Panel	X	Х	
boards			
Article 409 Industrial Control Panels	X	X	
Article 410 Luminaries, Lamp holders,	X	X	
and Lamps			
Article 411 Lighting Systems Operating at 30 Volts	Χ	X	
or Less and Lighting Equipment Connected to			
Class – 2 Power Sources			
Article 422 Appliances	X	X	
Article 424 Fixed Electrical Space-Heating	Х	X	
Equipment			
Article 426 Fixed Outdoor Electric Deicing and	X	X	
Snow-Melting Equipment			
Article 427 Fixed Electric Heating Equipment for	Х	Х	
Pipelines and Vessels			
Article 430 Motors, Motor Circuits, and Controllers	X	X	
Article 440 Air-Conditioning and Refrigerating	X	X	
Equipment			
Article 445 Generators	X	X	
Article 450 Transformers and Transformer Vaults	Х	X	
(Including Secondary Ties)			
Article 455 Phase Converters	X	X	
Article 460 Capacitors	XX	Х	
Article 470 Resistors and Reactors	X	X	
Article 480 Storage Batteries	X	X	

Article 490 Equipment, Over	Х	Х	
1000 Volts Nominal			

## CALIFORNIA ELECTRICAL CODE CHAPTER 5 - SPECIAL OCCUPANCIES

Repeal Chapter 5 (Special Occupancies) of the 2011 NEC.

Adopt Chapter 5 (Special Occupancies) of the 2014 NEC without amendment for publication in the 2016 triennial edition of the CEC.

Adopting Agency	DSA-SS	DSA-SS/CC	Comments
Adopt Entire Chapter	X	X	
Article 500 Hazardous (Classified) Locations,	Χ	X	
Classes I, II, and III, Divisions 1 and 2			
Article 501 Class I Locations	Χ	Х	
Article 502 Class II Locations	X	Х	
Article 503 Class III Locations	X	Х	
Article 504 Intrinsically Safe Systems	Х	Х	
Article 505 Zone 0, 1, and 2 Locations	Х	X	
Article 506 Zone 20, 21, and 22 Locations for	Х	Х	
Combustible Dusts or ignitable Fibers/ Flyings			
Article 510 Hazardous (Classified) Locations –	Χ	Х	
Specific			
Article 511 Commercial Garages, Repair and	Χ	X	
Storage			
Article 513 Aircraft Hangars	Х	X	
Article 514 Motor Fuel Dispensing Facilities	X	X	
Article 515 Bulk Storage Plants	Χ	X	
Article 516 Spray Application, Dipping, Coating, and	Х	Х	
Processes Using Flammable Combustible Materials			
Article 517 Health Care Facilities	X	X	
Article 518 Assembly Occupancies	X X X	X	
Article 520 Theaters, Audience Areas of Motion	X	X	,
Picture and Television Studios, Performance Areas,			
and Similar Locations			
Article 522 Control Systems for Permanent	Χ	X	
Amusement Attractions			
Article 525 Carnivals, Circuses, Fairs, and Similar	Х	X	
Events			
Article 530 Motion Picture and Television Studios	Х	X	
and Similar Locations			
Article 540 Motion Picture Projection Rooms	X	X	
Article 545 Manufactured Buildings	X	X	
Article 547 Agricultural Buildings	X	X	
Article 550 Mobile Homes, Manufactured Homes,	Х	Х	
and Mobile Home Parks			<del></del>
Article 551 Recreational Vehicles and Recreational	Х	X	
Vehicle Parks			
Article 552 Park Trailers	X	X	
Article 553 Floating Buildings	X	X	· · · · · · · · · · · · · · · · · · ·
Article 555 Marinas and Boatyards	X	X	
Article 590 Temporary Installations	Χ	X	

### CALIFORNIA ELECTRICAL CODE CHAPTER 6 - SPECIAL EQUIPMENT

Repeal Chapter 6 (Special Equipment) of the 2011 NEC.

Adopt Chapter 6 (Special Equipment) of the 2014 NEC without amendment for publication in the 2013 triennial edition of the CEC.

Adopt Entire Chapter X X X Article 600 Electric Signs and Outline Lighting X X Article 605 Office Furnishings (Consisting of Lighting X X Article 605 Office Furnishings (Consisting of Lighting X X Accessories and Wired Partitions) Article 610 Cranes and Hoists X X Article 610 Cranes and Hoists X X Article 620 Elevators, Dumbwaiters, Escalators, Moving Walks, Platform Liffs, and Stairway Chairlifts Article 625 Electric Vehicle Charging Systems X X Article 625 Electric Vehicle Charging Systems X X Article 630 Electric Welders X X Article 630 Electric Welders X X Article 640 Audio Signal Processing, Amplification, Article 640 Furnishing X X Article 645 Information Technology Equipment X X Article 647 Sensitive Electronic Equipment X X Article 650 Pipe Organs X X Article 660 X-Ray Equipment X X Article 660 Induction and Dielectric Heating X Equipment X Article 668 Electrolytic Cells X X Article 670 Industrial Machinery X X Article 670 Industrial Machinery X X Article 670 Industrial Machinery X X Article 680 Swimming Pools, Fountains, and Similar X Installations Article 682 Natural and Artificially Made Bodies of X Water Article 685 Integrated Electrical Systems X X Article 690 Fuel Cell Systems X X Article 692 Fuel Cell Systems X X Article 694 Small Wind Electric Systems X X	Adopting Agency	DSA-SS	DSA-SS/CC	Comments
Article 600 Electric Signs and Outline Lighting Article 604 Manufactured Wiring Systems Article 605 Office Furnishings (Consisting of Lighting Accessories and Wired Partitions) Article 610 Cranes and Hoists Article 620 Elevators, Dumbwaiters, Escalators, Moving Walks, Platform Lifts, and Stainway Chairlifts Article 625 Electric Vehicle Charging Systems Article 626 Electrifed Truck Parking Spaces Article 630 Electric Welders Article 640 Audio Signal Processing, Amplification, and Reproduction Equipment Article 645 Information Technology Equipment Article 647 Sensitive Electronic Equipment Article 660 Induction and Dielectric Heating Equipment Article 668 Induction and Dielectric Heating Article 669 Electroplating Article 670 Industrial Machinery Article 675 Electrically Driven or Controlled Irrigation Article 680 Swimming Pools, Fountains, and Similar Installations Article 682 Natural and Artificially Made Bodies of Water Article 685 Integrated Electrical Systems X X X X X X X X X X X X X X X X X X X				Johnnella
Article 604 Manufactured Wiring Systems X X X Article 605 Office Furnishings (Consisting of Lighting X X X Accessories and Wired Partitions)  Article 610 Cranes and Hoists X X X Article 620 Elevators, Dumbwaiters, Escalators, X X X Moving Walks, Platform Lifts, and Stairway Chairlifts Article 625 Electric Vehicle Charging Systems X X X Article 626 Electrifed Truck Parking Spaces X X X Article 630 Electric Welders X X X Article 630 Electric Welders X X X Article 640 Audio Signal Processing, Amplification, X X X Article 640 Finformation Technology Equipment X X X Article 647 Sensitive Electronic Equipment X X X Article 647 Sensitive Electronic Equipment X X X Article 660 X-Ray Equipment X X X Article 660 Induction and Dielectric Heating X X X Article 668 Electrolytic Cells X X X Article 669 Electroplating X X X Article 669 Electroplating X X X Article 670 Industrial Machinery X X X Article 675 Electrically Driven or Controlled Irrigation X X X Article 680 Swimming Pools, Fountains, and Similar Installations Article 680 Swimming Pools, Fountains, and Similar Installations Article 681 Integrated Electrical Systems X X X Article 690 Solar Photovoltaic (PV) Systems X X Article 691 Fuel Cell Systems X X Article 692 Fuel Cell Systems X X				
Article 605 Office Furnishings (Consisting of Lighting Accessories and Wired Partitions)  Article 610 Cranes and Hoists X X X  Article 620 Elevators, Dumbwaiters, Escalators, Moving Walks, Platform Lifts, and Stairway Chairlifts  Article 625 Electric Vehicle Charging Systems X X  Article 626 Electrified Truck Parking Spaces X X  Article 630 Electric Welders X X  Article 640 Audio Signal Processing, Amplification, And Reproduction Equipment X  Article 645 Information Technology Equipment X X  Article 647 Sensitive Electronic Equipment X X  Article 650 Pipe Organs X X  Article 660 X-Ray Equipment X X  Article 663 Electrolytic Cells X X  Article 668 Electrolytic Cells X X  Article 669 Electroplating X X  Article 670 Industrial Machinery X X  Article 675 Electrically Driven or Controlled Irrigation X  Machines  Article 680 Swimming Pools, Fountains, and Similar X  Installations  Article 685 Integrated Electrical Systems X X  Article 690 Solar Photovoltaic (PV) Systems X X  Article 692 Fuel Cell Systems X X  Article 691 Fuel Cell Systems X X  Article 692 Fuel Cell Systems X X				
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## CALIFORNIA ELECTRICAL CODE CHAPTER 7 - SPECIAL CONDITIONS

Repeal Chapter 7 (Special Conditions) of the 2011 NEC.

Adopt Chapter 7 (Special Conditions) of the 2014 NEC without amendment for publication in the 2016 triennial edition of the CEC.

Adopting Agency	DSA-SS	DSA-SS/CC	Comments

### STATE OF CALIFORNIA **BUILDING STANDARDS COMMISSION**

Adaus Entire Objection	· · · · · · · · · · · · · · · · · · ·		
Adopt Entire Chapter	X	X	
Article 700 Emergency Systems	X	X	
Article701 Legally Required Standby Systems	Х	X	
Article 702 Optional Standby Systems	Х	X	
Article 705 Interconnected Electric Power Production	Х	Х	
Sources			
Article 708 Critical Operations Power Systems	Х	Х	
(COPS)			
Article 720 Circuits and Equipment Operating at Less	Χ	Х	
Than 50 Volts			
Article 725 Class 1, Class 2, and Class 3 Remote-	Х	Х	
Control, Signaling, and Power-Limited Circuits			
Article 727 Instrumentation Tray Cable: Type ITC	X	Х	
Article 727 Instrumentation Tray Cable: Type ITC	Х	Х	
Article 728 Fire Resistive Cable Systems	Х	Х	Adopt New
			Article 728 in
			2014 NEC -
·			Fire Resistive
,			Cable
			Systems
Article 750 Energy Management Systems	X	X	Adopt New
The note of an arrangement of the state of t			Article 750 in
			2014 NEC -
			Energy
			Management
			Systems
Article 770 Optical Fiber Cables and Raceways	х	X	Systems
Afficie 110 Optical Fiber Cables and Naceways			

### CALIFORNIA ELCTRICAL CODE **CHAPTER 8 - COMMUNICATIONS SYSTEMS**

Repeal Chapter 8 (Communications Systems) of the 2011 NEC. Adopt Chapter 8 (Communications Systems) of the 2014 NEC without amendment for publication in the 2016 triennial edition of the CEC.

Adopting Agency	DSA-SS	DSA-SS/CC	Comments
Adopt Entire Chapter	. X	X	
Article 800 Communications Circuits	Χ	X	
Article 810 Radio and Television Equipment	Χ	X	
Article 820 Community Antenna Television and Radio Distribution Systems	Х	Х	
Article 830 Network-Powered Broadband	Χ	Х	
Communications Systems			
Article 840 Premises-Powered Broadband	X	X	

### CALIFORNIA ELECTRICAL CODE CHAPTER 9 - TABLES

Repeal Chapter 9 (Tables) of the 2011 NEC.

Adopt Chapter 9 (Tables) of the 2014 NEC for publication in the 2016 triennial edition of the CEC.

Adopting Agency	DSA-SS	DSA-SS/CC	Comments
Adopt Entire Chapter	X	X	
Table 1 Percent of Cross Section of conduit and Tubing	Х	.X	
for Conductors and Cables			

Table 2 Radius of Conduit and Tubing Bends	Х	X	
Table 4 Dimensions ad Percent Area of Conduit and	X	X	
Tubing (Areas of conduit or Tubing for the Combinations	^	^	
of Wires Permitted in Table 1, Chapter 9)			
Table 5 Dimensions of Insulated Conductors and Fixture	X	X	
Wires	^	<b>X</b>	
Table 5A Compact Copper and Aluminum Building Wire	X	X	
Nominal Dimensions* and Areas	^	<b>A</b>	
Table 8 Conductor Properties	X	X	
Table 9 Alternating-Current Resistance and Reactance	X	X	
for 600-Volt Cables, 3-Phase, 60 Hz, 75°C (167°F) –			
Three Single Conductors in Conduit			
Table 10 Conductor Standing	X	X	
Table 11(A) Class 2 and Class 3 Alternating-Current	X	X	
Power Source Limitations			
Table 11(B) Class 2 and Class 3 Direct-Current Power	Х	Х	
Source Limitations			
Table 12(A) PLFA Alternating-Current Power Source	Х	Х	
Limitations			
Table 12 (B) PLFA Direct-Current Power Source	X	Х	

### CALIFORNIA ELECTRICAL CODE **ANNEX**

DSA-SS and DSA-SS/CC do not propose to adopt Annex A, B, C, D, E, F, G, H, I or J of the 2014 NEC for publication in the 2016 triennial edition of the CEC.

Adenting Agency	Device	Dev seice	Commonto
Adopting Agency	DSA-SS	DSA-SS/CC	Comments
Informative Annex A Product Safety Standards	,		
Informative Annex B Application Information for			
Ampacity Calculation			
Informative Annex C Conduit and Tubing Fill Tables for			
Conductors and Fixture Wires of the Same Size			
Informative Annex D Examples			
Informative E Types of Construction			
Informative Annex F Availability and Reliability for Critical			
Operations Power Systems; and Development and			
Implementation of Functional Performance Tests (FPTs)			
for Critical Operations Power Systems			
Informative Annex G Supervisory Contr5ol and Data			
Acquisition (ACADA)			
Annex H Administration and Enforcement			
Annex I Recommended Tightening Torque Tables from			
UL Standard 486A-B			
Informative Annex J ADA Standards for Accessible			
Design			

### Notation for DSA-SS

Authority:

Education Code § 17310 and 81142, and H&S Code §16022. Education Code §§ 17280 through 17317, and 81130 through 81147, and H&S Code Reference(s):

§§16000 through 16023.

### STATE OF CALIFORNIA BUILDING STANDARDS COMMISSION

Notation for DSA-SS/CC

Authority: Education Code § 81053. Reference(s): Education Code §§ 81052, 81053, and 81130 through 81147.

### **FINAL EXPRESS TERMS**

FOR

### PROPOSED BUILDING STANDARDS

OF THE

DEPARTMENT OF HOUSING AND COMMUNITY DEVELOPMENT
REGARDING THE ADOPTION BY REFERENCE OF THE
2014 EDITION OF THE NATIONAL ELECTRICAL CODE WITH PROPOSED AMENDMENTS
INTO THE 2016 CALIFORNIA ELECTRICAL CODE
CALIFORNIA CODE OF REGULATIONS, TITLE 24, PART 3

(HCD 01/14)

The Department of Housing and Community Development (HCD) proposes to adopt the 2014 edition of the National Electrical Code (NEC) for codification and effectiveness into the 2016 edition of the California Electrical Code (CEC) as presented on the following pages, including any necessary amendments. HCD further proposes to:

- Repeal the 2011 edition of the National Electrical Code;
- Repeal the 2013 edition of the California Electrical Code, which includes amendments to the model code that are no longer necessary;
- Repeal or amend building standards that are not addressed by a model code:
- Relocate or codify existing adopted and necessary amendments to the model code into the format of the model code proposed for adoption, the action of which has no regulatory effect; adopt new necessary amendments to the model code proposed for adoption; and/or
- Adopt new building standards that are not addressed by the model code proposed for adoption.

### LEGEND FOR EXPRESS TERMS:

- NEC language with new California amendments: NEC language shown in normal Arial 9 point; California amendments to NEC text shown <u>underlined and in italics</u> with vertical bar in left margin.
- 2. Existing California amendments or code language being modified: All such language shown in *italics*; modified language is <u>underlined</u> or shown in *strikeout* with vertical bar in left margin.
- Existing California amendments with no modifications: All such existing language shown in italics, modified model code language shown in strikeout.
- 4. Text not being modified: All language not displayed in full is shown as "..." (i.e., ellipsis).
- 5. Repealed text: All language shown in strikeout.
- 6. Notation: Authority and Reference citations are provided at the end of each action.

1. HCD proposes to bring forward existing California amendments in Article 89, Sections 89.101, 89.101.1, 89.101.3.2, 89.101.8.1, 89.101.10, 89.108, 89.108.2.1.1, 89.108.2.1.2, 89.108.3.1, 89.108.3.2.1, 89.108.4.3.1, 89.108.7.2, 89.108.7.2.1, 89.108.7.3, 89.108.8, 89.108.8.1, 89.108.10, 89.108.10.1, and 89.108.10.2 from the 2013 California Electrical Code for adoption into the 2016 California Electrical Code with modifications as follows:

## CALIFORNIA ARTICLE 89 GENERAL CODE PROVISIONS

### SECTION 89.101 GENERAL

89.101.1 Title. These regulations shall be known as the California Electrical Code, may be cited as such and will be referred to herein as "this code." The California Electrical Code is Part 3 of twelve parts of the official compilation and publication of the adoption, amendment, and repeal of electrical regulations to the California Code of Regulations, Title 24, also referred to as the California Building Standards Code. This part incorporates by adoption the 2014 2014 National Electrical Code of the National Fire Protection Association with necessary California amendments.

89.101.3.2 State-Regulated Buildings, Structures, and Applications. The model code, state amendments to the model code, and/or state amendments where there are no relevant model code provisions shall apply to the following buildings, structures, and applications regulated by state agencies and as specified in Sections 89.102 through 89.114, except where modified by local ordinance pursuant to Section 89.101.8. When adopted by a state agency, the provisions of this code shall be enforced by the appropriate enforcing agency, but only to the extent of authority granted to such agency by the state legislature.

Note: See Preface to distinguish the model code provisions from the California provisions.

- State-owned buildings, including buildings constructed by the Trustees of the California State University, and
  to the extent permitted by California laws, buildings designed and constructed by the Regents of the
  University of California, and regulated by the Building Standards Commission. See Section 89.102 for
  additional scope provisions.
- 2. Reserved for Corrections Standards Authority. See Section 89.103 for additional scope provisions.
- 3. Reserved for the Department of Consumer Affairs. See Section 89.104 for additional scope provisions.
- 4. Reserved for the California Energy Commission. See Section 89.105 for additional scope provisions.
- 5. Reserved for the Department of Food and Agriculture. See Section 89.106 for additional scope provisions.
- Organized camps, laboratory animal quarters, public swimming pools, radiation protection, commissaries serving mobile food preparation vehicles and wild animal quarantine facilities regulated by the California Department of Public Health (DPH). See Section 89.107 for additional scope provisions.
- Hotels, motels, lodging houses, apartment houses apartments, dwellings, dormitories, condominiums, shelters for homeless persons, congregate residences, employee housing, factory-built housing, and other types of dwellings containing sleeping accommodations with or without common toilets or cooking facilities. See Section 89.108.2.1.1 for additional scope provisions.
- 8. Accommodations for persons with disabilities in buildings containing newly constructed covered multifamily dwellings, new common use spaces areas serving existing covered multifamily dwellings, additions to existing buildings where the addition alone meets the definition of "COVERED MULTIFAMILY DWELLINGS," covered multifamily dwellings, and new common-use spaces areas serving new covered multifamily dwellings which are regulated by the Department of Housing and Community Development. See Section 89.108.2.1.2 for additional scope provisions.
- Permanent buildings and permanent accessory buildings or structures constructed within mobilehome parks and special occupancy parks regulated by the Department of Housing and Community Development. See Section 89.108.2.1.3 for additional scope provisions.
- 10. Accommodations for persons with disabilities regulated by the Division of the State Architect. See Section 89.109.1 for additional scope provisions.

- 11. Public elementary and secondary schools, community college buildings, and state-owned or state-leased essential service buildings regulated by the Division of the State Architect. See Section 89.109.2 for additional scope provisions.
- Qualified historical buildings and structures and their associated sites regulated by the State Historical Building Safety Board with the Division of the State Architect. See Section 89.109.3 for additional scope provisions.
- 13. General acute care hospitals, acute psychiatric hospitals, skilled nursing and/or intermediate care facilities, clinics licensed by the California Department of Public Health (DPH) and correctional treatment centers regulated by the Office of Statewide Health Planning and Development. See Section 89.110 for additional scope provisions.
- 14. Applications regulated by the Office of the State Fire Marshal include, but are not limited to, the following in accordance with Section 89.111:
  - 1. Buildings or structures used or intended for use as an:
    - 1.1. Asylum, jail, prison.
    - 1.2. Mental hospital, hospital, home for the elderly, children's nursery, children's home or institution, school or any similar occupancy of any capacity.
    - 1.3. Theater, dancehall, skating rink, auditorium, assembly hall, meeting hall, nightclub, fair building, or similar place of assemblage where 50 or more persons may gather together in a building, room or structure for the purpose of amusement, entertainment, instruction, deliberation, worship, drinking or dining, awaiting transportation, or education.
    - 1.4. Small family day care homes, large family day care homes, residential facilities and residential facilities for the elderly and residential care facilities.
    - 1.5. State institutions or other state-owned or state-occupied buildings.
    - 1.6. High rise structures.
    - 1.7. Motion picture production studios.
    - 1.8. Organized camps.
    - 1.9. Residential structures.
  - 2. Tents, awnings or other fabric enclosures used in connection with any occupancy.
  - 3. Fire alarm devices, equipment and systems in connection with any occupancy.
  - 4. Hazardous materials, flammable and combustible liquids.
  - 5. Public school automatic fire detection, alarm, and sprinkler systems.
  - 6. Wildland-Urban Interface (WUI) fire areas.
- 15. Reserved for the State Librarian. See Section 89.112 for additional scope provisions.
- 16. Reserved for the Department of Water Resources. See Section 89.113 for additional scope provisions.
- 17. Reserved for the California State Lands Commission. See Section 89.114 for additional scope provisions.

### 89.101.8.1 Findings and Filings.

 The city, county, or city and county shall make express findings for each amendment, addition or deletion based upon climatic, topographical, or geological conditions.

Exception: Hazardous building ordinances and programs mitigating unreinforced masonry buildings.

- The city, county, or city and county shall file the amendments, additions, or deletions expressly
  marked and identified as to the applicable findings. Cities, counties, cities and counties, and fire
  departments shall file the amendments, additions or deletions, and the findings with the California
  Building Standards Commission at 2525 Natomas Park Drive, Suite 130, Sacramento, CA 95833.
- 3. Findings prepared by fire protection districts shall be ratified by the local city, county, or city and county and

filed with the California Department of Housing and Community Development, Division of Codes and Standards, P.O. Box 1407, Sacramento, CA 95812-1407 or at 1800 3rd Street, Room 260, Sacramento, CA 95811-2020 W. El Camino Avenue, Suite 250, Sacramento, CA 95833-1829.

89.101.10 Availability of Codes. At least one complete copy each of Titles 8, 19, 20, 24, and 25 with all revisions shall be maintained in the office of the building official responsible for the administration and enforcement of this code. Each state department concerned and each city, county or city and county shall have an up-to-date copy of the code available for public inspection. See Health and Safety Code Section 18942 (d)(e)(1) and (2).

## SECTION 89.108 DEPARTMENT OF HOUSING AND COMMUNITY DEVELOPMENT

89.108.2.1.1 Housing Construction. Application - Hotels, motels, lodging houses, apartment houses apartments, dwellings, domitories, condominiums, shelters for homeless persons, congregate residences, employee housing, factory-built housing and other types of dwellings containing sleeping accommodations with or without common toilet or cooking facilities including accessory buildings, facilities, and uses thereto. Sections of this code which pertain to applications listed in this section are identified using the abbreviation "HCD 1".

Enforcing Agency-Local building department or the Department of Housing and Community Development.

**Authority Cited**: Health and Safety Code Sections 17040, 17050, 17920.9, 17921, 17921.3, 17921.6, 17921.10, 17922, 17922.6, 17922.12, 17927, 17928, 17959.6, 18300, 18552, 18554, 18620, 18630, 18640, 18670, 18690, 18691, 18865, 18871.3, 18871.4, 18873, 18873.1, 18873.2, 18873.3, 18873.4, 18873.5, 18938.3, 18944.11, and 19990: and Government Code Section 12955.1.

**Reference**: Health and Safety Code Sections 17000 through 17062.5, 17910 through 17995.5, 18200 through 18700, 18860 through 18874, and 19960 through 19997; and Government Code Sections 12955.1 and 12955.1.1.

89.108.2.1.2 Housing Accessibility. Application — Covered multifamily dwellings as defined in Chapter 11A-2 of the California Code of Regulations, Title 24, Part 2, also known as the California Building Code (CBC) including, but not limited to, lodging houses, domitories, timeshares, condominiums, shelters for homeless persons, congregate residences, apartment houses apartments, dwellings, employee housing, factory-built housing and other types of dwellings containing sleeping accommodations with or without common toilet or cooking facilities.

Sections of this code identified by the abbreviation "HCD 1-AC" require specific accommodations for "PERSONS WITH DISABILITIES," persons with disabilities, as defined in CBC-Chapter 41A 2 of the California Building Code. The application of such provisions shall be in conjunction with other requirements of this code and apply only to newly-constructed "COVERED MULTIFAMILY DWELLINGS" covered multifamily dwellings as defined in CBC Chapter 41A 2 of the California Building Code. "HCD 1-AC" applications include, but are not limited to, the following:

- (1) All newly-constructed "COVERED MULTIFAMILY DWELLINGS" covered multifamily dwellings as defined in CBC Chapter 41A 2 of the California Building Code.
- (2) New "COMMON USE AREAS" common use areas as defined in CBC Chapter 11A 2 of the California Building Code serving existing covered multifamily dwellings.
- (3) Additions to existing buildings, where the addition alone meets the definition of "COVERED MULTIFAMILY DWELLINGS" covered multifamily dwellings as defined in GBC Chapter 11A 2 of the California Building Code.
- (4) Common use areas serving covered multifamily dwellings.
- (5) Where any portion of a building's exterior is preserved, but the interior of the building is removed, including all structural portions of floors and ceilings, the building is considered a new building for determining the application of CBC, the <u>California Building Code</u> Chapter 11A.

"HCD 1-AC" building standards generally do not apply to public use areas or public accommodations such as hotels, and motels and public housing. Public use areas, public accommodations, and public housing which is publicly funded as defined in Chapter 2 of the CBC California Building Code are subject to the Division of the State Architect (DSA-AC) and are referenced in Section 109.1 1.9.1.

Newly constructed covered multifamily dwellings, which can also be defined as public housing, shall be subject to the requirements of Chapter 11A and Chapter 11B.

Enforcing Agency-Local building department or the Department of Housing and Community Development.

**Authority Cited**: Health and Safety Code Sections 17040, 17050, 17920.9, 17921, 17921.3, 17921.6, 17921.10, 17922, 17922.6, 17922.12, 17927, 17928, 17959.6, 18300, 18552, 18554, 18620, 18630, 18640, 18670, 18690, 18691, 18865, 18871.3, 18871.4, 18873, 18873.1, 18873.2, 18873.3, 18873.4, 18873.5, 18944.11, and 19990; and Government Code Section 12955.1.

**Reference**: Health and Safety Code Sections 17000 through 17062.5, 17910 through 17995.5, 18200 through 18700, 18860 through 18874, and 19960 through 19997; and Government Code Sections 12955.1 and 12955.1.1.

89.108.3.1 Duties and Powers. The building department of every city, county or city and county shall enforce all the provisions of law, this code, and the other rules and regulations promulgated by the Department of Housing and Community Development pertaining to the installation, erection, construction, reconstruction, movement, enlargement, conversion, alteration, repair, removal, demolition, or arrangement of apartment houses apartments, condominiums, hotels, motels, lodging houses and dwellings, including accessory buildings, facilities, and uses thereto.

The provisions regulating the erection and construction of dwellings and appurtenant structures shall not apply to existing structures as to which construction is commenced or approved prior to the effective date of these regulations. Requirements relating to use, maintenance and occupancy shall apply to all dwellings and appurtenant structures approved for construction or constructed before or after the effective date of this code.

For additional information regarding the use and occupancy of existing buildings and appurtenant structures, see California Code of Regulations, Title 25, Division 1, Chapter 1, Subchapter 1, commencing with Article 1, Section 1.

89.108.3.2.1 State Housing Law. Refer to the State Housing Law, California Health and Safety Code, Division 13, Part 1.5, commencing with Section 17910 and California Code of Regulations, Title 25, Division 1, Chapter 1, Subchapter 1, commencing with Section 1, for the erection, construction, reconstruction, movement, enlargement, conversion, alteration, repair, removal, demolition or arrangement of apartment houses apartments, condominiums, hotels, motels, lodging houses and dwellings, including accessory buildings, facilities, and uses thereto.

**89.108.4.3.1 Retention of Plans.** The building department of every city, county or city and county shall maintain an official copy, microfilm, or electronic or other type of photographic copy of the plans of every building, during the life of the building, for which the department issued a building permit.

### Exceptions:

- 1. Single or multiple dwellings not more than two stories and basement in height.
- 2. Garages and other structures appurtenant to buildings listed in Exception (1).
- 3. Farm or ranch buildings appurtenant to buildings listed in Exception (1).
- Any one-story building where the span between bearing walls does not exceed 25 feet (7620 mm), except a steel frame or concrete building.

All plans for common interest developments as defined in Section 1351 4100 of the California Civil Code shall be retained. For additional information regarding plan retention and reproduction of plans by an enforcing agency, see Health and Safety Code Sections 19850 through 19852.

89.108.7.2 Local Building Departments. The building department of any city, county or city and county may approve alternates for use in the erection, construction, reconstruction, movement, enlargement, conversion,

alteration, repair, removal, demolition or arrangement of an apartment house apartments, condominiums, hotels, motels, lodging houses, dwellings, or an accessory structures, except for the following:

- 1. Structures located in mobilehome parks as defined in California Health and Safety Code Section 18214.
- Structures located in special occupancy parks as defined in California Health and Safety Code Section 18862.43.
- 3. Factory-built housing as defined in California Health and Safety Code Section 19971.

**89.108.7.2.1** Approval of Alternates. The consideration and approval of alternates by a local building department shall comply with the following procedures and limitations:

- 1. The approval shall be granted on a case-by-case basis.
- Evidence shall be submitted to substantiate claims that the proposed alternate, in performance, safety, and protection of life and health, conforms to, or is at least equivalent to, the standards contained in this code and other rules and regulations promulgated by the Department of Housing and Community Development.
- 3. The local building department may require tests performed by an approved testing agency at the expense of the owner or owner's agent as proof of compliance.
- 4. If the proposed alternate is related to accessibility in covered multifamily dwellings or in facilities serving "COVERED MULTIFAMILY DWELLINGS" covered multifamily dwellings as defined in CBC Chapter 11A 2, of the California Building Code, the proposed alternate must also meet the threshold set for "EQUIVALENT FACILITATION" equivalent facilitation as defined in CBC Chapter 11A 2 of the California Building Code.

For additional information regarding approval of alternates by a local building department pursuant to the State Housing Law, see California Health and Safety Code Section 17951(e) and California Code of Regulations, Title 25, Division 1, Chapter 1, Subchapter 1.

89.108.7.3 Department of Housing and Community Development. The Department of Housing and Community Development may approve alternates for use in the erection, construction, reconstruction, movement, enlargement, conversion, alteration, repair, removal or demolition of an apartment house apartments, condominiums, hotels, motels, lodging houses, dwellings, or an accessory thereto. The consideration and approval of alternates shall comply with the following:

- The department may require tests at the expense of the owner or owner's agent to substantiate compliance with the California Building Standards Code.
- 2. The approved alternate shall, for its intended purpose, be at least equivalent in performance and safety to the materials, designs, tests, or methods of construction prescribed by this code.

### 89.108.8 APPEALS BOARD

89.108.8.1 General. Every city, county, or city and county shall establish a process to hear and decide appeals of orders, decisions, and determinations made by the enforcing agency relative to the application and interpretation of this code and other regulations governing construction. use, maintenance and change of occupancy. The governing body of any city, county, or city and county may establish a local appeals board and a housing appeals board to serve this purpose. Members of the appeals board(s) shall not be employees of the enforcing agency and shall be knowledgeable in the applicable building codes, regulations and ordinances as determined by the governing body of the city, county, or city and county.

Where no such appeals boards or agencies have been established, the governing body of the city, county, or city and county shall serve as the local appeals board or housing appeals board as specified in California Health and Safety Code Sections 17920.5 and 17920.6.

### 89.108.10 OTHER BUILDING REGULATIONS

89.108.10.1 Existing Structures. Subject to the requirements of California Health and Safety Code Sections 17912, 17920.3, 17922.3, 17958.8 and 17958.9, the provisions contained in Chapter 34 of the CBC relating to existing structures shall only apply as identified in the Matrix Adoption Table under the authority of the Department of Housing and Community Development as listed in Sections 89.108.2.1.1 through 89.108.2.1.3 of this code.

89.108.10.1 Existing Structures. Notwithstanding other provisions of law, the replacement, retention, and extension of original materials and the use of original methods of construction for any existing building or accessory structure, or portions thereof, shall be permitted in accordance with the provisions of this code and the California Existing Building Code, as adopted by the Department of Housing and Community Development. For additional information, see California Health and Safety Code, Sections 17912, 17920.3, 17922 and 17958.8.

89.108.10.2 Moved Structures. Subject to the requirements of California Health and Safety Code Sections 17922, 17922.3 and 17958.9, the provisions relating to a moved residential structure shall, after July 1, 1978, permit the retention of existing materials and methods of construction so long as the structure does not become or continue to be a substandard building.

89.108.10.2 Moved Structures. Subject to the requirements of California Health and Safety Code Sections
17922, 17922.3 and 17958.9. local ordinances or regulations relating to a moved residential building or accessory
structure thereto, shall permit the replacement, retention, and extension of original materials and the use of
original methods of construction so long as the structure does not become or continue to be a substandard
building.

#### NOTE:

Authority Cited: Health and Safety Code Sections 17040, 17050, 17920.9, 17921, 17921.3, 17921.6, 17921.10, 17922, 17922.6, 17922.12, 17927, 17928, 17959.6, 18300, 18552, 18554, 18620, 18630, 18640, 18670, 18690, 18691, 18865, 18871.3, 18871.4, 18873, 18873.1, 18873.2, 18873.3, 18873.4, 18873.5, 18938.3, 18944.11, and 19990; and Government Code Section 12955.1.

Reference: Health and Safety Code Sections 17000 through 17062.5, 17910 through 17995.5, 18200 through 18700, 18860 through 18874 and 19960 through 19997; and Government Code Sections 12955.1 and 12955.1.1.

2. HCD proposes to bring forward existing California amendments in Article 89, Sections 89.101.2, 89.101.3, 89.101.3.1, 89.101.3.3, 89.101.4 – 89.101.7, 89.101.7.1 – 89.101.7.3, 89.101.8, 89.101.9, 89.101.11, 89.101.12, 89.108.1, 89.108.2, 89.108.2.1, 89.108.2.1.3, 89.108.3.2, 89.108.3.2.2 – 89.108.3.2.5, 89.108.4.1, - 89.108.4.3, 89.108.4.4, 89.108.5.1, 89.108.6.1, 89.108.6.2, 89.108.7.1, 89.108.8.2, 89.108.8.3, 89.108.9.1, and 89.108.9.2, from the 2013 California Electrical Code for adoption into the 2016 California Electrical Code without modification as follows:

## CALIFORNIA ARTICLE 89 GENERAL CODE PROVISIONS

#### SECTION 89.101 GENERAL

89.101.2 Purpose. The purpose of this code is to establish the minimum requirements to safeguard the public health, safety and general welfare through structural strength, means of egress facilities, stability, access to persons with disabilities, sanitation, adequate lighting and ventilation, and energy conservation; safety to life and property from fire and other hazards attributed to the built environment; and to provide safety to fire fighters and emergency responders during emergency operations.

**89.101.3** Scope. The provisions of this code shall apply to the construction, alteration, movement, enlargement, replacement, repair, equipment, use and occupancy, location, maintenance, removal and demolition of every building or structure or any appurtenances connected or attached to such building or structures throughout the State of California.

89.101.3.1 Nonstate-Regulated Buildings, Structures, and Applications. Except as modified by local ordinance pursuant to Section 89.101.8, the building standards in the California Code of Regulations, Title 24,

Parts 2, 2.5, 3, 4, 5, 6, 9, 10 and 11 shall apply to all occupancies and applications not regulated by a state agency.

#### 89.101.3.3 Exempted from this Code. This code does not cover:

- (A) 1. Installations in ships, watercraft other than floating dwelling units, railway rolling stock, aircraft, automotive vehicles, commercial coaches, mobilehomes, and recreational vehicles.
- (B) 2. Installations underground in mines, mine shafts and tunnels.
- (C) 3. Installations of railways for generation, transformation, transmission, or distribution of power used exclusively for operation of rolling stock or installations used exclusively for signaling and communication purposes.
- (D) 4. Installation of communication equipment under the exclusive control of communication utilities, located outdoors or in building spaces used exclusively for such installations.
- (E) 5. Installations under the exclusive control of electrical utilities for the purpose of communication, or metering; or for the generation, control, transformation, transmission, and distribution of electrical energy located in buildings used exclusively by utilities for such purposes or located outdoors on property owned or leased by the utility or on public highways, streets, roads, etc., or outdoors by established rights on private property.
- Exception to (D)4 and (E)5: In places of employment, the following shall apply: installations of conductors, equipment and associated enclosures subject to the jurisdiction of the California Public Utilities Commission, that are owned, operated and maintained by an electric, communications or electric railway utility, but not including conduit, vaults, and other like enclosures containing conductors and equipment of such a utility when located indoors or on premises not used exclusively for utility purposes, but do not apply to the utility's conductors and equipment therein.
- (F) 6. Installations on highways or bridges.
- 89.101.4 Annexes. Provisions contained in the annexes of this code shall not apply unless specifically adopted by a state agency or adopted by a local enforcing agency in compliance with Health and Safety Code Section 18901 et seq. for Building Standards Law, Health and Safety Code Section 17950 for State Housing Law and Health and Safety Code Section 13869.7 for Fire Protection Districts. See Section 89.101.8 of this code.
- 89.101.5 Referenced Codes. The codes, standards and publications adopted and set forth in this code, including other codes, standards and publications referred to therein are, by title and date of publication, hereby adopted as standard reference documents of this code. When this code does not specifically cover any subject related to building design and construction, recognized architectural or engineering practices shall be employed. The National Fire Codes, standards and the Fire Protection Handbook of the National Fire Protection Association are permitted to be used as authoritative guides in determining recognized fire prevention engineering practices.
- 89.101.6 Non-Building Standards, Orders and Regulations. Requirements contained in the National Electrical Code, or in any other referenced standard, code or document, which are not building standards as defined in Health and Safety Code Section 18909 shall not be construed as part of the provisions of this code. For nonbuilding standards, orders, and regulations, see other titles of the California Code of Regulations.

#### 89,101.7 Order of Precedence and Use.

- **89.101.7.1** Differences. In the event of any differences between these building standards and the standard reference documents, the text of these building standards shall govern.
- **89.101.7.2 Specific Provisions.** Where a specific provision varies from a general provision, the specific provisions shall apply.
- **89.101.7.3 Conflicts.** When the requirements of this code conflict with the requirements of any other part of the California Building Standards Code, Title 24, the most restrictive requirements shall prevail.
- 89.101.8 City, County, or City and County Amendments, Additions or Deletions. The provisions of this code do not limit the authority of city, county, or city and county governments to establish more restrictive and reasonably necessary differences to the provisions contained in this code pursuant to complying with Section 89.101.8.1. The effective date of amendments, additions, or deletions to this code by city, county or city and county filed pursuant to

Section 89.101.8.1 shall be the date filed. However, in no case shall the amendments, additions or deletions to this code be effective any sooner than the effective date of this code.

Local modifications shall comply with Health and Safety Code Section 18941.5 for Building Standards Law, Health and Safety Code Section 17958 for State Housing Law or Health and Safety Code Section 13869.7 for Fire Protection Districts.

**89.101.9** Effective Date of this Code. Only those standards approved by the California Building Standards Commission that are effective at the time an application for building permit is submitted shall apply to the plans and specifications for, and to the construction performed under, that permit. For the effective dates of the provisions contained in this code, see the History Note page of this code.

89.101.11 Format. This part fundamentally adopts the National Electrical Code by reference on a chapter-by-chapter basis. When a specific chapter of the National Electrical Code is not printed in the code and is marked "Reserved", such chapter of the National Electrical Code is not adopted as a portion of this code. When a specific chapter of the National Electrical Code is marked "Not adopted by the State of California" but appears in the code, it may be available for adoption by local ordinance.

**Note:** Matrix Adoption Tables at the front of each chapter may aid the code user in determining which chapter or sections within a chapter are applicable to buildings under the authority of a specific state agency, but they are not to be considered regulatory.

**89.101.12 Validity.** If any chapter, article, section, subsection, sentence, clause or phrase of this code is for any reason held to be unconstitutional, contrary to statute, exceeding the authority of the state as stipulated by statutes, or otherwise inoperative, such decision shall not affect the validity of the remaining portion of this code.

## SECTION 89.108 DEPARTMENT OF HOUSING AND COMMUNITY DEVELOPMENT

**89.108.1 Purpose.** The purpose of this code is to establish minimum standards to protect the health, safety, and general welfare of the occupant and the public against hazards that may arise from the use of electricity by governing the design, construction, reconstruction, installation, quality of materials, location, operation, and maintenance or use of electrical equipment, wiring and systems.

#### 89.108.2 AUTHORITY AND ABBREVIATIONS

**89.108.2.1 General.** The Department of Housing and Community Development is authorized by law to promulgate and adopt building standards and regulations for several types of building applications. The applications under the authority of the Department of Housing and Community Development are listed in Sections 89.108.2.1.1 through 89.108.2.1.3.

89.108.2.1.3 Permanent Buildings in Mobilehome Parks and Special Occupancy Parks. Application Permanent buildings, and permanent accessory buildings or structures, constructed within mobilehome parks and
special occupancy parks that are under the control and ownership of the park operator. Sections of this code
which pertain to applications listed in this section are identified using the abbreviation "HCD 2".

Enforcing Agency— Local building department or other local agency responsible for the enforcement of Health and Safety Code, Division 13, Part 2.1, commencing with Section 18200 for mobilehome parks and Health and Safety Code, Division 13, Part 2.3, commencing with Section 18860 for special occupancy parks; or the Department of Housing and Community Development.

**Authority Cited**: Health and Safety Code Sections 17040, 17050, 17920.9, 17921, 17921.3, 17921.6, 17921.10, 17922, 17922.6, 17922.12, 17927, 17928, 17959.6, 18300, 18552, 18554, 18620, 18630, 18640, 18670, 18690, 18691, 18865, 18871.3, 18871.4, 18873, 18873.1, 18873.2, 18873.3, 18873.4, 18873.5, 18944.11, and 19990; and Government Code Section 12955.1.

Reference: Health and Safety Code Sections 17000 through 17062.5, 17910 through 17995.5, 18200 through 18700, 18860 through 18874, and 19960 through 19997; and Government Code Sections 12955.1 and 12955.1.1.

89.108.3.2 Laws, Rules and Regulations. Other than the building standards contained in this code, and notwithstanding other provisions of law, the statutory authority and location of the laws, rules, and regulations to be enforced by local enforcing agencies are listed by statute in Sections 89.108.3.2.1 through 89.108.3.2.5 below:

89.108.3.2.2 Mobilehome Parks Act. Refer to the Mobilehome Parks Act, California Health and Safety Code, Division 13, Part 2.1, commencing with Section 18200 and California Code of Regulations, Title 25, Division 1, Chapter 2, commencing with Section 1000 for mobilehome park administrative and enforcement authority, permits, plans, fees, violations, inspections and penalties both within and outside mobilehome parks.

Exception: Mobilehome parks where the Department of Housing and Community Development is the enforcing agency.

89.108.3.2.3 Special Occupancy Parks Act. Refer to the Special Occupancy Parks Act, California Health and Safety Code, Division 13, Part 2.3, commencing with Section 18860 and California Code of Regulations, Title 25, Division 1, Chapter 2.2, commencing with Section 2000 for special occupancy park administrative and enforcement authority, permits, fees, violations, inspections and penalties both within and outside of special occupancy parks.

**Exception:** Special occupancy parks where the Department of Housing and Community Development is the enforcing agency.

89.108.3.2.4 Employee Housing Act. Refer to the Employee Housing Act, California Health and Safety Code, Division 13, Part 1, commencing with Section 17000 and California Code of Regulations, Title 25, Division 1, Chapter 1, Subchapter 3, commencing with Section 600 for employee housing administrative and enforcement authority, permits, fees, violations, inspections and penalties.

89.108.3.2.5 Factory-Built Housing Law. Refer to the Factory-Built Housing Law, California Health and Safety Code, Division 13, Part 6, commencing with Section 19960 and California Code of Regulations, Title 25, Division 1, Chapter 3, Subchapter 1, commencing with Section 3000 for factory-built housing administrative and enforcement authority, permits, fees, violations, inspections and penalties.

#### 89.108.4 PERMITS, FEES, APPLICATIONS AND INSPECTIONS

- 89.108.4.1 Permits. (a) Except as exempted in paragraph (b) of this subsection, a written construction permit shall be obtained from the enforcing agency prior to the erection, construction, reconstruction, installation, movement, or alteration of any electrical system.
- (b) Consistent with the requirements of Section 17960 of the Health and Safety Code, the local enforcing agency shall enforce the requirements of this code, but shall exempt the following activities from the requirement for a permit or inspection.
  - Listed cord and plug connected temporary decorative lighting.
  - 2. Reinstallation of attachment plug receptacles, but not the outlets therefore.
  - 3. Repair or replacement of branch circuit overcurrent devices of the required capacity in the same location.
  - 4. Installation or maintenance of communications wiring, devices, appliances, apparatus or equipment.

Exemptions from permit and inspection requirements shall not be deemed to grant authorization for any work to be done in any manner in violation of any other provision of law or this code.

89.108.4.2 Fees. Subject to other provisions of law, the governing body of any city, county or city and county may prescribe fees to defray the cost of enforcement of rules and regulations promulgated by the Department of Housing and Community Development. The amount of the fees shall not exceed the amount reasonably necessary to administer or process permits, certificates, forms, or other documents, or to defray the costs of enforcement. For additional information, see State Housing Law, Health and Safety Code, Division 13, Part 1.5,

Section 17951 and California Code of Regulations, Title 25, Division 1, Chapter 1, Subchapter 1, Article 3, commencing with Section 6.

89.108.4.3 Plan Review and Time Limitations. Subject to other provisions of law, provisions related to plan checking, prohibition of excessive delays and contracting with or employment of private parties to perform plan checking are set forth in State Housing Law, Health and Safety Code Section 17960.1, and for employee housing, in Health and Safety Code Section 17021.

**89.108.4.4 Inspections.** Construction or work for which a permit is required shall be subject to inspection by the building official and such construction or work shall remain accessible and exposed for inspection purposes until approved. Approval as a result of an inspection shall not be construed to be an approval of a violation of the provisions of this code or other regulations of the Department of Housing and Community Development.

#### 89.108.5 RIGHT OF ENTRY FOR ENFORCEMENT

89.108.5.1 General. Subject to other provisions of law, officers and agents of the enforcing agency may enter and inspect public and private properties to secure compliance with the rules and regulations promulgated by the Department of Housing and Community Development. For limitations and additional information regarding enforcement, see the following:

- For applications subject to State Housing Law as referenced in Section 89.108.3.2.1 of this code, refer to Health and Safety Code, Division 13, Part 1.5, commencing with Section 17910 and California Code of Regulations, Title 25, Division 1, Chapter 1, Subchapter 1, commencing with Section 1.
- 2. For applications subject to the Mobilehome Parks Act as referenced in Section 89.108.3.2.2 of this code, refer to Health and Safety Code, Division 13, Part 2.1, commencing with Section 18200 and California Code of Regulations, Title 25, Division 1, Chapter 2, commencing with Section 1000.
- For applications subject to the Special Occupancy Parks Act as referenced in Section 89.108.3.2.3 of this
  code, refer to Health and Safety Code, Division 13, Part 2.3, commencing with Section 18860 and California
  Code of Regulations, Title 25, Division 1, Chapter 2.2, commencing with Section 2000.
- 4. For applications subject to the Employee Housing Act as referenced in Section 89.108.3.2.4 of this code, refer to Health and Safety Code, Division 13, Part 1, commencing with Section 17000 and California Code of Regulations, Title 25, Division 1, Chapter 1, Subchapter 3, commencing with Section 600.
- For applications subject to the Factory-Built Housing Law as referenced in Section 89.108.3.2.5 of this code, refer to Health and Safety Code, Division 13, Part 6, commencing with Section 19960 and California Code of Regulations, Title 25, Division 1, Chapter 3, Subchapter 1, commencing with Section 3000.

#### 89.108.6 LOCAL MODIFICATION BY ORDINANCE OR REGULATION

89.108.6.1 General. Subject to other provisions of law, a city, county or city and county may make changes to the provisions adopted by the Department of Housing and Community Development. If any city, county or city and county does not amend, add, or repeal by local ordinances or regulations the provisions published in this code or other regulations promulgated by the Department of Housing and Community Development, those provisions shall be applicable and shall become effective 180 days after publication by the California Building Standards Commission. Amendments, additions, and deletions to this code adopted by a city, county or city and county pursuant to California Health and Safety Code Sections 17958.5, 17958.7 and 18941.5, together with all applicable portions of this code, shall also become effective 180 days after publication of the California Building Standards Code by the California Building Standards Commission.

89.108.6.2 Findings, Filings, and Rejections of Local Modifications. Prior to making any modifications or establishing more restrictive building standards, the governing body shall make express findings and filings, as required by California Health and Safety Code Section 17958.7, showing that such modifications are reasonably necessary due to local climatic, geological, or topographical conditions. No modification shall become effective or operative unless the following requirements are met:

- 1. The express findings shall be made available as a public record.
- A copy of the modification and express finding, each document marked to cross-reference the other, shall be filed with the California Building Standards Commission for a city, county or city and county and with the Department of Housing and Community Development for fire protection districts.

3. The California Building Standards Commission has not rejected the modification or change.

Nothing in this section shall limit the authority of fire protection districts pursuant to California Health and Safety Code Section 13869.7(a).

#### 89.108.7 ALTERNATE MATERIALS, DESIGNS, TESTS AND METHODS OF CONSTRUCTION

89.108.7.1 General. The provisions of this code as adopted by the Department of Housing and Community Development are not intended to prevent the use of any alternate material, appliance, installation, device, arrangement, design or method of construction not specifically prescribed by this code. Consideration and approval of alternates shall comply with Section 89.108.7.2 for local building departments and Section 89.108.7.3 for the Department of Housing and Community Development.

#### 89.108.8 APPEALS BOARD

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89.108.8.2 Definitions. The following terms shall for the purposes of this section have the meaning shown.

Housing Appeals Board. The board or agency of a city, county or city and county which is authorized by the governing body of the city, county or city and county to hear appeals regarding the requirements of the city, county or city and county relating to the use, maintenance and change of occupancy of buildings and structures, including requirements governing alteration, additions, repair, demolition, and moving. In any area in which there is no such board or agency, "Housing Appeals Board" means the local appeals board having jurisdiction over the area.

**Local Appeals Board.** The board or agency of a city, county or city and county which is authorized by the governing body of the city, county or city and county to hear appeals regarding the building requirements of the city, county or city and county. In any area in which there is no such board or agency, "Local Appeals Board" means the governing body of the city, county or city and county having jurisdiction over the area.

89.108.8.3 Appeals. Except as otherwise provided by law, any person, firm, or corporation adversely affected by a decision, order, or determination by a city, county or city and county relating to the application of building standards published in the California Building Standards Code, or any other applicable rule or regulation adopted by the Department of Housing and Community Development, or any lawfully enacted ordinance by a city, county or city and county, may appeal the issue for resolution to the local appeals board or housing appeals board as appropriate.

The local appeals board shall hear appeals relating to new building construction and the housing appeals board shall hear appeals relating to existing buildings.

#### 89.108.9 UNSAFE BUILDINGS OR STRUCTURES

**89.108.9.1 Authority to Enforce.** Subject to other provisions of law, the administration, enforcement, actions, proceedings, abatement, violations and penalties for unsafe buildings and structures are contained in the following statutes and regulations:

- 1. For applications subject to State Housing Law as referenced in Section 89.108.3.2.1 of this code, refer to Health and Safety Code, Division 13, Part 1.5, commencing with Section 17910 and California Code of Regulations, Title 25, Division 1, Chapter 1, Subchapter 1, commencing with Section 1.
- 2. For applications subject to the Mobilehome Parks Act as referenced in Section 89.108.3.2.2 of this code, refer to Health and Safety Code, Division 13, Part 2.1, commencing with Section 18200 and California Code of Regulations, Title 25, Division 1, Chapter 2, commencing with Section 1000.
- 3. For applications subject to the Special Occupancy Parks Act as referenced in Section 89.108.3.2.3 of this code, refer to Health and Safety Code, Division 13, Part 2.3, commencing with Section 18860 and California Code of Regulations, Title 25, Division 1, Chapter 2.2, commencing with Section 2000.
- 4. For applications subject to the Employee Housing Act as referenced in Section 89.108.3.2.4 of this code, refer to Health and Safety Code, Division 13, Part 1, commencing with Section 17000 and California Code of Regulations, Title 25, Division 1, Chapter 1, Subchapter 3, commencing with Section 600.

5. For applications subject to the Factory-Built Housing Law as referenced in Section 89.108.3.2.5 of this code, refer to Health and Safety Code, Division 13, Part 6, commencing with Section 19960 and California Code of Regulations, Title 25, Division 1, Chapter 3, Subchapter 1, commencing with Section 3000.

**89.108.9.2 Actions and Proceedings.** Subject to other provisions of law, punishments, penalties and fines for violations of building standards are contained in the following statutes and regulations:

- 1. For applications subject to State Housing Law as referenced in Section 89.108.3.2.1 of this code, refer to Health and Safety Code, Division 13, Part 1.5, commencing with Section 17910 and California Code of Regulations, Title 25, Division 1, Chapter 1, Subchapter 1, commencing with Section 1.
- 2. For applications subject to the Mobilehome Parks Act as referenced in Section 89.108.3.2.2 of this code, refer to Health and Safety Code, Division 13, Part 2.1, commencing with Section 18200 and California Code of Regulations, Title 25, Division 1, Chapter 2, commencing with Section 1000.
- 3. For applications subject to the Special Occupancy Parks Act as referenced in Section 89.108.3.2.3 of this code, refer to Health and Safety Code, Division 13, Part 2.3, commencing with Section 18860 and California Code of Regulations, Title 25, Division 1, Chapter 2.2, commencing with Section 2000.
- 4. For applications subject to the Employee Housing Act as referenced in Section 89.108.3.2.4 of this code, refer to Health and Safety Code, Division 13, Part 1, commencing with Section 17000 and California Code of Regulations, Title 25, Division 1, Chapter 1, Subchapter 3, commencing with Section 600.
- 5. For applications subject to the Factory-Built Housing Law as referenced in Section 89.108.3.2.5 of this code, refer to Health and Safety Code, Division 13, Part 6, commencing with Section 19960 and California Code of Regulations, Title 25, Division 1, Chapter 3, Subchapter 1, commencing with Section 3000.

#### NOTE:

Authority Cited: Health and Safety Code Sections 17040, 17050, 17920.9, 17921, 17921.3, 17921.6, 17921.10, 17922, 17922.6, 17922.12, 17927, 17928, 17959.6, 18300, 18552, 18554, 18620, 18630, 18640, 18670, 18690, 18691, 18865, 18871.3, 18871.4, 18873, 18873.1, 18873.2, 18873.3, 18873.4, 18873.5, 18938.3, 18944.11, and 19990; and Government Code Section 12955.1.

Reference: Health and Safety Code Sections 17000 through 17062.5, 17910 through 17995.5, 18200 through 18700, 18860 through 18874 and 19960 through 19997; and Government Code Sections 12955.1 and 12955.1.1.

## 3. HCD proposes to adopt Article 90 from the 2014 National Electrical Code into the 2016 California Electrical Code without amendment.

## ARTICLE 90 Introduction

#### NOTE:

Authority Cited: Health and Safety Code Sections 17040, 17050, 17920.9, 17921, 17921.3, 17921.6, 17921.10, 17922, 17922.6, 17922.12, 17927, 17928, 17959.6, 18300, 18552, 18554, 18620, 18630, 18640, 18670, 18690, 18691, 18865, 18871.3, 18871.4, 18873, 18873.1, 18873.2, 18873.3, 18873.4, 18873.5, 18938.3, 18944.11, and 19990; and Government Code Section 12955.1.

Reference: Health and Safety Code Sections 17000 through 17062.5, 17910 through 17995.5, 18200 through 18700, 18860 through 18874 and 19960 through 19997; and Government Code Sections 12955.1 and 12955.1.1.

4. HCD proposes to adopt Chapter 1, Articles 100 and 110, from the
2014 National Electrical Code, and to bring forward the existing California
amendments from the 2013 California Electrical Code into the 2016 California
Electrical Code as follows:

#### Chapter 1 General

### ARTICLE 100 Definitions

Ballasted Solar Photovoltaic System. (BSC, SFM, HCD1 & HCD2) A roof mounted system composed of solar photovoltaic panels and supporting members that are unattached or partially attached to the roof and must rely on their weight, aerodynamics and friction to counter the effect of wind and seismic forces.

## ARTICLE 110 Requirements for Electrical Installations

#### SECTION 110.13 MOUNTING AND COOLING OF EQUIPMENT

(A) Mounting. Electrical equipment shall be firmly secured to the surface on which it is mounted. Wooden plugs driven into holes in masonry, concrete, plaster, or similar materials shall not be used.

Exception: (BSC, SFM, HCD1 & HCD2) Roof mounted ballasted solar photovoltaic systems provided that the wiring and interconnections are designed to accommodate for maximum system displacement.

#### NOTE:

Authority Cited: Health and Safety Code Sections 17040, 17050, 17920.9, 17921, 17921.3, 17921.6, 17921.10, 17922, 17922.6, 17922.12, 17927, 17928, 17959.6, 18300, 18552, 18554, 18620, 18630, 18640, 18670, 18690, 18691, 18865, 18871.3, 18871.4, 18873, 18873.1, 18873.2, 18873.3, 18873.4, 18873.5, 18938.3, 18944.11, and 19990; and Government Code Section 12955.1.

Reference: Health and Safety Code Sections 17000 through 17062.5, 17910 through 17995.5, 18200 through 18700, 18860 through 18874 and 19960 through 19997; and Government Code Sections 12955.1 and 12955.1.1.

5. HCD proposes to adopt Chapter 2, Articles 200, 210, 215, 220, 225, 230, 240, 250, 280 and 285, from the 2014 National Electrical Code into the 2016 California Electrical Code without amendment.

#### **Chapter 2 Wiring and Protection**

#### **ARTICLES 200-285**

#### NOTE:

Authority Cited: Health and Safety Code Sections 17040, 17050, 17920.9, 17921, 17921.3, 17921.6, 17921.10, 17922, 17922.6, 17922.12, 17927, 17928, 17959.6, 18300, 18552, 18554, 18620, 18630, 18640, 18670, 18690, 18691, 18865, 18871.3, 18871.4, 18873, 18873.1, 18873.2, 18873.3, 18873.4, 18873.5, 18938.3, 18944.11, and 19990; and Government Code Section 12955.1.

Reference: Health and Safety Code Sections 17000 through 17062.5, 17910 through 17995.5, 18200 through 18700, 18860 through 18874 and 19960 through 19997; and Government Code Sections 12955.1 and 12955.1.1.

6. HCD proposes to adopt Chapter 3, Articles 300, 310, 312, 314, 320, 322, 324, 326, 328, 330, 332, 334, 336, 338, 340, 342, 344, 348, 350, 352, 353, 354, 355, 356, 358, 360, 362, 366, 368, 370, 372, 374, 376, 378, 380, 382, 384, 386, 388, 390, 392, 393, 394, 396, 398 and 399, from the 2014 National Electrical Code, and to bring forward the existing California amendments from the 2013 California Electrical Code into the 2016 California Electrical Code with modification as follows:

#### **Chapter 3 Wiring Methods and Materials**

## ARTICLE 334 Nonmetallic-Sheathed Cable: Types NM, NMC, and NMS

**334.10 Uses Permitted.** Type NM, Type NMC, and Type NMS cables shall be permitted to be used in the following, except as prohibited in 334.12:

- (1) One- and two-family dwellings and their attached or detached garages, and their storage buildings.
- (2) Multifamily dwellings permitted to be of Types III, IV, and V construction.
- (3) Other structures permitted to be of Types III, IV, and V construction. Cables shall be concealed within walls, floors, or ceilings that provide a thermal barrier of material that has at least a 15-minute finish rating as identified in listings of fire-rated assemblies.
  - Informational Note No. 1: Types of building construction and occupancy classifications are defined in NFPA 220-2012, Standard on Types of Building Construction, or the applicable building code, or both.

Informational Note No. 2: See Informative Annex E for determination of building types (NFPA 220, Table 3-1).

- (4) Cable trays in structures permitted to be Types III, IV, or V where the cables are identified for the use. Informational Note: See 310.15(A)(3) for temperature limitation of conductors.
- (5) Types I and II construction where installed within raceways permitted to be installed in Types I and II construction.

Note: (HCD 1 and HCD 2) Types I, II, III, IV, and V construction as referenced in Section 334.10 shall be as defined in Title 24, Part 2, the California Building Code.

- (A) Type NM. Type NM cable shall be permitted as follows:
- (1) For both exposed and concealed work in normally dry locations except as prohibited in 334.10(3)
- (2) To be installed or fished in air voids in masonry block or tile walls
- (B) Type NMC. Type NMC cable shall be permitted as follows:
- For both exposed and concealed work in dry, moist, damp, or corrosive locations, except as prohibited by 334.10(3)
- (2) In outside and inside walls of masonry block or tile
- (3) In a shallow chase in masonry, concrete, or adobe protected against nails or screws by a steel plate at least 1.59 mm (1/16 in.) thick and covered with plaster, adobe, or similar finish
- (C) Type NMS. Type NMS cable shall be permitted as follows:
- For both exposed and concealed work in normally dry locations except as prohibited by 334.10(3)
- (2) To be installed or fished in air voids in masonry block or tile walls

## ARTICLE 394 Concealed Knob-and-Tube Wiring

394.12 Uses Not Permitted. Concealed knob-and-tube wiring shall not be used in the following:

- (1) Commercial garages
- (2) Theaters and similar locations
- (3) Motion picture studios
- (4) Hazardous (classified) locations

- (5) Hollow spaces of walls, ceilings, and attics where such spaces are insulated by loose, rolled, or foamed-in-place insulating material that envelops the conductors
  - **Exception:** (HCD 1) This article is not intended to prohibit the installation of insulation where knob-and-tube wiring is present, provided the following are complied with:
  - (1) The wiring shall be surveyed by an electrical contractor licensed by the State of California. Certification shall be provided by the electrical contractor that the existing wiring is in good condition with no evidence of deterioration or improper over-current protection, and no improper connections or splices. Repairs, alterations, or extensions to the electrical system will require permits and inspections by the authority having jurisdiction for the enforcement of this code.
  - (2) The certification form shall be filed with the authority having jurisdiction for the enforcement of this code, and a copy furnished to the property owner.
  - (3) All accessible areas in the building where insulation has been installed around knob-and-tube wiring shall be posted by the insulation contractor with a notice, clearly visible, stating that caution is required when entering these areas. The notice shall be printed in both English and Spanish.
  - (4) The insulation shall be noncombustible as defined in Title 24, Part 2, the California Building Code.
  - (5) The insulation shall not have any electrical conductive material as part of or supporting the insulation
  - (6) Nothing in this exception will prohibit the authority having jurisdiction for the enforcement of this code from requiring permits and inspections for the installations of thermal insulation.

#### NOTE:

Authority Cited: Health and Safety Code Sections 17040, 17050, 17920.9, 17921, 17921.3, 17921.6, 17921.10, 17922, 17922.6, 17922.12, 17927, 17928, 17959.6, 18300, 18552, 18554, 18620, 18630, 18640, 18670, 18690, 18691, 18865, 18871.3, 18871.4, 18873, 18873.1, 18873.2, 18873.3, 18873.4, 18873.5, 18938.3, 18944.11, and 19990; and Government Code Section 12955.1.

Reference: Health and Safety Code Sections 17000 through 17062.5, 17910 through 17995.5, 18200 through 18700, 18860 through 18874 and 19960 through 19997; and Government Code Sections 12955.1 and 12955.1.1.

7. HCD proposes to adopt Chapter 4, Articles 400, 402, 404, 406, 408, 409, 410, 411, 422, 424, 426, 427, 430, 440, 445, 450, 455, 460, 470, 480 and 490, from the 2014 National Electrical Code and to bring forward the existing California amendment from the 2013 California Electrical Code into the 2016 California Electrical Code with modification as follows:

#### **Chapter 4 Equipment for General Use**

## ARTICLE 450 Transformers and Transformer Vaults (Including Secondary Ties)

#### 450.23 Less-Flammable Liquid-Insulated Transformers.

Transformers insulated with listed less-flammable liquids that have a fire point of not less than 300°C shall be permitted to be installed in accordance with 450.23(A) or 450.23(B).

- (A) Indoor Installations. Indoor installations shall be permitted in accordance with one of the following:
- (1) In Type I or Type II buildings, in areas where all of the following requirements are met:
  - a. The transformer is rated 35,000 volts or less.
  - b. No combustible materials are stored.
  - c. A liquid confinement area is provided.
  - d. The installation complies with all restrictions provided for in the listing of the liquid.

- (2) With an automatic fire extinguishing system and a liquid confinement area, provided the transformer is rated 35,000 volts or less.
- (3) In accordance with 450.26
- (B) Outdoor Installations. Less-flammable liquid-filled transformers shall be permitted to be installed outdoors, attached to, adjacent to, or on the roof of buildings, where installed in accordance with (1) or (2):
- (1) For Type I and Type II buildings, the installation shall comply with all restrictions provided for in the listing of the liquid.
  - **Informational Note:** Installations adjacent to combustible material, fire escapes, or door and window openings may require additional safeguards such as those listed in 450.27.
- (2) In accordance with 450.27.

**Informational Note No. 1:** As used in this section, *Type I and Type II buildings* refers to Type I and Type II building construction as defined in NFPA 220-2012, *Standard on Types of Building Construction*. Combustible materials refers to those materials not classified as noncombustible or limited-combustible as defined in NFPA 220-2012.

Informational Note No. 2: See definition of Listed in Article 100.

**Note:** (HCD 1 and HCD 2) Types I and II construction as referenced in Section 450.23 (A)(1) and (B)(1) shall be as defined in Title 24, Part 2, the California Building Code.

#### NOTE:

Authority Cited: Health and Safety Code Sections 17040, 17050, 17920.9, 17921, 17921.3, 17921.6, 17921.10, 17922, 17922.6, 17922.12, 17927, 17928, 17959.6, 18300, 18552, 18554, 18620, 18630, 18640, 18670, 18690, 18691, 18865, 18871.3, 18871.4, 18873, 18873.1, 18873.2, 18873.3, 18873.4, 18873.5, 18938.3, 18944.11, and 19990; and Government Code Section 12955.1.

Reference: Health and Safety Code Sections 17000 through 17062.5, 17910 through 17995.5, 18200 through 18700, 18860 through 18874 and 19960 through 19997; and Government Code Sections 12955.1 and 12955.1.1.

8. HCD proposes to adopt Chapter 5, Articles 518, 545 and 590, from the 2014

National Electrical Code into the 2016 California Electrical Code without amendment.

#### **Chapter 5 Special Occupancies**

#### **ARTICLES 518-590**

#### NOTE:

Authority Cited: Health and Safety Code Sections 17040, 17050, 17920.9, 17921, 17921.3, 17921.6, 17921.10, 17922, 17922.6, 17922.12, 17927, 17928, 17959.6, 18300, 18552, 18554, 18620, 18630, 18640, 18670, 18690, 18691, 18865, 18871.3, 18871.4, 18873, 18873.1, 18873.2, 18873.3, 18873.4, 18873.5, 18938.3, 18944.11, and 19990; and Government Code Section 12955.1.

Reference: Health and Safety Code Sections 17000 through 17062.5, 17910 through 17995.5, 18200 through 18700, 18860 through 18874 and 19960 through 19997; and Government Code Sections 12955.1 and 12955.1.1.

9. HCD proposes to NOT adopt Chapter 5, Articles 500, 501, 502, 503, 504, 505, 506, 510, 511, 513, 514, 515, 516, 517, 520, 522, 525, 530, 540, 547, 550, 551, 552, 553 and 555, from the 2014 National Electrical Code.

#### NOTE:

Authority Cited: Health and Safety Code Sections 17040, 17050, 17920.9, 17921, 17921.3, 17921.6, 17921.10, 17922, 17922.6, 17922.12, 17927, 17928, 17959.6, 18300, 18552, 18554, 18620, 18630, 18640, 18670, 18690, 18691, 18865, 18871.3, 18871.4, 18873, 18873.1, 18873.2, 18873.3, 18873.4, 18873.5, 18938.3, 18944.11, and 19990; and Government Code Section 12955.1.

Reference: Health and Safety Code Sections 17000 through 17062.5, 17910 through 17995.5, 18200 through 18700, 18860 through 18874 and 19960 through 19997; and Government Code Sections 12955.1 and 12955.1.1.

10. HCD proposes to adopt Chapter 6, Articles 600, 620, 625, 626, 646, 680, 682, 690, 692 and 694, from the 2014 National Electrical Code into the 2016 California Electrical Code with amendment as follows:

**Chapter 6 Special Equipment** 

ARTICLES 600, 620, 625, 626, 646, 680, 682, 690, 692, and 694

625.1.1 (HCD 1) Electric Vehicle (EV) Charging for New Construction. In addition to requirements in this Article, electric vehicle charging shall comply with the California Green Building Standards Code (CALGreen) Chapter 4, Division 4.1.

#### NOTE:

Authority Cited: Health and Safety Code Sections 17040, 17050, 17920.9, 17921, 17921.3, 17921.6, 17921.10, 17922, 17922.6, 17922.12, 17927, 17928, 17959.6, 18300, 18552, 18554, 18620, 18630, 18640, 18670, 18690, 18691, 18865, 18871.3, 18871.4, 18873, 18873.1, 18873.2, 18873.3, 18873.4, 18873.5, 18938.3, 18944.11, and 19990; and Government Code Section 12955.1.

Reference: Health and Safety Code Sections 17000 through 17062.5, 17910 through 17995.5, 18200 through 18700, 18860 through 18874 and 19960 through 19997; and Government Code Sections 12955.1 and 12955.1.1.

11. HCD proposes to repeal the California amendments to Chapter 6, Article 625, Section 625.13 "Electrical Vehicle Supply Equipment Connection" and Section 625.14 "Rating" from the 2013 California Electrical Code as follows:

**Chapter 6 Special Equipment** 

## ARTICLE 625 Electric Vehicle Charging System

625.13 Electric Vehicle Supply Equipment Connection. Electric vehicle supply equipment shall be permitted to be cord- and plug-connected to the premises wiring system in accordance with one of the following:

- (A) Connections to 125-Volt, Single-Phase, 15- and 20-Ampere Receptacle Outlets. Electric vehicle supply equipment intended for connection to nonlocking, 2-pole, 3-wire grounding-type receptacle outlets rated at 125 V, single phase, 15 and 20 amperes or from a supply of less than 50 volts dc.
- (B) Connections to Other Receptacle Outlets. Electric vehicle supply equipment that is rated 250 V maximum and complying with all of the following:
  - (1) It is intended for connection to nonlocking, 2-pole, 3-wire and 3-pole, 4-wire, grounding-type receptacle outlets rated not more than 50 amperes.
  - (2) EVSE is fastened in place to facilitate any of the following:
    - a. Ready removal for interchange
    - b. Facilitation of maintenance and repair

- c. Repositioning of portable, movable, or EVSE fastened in place
- (3) Power-supply cord length for electric vehicle supply equipment fastened in place is limited to 1.8 m (6 ft).
- (4) Receptacles are located to avoid physical damage to the flexible cord.

All other electric vehicle supply equipment shall be permanently wired and fastened in place to the supporting surface, a wall, a pole, or other structure. The electric vehicle supply equipment shall have no exposed live parts.

625.14 Rating. Electric vehicle supply equipment shall have sufficient rating to supply the load served. Electric vehicle charging loads shall be considered continuous loads for the purposes of this article. Where an automatic load management system is used, the maximum electric vehicle supply equipment load on a service and feeder shall be the maximum load permitted by the automatic load management system.

#### NOTE:

Authority Cited: Health and Safety Code Sections 17040, 17050, 17920.9, 17921, 17921.3, 17921.6, 17921.10, 17922, 17922.6, 17922.12, 17927, 17928, 17959.6, 18300, 18552, 18554, 18620, 18630, 18640, 18670, 18690, 18691, 18865, 18871.3, 18871.4, 18873, 18873.1, 18873.2, 18873.3, 18873.4, 18873.5, 18938.3, 18944.11, and 19990; and Government Code Section 12955.1.

Reference: Health and Safety Code Sections 17000 through 17062.5, 17910 through 17995.5, 18200 through 18700, 18860 through 18874 and 19960 through 19997; and Government Code Sections 12955.1 and 12955.1.1.

# 12. <u>HCD proposes to NOT adopt Chapter 6, Articles 604, 605, 610, 630, 640, 645, 647, 650, 660, 665, 668, 669, 670, 675, 685 and 695, from the 2014 National Electrical Code.</u>

#### NOTE:

Authority Cited: Health and Safety Code Sections 17040, 17050, 17920.9, 17921, 17921.3, 17921.6, 17921.10, 17922, 17922.6, 17922.12, 17927, 17928, 17959.6, 18300, 18552, 18554, 18620, 18630, 18640, 18670, 18690, 18691, 18865, 18871.3, 18871.4, 18873, 18873.1, 18873.2, 18873.3, 18873.4, 18873.5, 18938.3, 18944.11, and 19990; and Government Code Section 12955.1.

Reference: Health and Safety Code Sections 17000 through 17062.5, 17910 through 17995.5, 18200 through 18700, 18860 through 18874 and 19960 through 19997; and Government Code Sections 12955.1 and 12955.1.1.

# 13. HCD proposes to adopt Chapter 7, Articles 700, 702, 705, 708, 720, 725, 727, 728, 750 and 770, from the 2014 National Electrical Code into the 2016 California Electrical Code without amendment.

**Chapter 7 Special Conditions** 

ARTICLES 700, 702, 705, 708, 720, 725, 727, 728, 750, and 770

#### NOTE:

Authority Cited: Health and Safety Code Sections 17040, 17050, 17920.9, 17921, 17921.3, 17921.6, 17921.10, 17922, 17922.6, 17922.12, 17927, 17928, 17959.6, 18300, 18552, 18554, 18620, 18630, 18640, 18670, 18690, 18691, 18865, 18871.3, 18871.4, 18873, 18873.1, 18873.2, 18873.3, 18873.4, 18873.5, 18938.3, 18944.11, and 19990; and Government Code Section 12955.1.

Reference: Health and Safety Code Sections 17000 through 17062.5, 17910 through 17995.5, 18200 through 18700, 18860 through 18874 and 19960 through 19997; and Government Code Sections 12955.1 and 12955.1.1.

## 14. <u>HCD proposes to NOT adopt Chapter 7, Articles 701 and 760, from the 2014 National Electrical Code.</u>

#### NOTE:

Authority Cited: Health and Safety Code Sections 17040, 17050, 17920.9, 17921, 17921.3, 17921.6, 17921.10, 17922, 17922.6, 17922.12, 17927, 17928, 17959.6, 18300, 18552, 18554, 18620, 18630, 18640, 18670, 18690, 18691, 18865, 18871.3, 18871.4, 18873, 18873.1, 18873.2, 18873.3, 18873.4, 18873.5, 18938.3, 18944.11, and 19990; and Government Code Section 12955.1.

Reference: Health and Safety Code Sections 17000 through 17062.5, 17910 through 17995.5, 18200 through 18700, 18860 through 18874 and 19960 through 19997; and Government Code Sections 12955.1 and 12955.1.1.

# 15. HCD proposes to adopt Chapter 8, Articles 800, 810, 820, 830 and 840, from the 2014 National Electrical Code into the 2016 California Electrical Code without amendment.

#### **Chapter 8 Communications Systems**

#### **ARTICLES 800-840**

#### NOTE:

Authority Cited: Health and Safety Code Sections 17040, 17050, 17920.9, 17921, 17921.3, 17921.6, 17921.10, 17922, 17922.6, 17922.12, 17927, 17928, 17959.6, 18300, 18552, 18554, 18620, 18630, 18640, 18670, 18690, 18691, 18865, 18871.3, 18871.4, 18873, 18873.1, 18873.2, 18873.3, 18873.4, 18873.5, 18938.3, 18944.11, and 19990; and Government Code Section 12955.1.

Reference: Health and Safety Code Sections 17000 through 17062.5, 17910 through 17995.5, 18200 through 18700, 18860 through 18874 and 19960 through 19997; and Government Code Sections 12955.1 and 12955.1.1.

# 16. HCD proposes to adopt Chapter 9, Tables 1, 2, 4, 5, 5A, 8, 9, 10, 11(A), 11(B), 12(A) and 12(B), from the 2014 National Electrical Code into the 2016 California Electrical Code without amendment.

#### **Chapter 9 Tables**

#### NOTE:

Authority Cited: Health and Safety Code Sections 17040, 17050, 17920.9, 17921, 17921.3, 17921.6, 17921.10, 17922, 17922.6, 17922.12, 17927, 17928, 17959.6, 18300, 18552, 18554, 18620, 18630, 18640, 18670, 18690, 18691, 18865, 18871.3, 18871.4, 18873, 18873.1, 18873.2, 18873.3, 18873.4, 18873.5, 18938.3, 18944.11, and 19990; and Government Code Section 12955.1.

Reference: Health and Safety Code Sections 17000 through 17062.5, 17910 through 17995.5, 18200 through 18700, 18860 through 18874 and 19960 through 19997; and Government Code Sections 12955.1 and 12955.1.1.

## 17. HCD proposes to NOT adopt Annexes A, B, C, D, E, F, G, H, I and J from the 2014 National Electrical Code.

#### NOTE:

Authority Cited: Health and Safety Code Sections 17040, 17050, 17920.9, 17921, 17921.3, 17921.6, 17921.10, 17922, 17922.6, 17922.12, 17927, 17928, 17959.6, 18300, 18552, 18554, 18620, 18630, 18640, 18670, 18690, 18691, 18865, 18871.3, 18871.4, 18873, 18873.1, 18873.2, 18873.3, 18873.4, 18873.5, 18938.3, 18944.11, and 19990; and Government Code Section 12955.1.

Reference: Health and Safety Code Sections 17000 through 17062.5, 17910 through 17995.5, 18200 through 18700, 18860 through 18874 and 19960 through 19997; and Government Code Sections 12955.1 and 12955.1.1.

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# FINAL EXPRESS TERMS FOR PROPOSED BUILDING STANDARDS OF THE OFFICE OF STATEWIDE HEALTH PLANNING AND DEVELOPMENT

#### REGARDING PROPOSED CHANGES TO CALIFORNIA ELECTRICAL CODE CALIFORNIA CODE OF REGULATIONS, TITLE 24, PART 3

#### LEGEND FOR EXPRESS TERMS

- 1. Existing California amendments or code language being modified are in italics when they appear in the model code text: All such language appears in *italics*, modified language is <u>underlined</u>.
- 2. New California amendments: All such language appears underlined and in italics.
- 3. Repealed text: All such language appears in strikeout.

#### **EXPRESS TERMS**

#### **ARTICLE 89 – ADMINISTRATION**

Carry forward Article 89 of the 2013 California Electric Code (CEC) for OSHPD 1, 2, 3 & 4.

#### NOTATION:

Authority: Health and Safety Code Sections 1226, 1275, 18928, 129790 and 129850; Government Code Section 11152.5 Reference: Health and Safety Code Section 129850

#### **ARTICLE 90 - INTRODUCTION**

Adopt entire 2014 National Electric Code (NEC) Article without amendments for OSHPD 1, 2, 3 & 4.

#### NOTATION:

Authority: Health and Safety Code Sections 1226, 1275, 18928, 129790 and 129850; Government Code Section 11152.5 Reference: Health and Safety Code Section 129850

#### Chapter 1 - General

#### **ARTICLE 100 - DEFINITIONS**

Adopt entire 2014 National Electric Code (NEC) Article without amendments for OSHPD 1, 2, 3 & 4.

#### NOTATION.

Authority: Health and Safety Code Sections 1226, 1275, 18928, 129790 and 129850; Government Code Section 11152.5 Reference: Health and Safety Code Section 129850

#### ARTICLE 110 - REQUIRMENTS FOR ELECTRICAL INSTALLATIONS

Adopt entire 2014 National Electric Code (NEC) Article and carry forward existing amendments of the 2013 California Electrical Code (CEC) for OSHPD 1, 2, 3 & 4.

#### NOTATION:

Authority: Health and Safety Code Sections 1226, 1275, 18928, 129790 and 129850; Government Code Section 11152.5 Reference: Health and Safety Code Section 129850

#### Chapter 2 - Wiring and Protection

#### ARTICLE 200 - USE AND IDENTIFICATION OF GROUNDED CONDUCTERS

Adopt entire 2014 National Electric Code (NEC) Article without amendments for OSHPD 1, 2, 3 & 4.

#### NOTATION:

#### **ARTICLE 210 – BRANCH CIRCUITS**

Adopt entire 2014 National Electric Code (NEC) Article without amendments for OSHPD 1, 2, 3 & 4.

#### NOTATION:

Authority: Health and Safety Code Sections 1226, 1275, 18928, 129790 and 129850; Government Code Section 11152.5 Reference: Health and Safety Code Section 129850

#### **ARTICLE 215 - FEEDERS**

Adopt entire 2014 National Electric Code (NEC) Article without amendments for OSHPD 1, 2, 3 & 4.

#### NOTATION

Authority: Health and Safety Code Sections 1226, 1275, 18928, 129790 and 129850; Government Code Section 11152.5 Reference: Health and Safety Code Section 129850

#### ARTICLE 220 - BRANCH-CIRCUIT, FEEDER AND SERVICE CALCULATIONS

Adopt entire 2014 National Electric Code (NEC) Article without amendments for OSHPD 1, 2, 3 & 4.

#### NOTATION:

Authority: Health and Safety Code Sections 1226, 1275, 18928, 129790 and 129850; Government Code Section 11152.5 Reference: Health and Safety Code Section 129850

#### ARTICLE 225 - OUTSIDE BRANCH CIRCUITS AND FEEDERS

Adopt entire 2014 National Electrical Code (NEC) Article without amendments for OSHPD 1, 2, 3 & 4.

#### NOTATION:

Authority: Health and Safety Code Sections 1226, 1275, 18928, 129790 and 129850; Government Code Section 11152.5 Reference: Health and Safety Code Section 129850

#### **ARTICLE 230 - SERVICES**

Adopt entire 2014 National Electric Code (NEC) Article without amendments for OSHPD 1, 2, 3 & 4.

#### NOTATION:

Authority: Health and Safety Code Sections 1226, 1275, 18928, 129790 and 129850; Government Code Section 11152.5 Reference: Health and Safety Code Section 129850

#### **ARTICLE 240- OVERCURRENT PROTECTION**

Adopt entire 2014 National Electric Code (NEC) Article without amendments for OSHPD 1, 2, 3 & 4.

#### NOTATION:

Authority: Health and Safety Code Sections 1226, 1275, 18928, 129790 and 129850; Government Code Section 11152.5 Reference: Health and Safety Code Section 129850

#### **ARTICLE 250 – GROUNDING AND BONDING**

Adopt entire 2014 National Electric Code (NEC) Article without amendments for OSHPD 1, 2, 3 & 4.

#### NOTATION:

Authority: Health and Safety Code Sections 1226, 1275, 18928, 129790 and 129850; Government Code Section 11152.5 Reference: Health and Safety Code Section 129850

#### ARTICLE 280 - SURGE ARRESTERS, OVER 1000 VOLTS

Adopt entire 2014 National Electric Code (NEC) Article without amendments for OSHPD 1, 2, 3 & 4.

#### NOTATION:

Authority: Health and Safety Code Sections 1226, 1275, 18928, 129790 and 129850; Government Code Section 11152.5 Reference: Health and Safety Code Section 129850

#### ARTICLE 285 - SURGE-PROTECTIVE DEVICES (SPDs), 1000 VOLTS or LESS

Adopt entire 2014 National Electric Code (NEC) Article without amendments for OSHPD 1, 2, 3 & 4.

#### NOTATION:

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#### Chapter 3 - Wiring Methods and Materials

#### ARTICLE 300 - GENERAL REQUIREMENTS FOR WIRING METHODS AND MATERIALS

Adopt entire 2014 National Electric Code (NEC) Article without amendments for OSHPD 1, 2, 3 & 4.

#### NOTATION:

Authority: Health and Safety Code Sections 1226, 1275, 18928, 129790 and 129850; Government Code Section 11152.5 Reference: Health and Safety Code Sections 129850

#### ARTICLE 310 - CONDUCTORS FOR GENERAL WIRING

Adopt entire 2014 National Electric Code (NEC) Article without amendments for OSHPD 1, 2, 3 & 4.

#### NOTATION:

Authority: Health and Safety Code Sections 1226, 1275, 18928, 129790 and 129850; Government Code Section 11152.5 Reference: Health and Safety Code Section 129850

#### ARTICLE 312: CABINETS, CUTOUT BOXES, AND METER SOCKET ENCLOSURES

Adopt entire 2014 National Electric Code (NEC) Article without amendments for OSHPD 1, 2, 3 & 4.

#### NOTATION:

Authority: Health and Safety Code Sections 1226, 1275, 18928, 129790 and 129850; Government Code Section 11152.5 Reference: Health and Safety Code Section 129850

## ARTICLE 314 – OUTLET, DEVICE, PULL, AND JUNCTION BOXES; CONDUIT BODIES; FITTINGS; AND HANDHOLE ENCLOSURES

Adopt entire 2014 National Electric Code (NEC) Article without amendments for OSHPD 1, 2, 3 & 4.

#### NOTATION:

Authority: Health and Safety Code Sections 1226, 1275, 18928, 129790 and 129850; Government Code Section 11152.5 Reference: Health and Safety Code Section 129850

#### **ARTICLE 320 - ARMORED CABLE: TYPE AC**

Adopt entire 2014 National Electric Code (NEC) Article without amendments for OSHPD 1, 2, 3 & 4.

#### NOTATION:

Authority: Health and Safety Code Sections 1226, 1275, 18928, 129790 and 129850; Government Code Section 11152.5 Reference: Health and Safety Code Section 129850

#### ARTICLE 322 - FLAT CABLE ASSEMBLIES: TYPE FC

Adopt entire 2014 National Electric Code (NEC) Article without amendments for OSHPD 1, 2, 3 & 4.

#### NOTATION:

Authority: Health and Safety Code Sections 1226, 1275, 18928, 129790 and 129850; Government Code Section 11152.5 Reference: Health and Safety Code Section 129850

#### ARTICLE 324 - FLAT CONDUCTOR CABLE: TYPE FCC

Adopt entire 2014 National Electric Code (NEC) Article without amendments for OSHPD 1, 2, 3 & 4.

#### NOTATION:

Authority: Health and Safety Code Sections 1226, 1275, 18928, 129790 and 129850; Government Code Section 11152.5 Reference: Health and Safety Code Section 129850

#### ARTICLE 326 – INTEGRATED GAS SPACER CABLE: TYPE IGS

Adopt entire 2014 National Electric Code (NEC) Article without amendments for OSHPD 1, 2, 3 & 4.

#### NOTATION:

#### ARTICLE 328 - MEDIUM VOLTAGE CABLE: TYPE MV

Adopt entire 2014 National Electric Code (NEC) Article without amendments for OSHPD 1, 2, 3 & 4.

#### NOTATION:

Authority: Health and Safety Code Sections 1226, 1275, 18928, 129790 and 129850; Government Code Section 11152.5 Reference: Health and Safety Code Section 129850

#### ARTICLE 330 - METAL-CLAD CABLE: TYPE MC

Adopt entire 2014 National Electric Code (NEC) Article without amendments for OSHPD 1, 2, 3 & 4.

#### NOTATION:

Authority: Health and Safety Code Sections 1226, 1275, 18928, 129790 and 129850; Government Code Section 11152.5 Reference: Health and Safety Code Section 129850

#### ARTICLE 332 - MINERAL-INSULATED, METAL-SHEATHED CABLE: TYPE MI

Adopt entire 2014 National Electric Code (NEC) Article without amendments for OSHPD 1, 2, 3 & 4.

#### NOTATION:

Authority: Health and Safety Code Sections 1226, 1275, 18928, 129790 and 129850; Government Code Section 11152.5 Reference: Health and Safety Code Section 129850

#### ARTICLE 334 - NONMETALLIC-SHEATHED CABLE: TYPES NM. NMC AND NMS

Adopt entire 2014 National Electric Code (NEC) Article without amendments for OSHPD 1, 2, 3 & 4.

#### NOTATION

Authority: Health and Safety Code Sections 1226, 1275, 18928, 129790 and 129850; Government Code Section 11152.5 Reference: Health and Safety Code Section 129850

#### ARTICLE 336 – POWER AND CONTROL TRAY CABLE: TYPE TC

Adopt entire 2014 National Electric Code (NEC) Article without amendments for OSHPD 1, 2, 3 & 4.

#### NOTATION:

Authority: Health and Safety Code Sections 1226, 1275, 18928, 129790 and 129850; Government Code Section 11152.5 Reference: Health and Safety Code Section 129850

#### ARTICLE 338 - SERVICE-ENTRANCE CABLE: TYPES SE AND USE

Adopt entire 2014 National Electric Code (NEC) Article without amendments for OSHPD 1, 2, 3 & 4.

#### NOTATION:

Authority: Health and Safety Code Sections 1226, 1275, 18928, 129790 and 129850; Government Code Section 11152.5 Reference: Health and Safety Code Section 129850

#### ARTICLE 340 – UNDERGROUND FEEDER AND BRANCH-CIRCUIT CABLE: TYPE UF

Adopt entire 2014 National Electric Code (NEC) Article without amendments for OSHPD 1, 2, 3 & 4.

#### NOTATION:

Authority: Health and Safety Code Sections 1226, 1275, 18928, 129790 and 129850; Government Code Section 11152.5 Reference: Health and Safety Code Section 129850

#### ARTICLE 342 - INTERMEDIATE METAL CONDUIT: TYPE IMC

Adopt entire 2014 National Electric Code (NEC) Article without amendments for OSHPD 1, 2, 3 & 4.

#### NOTATION:

Authority: Health and Safety Code Sections 1226, 1275, 18928, 129790 and 129850; Government Code Section 11152.5 Reference: Health and Safety Code Section 129850

#### ARTICLE 344 - RIGID METAL CONDUIT: TYPE RMC

Adopt entire 2014 National Electric Code (NEC) Article without amendments for OSHPD 1, 2, 3 & 4.

#### NOTATION:

#### ARTICLE 348 - FLEXIBLE METAL CONDUIT: TYPE FMC

Adopt entire 2014 National Electric Code (NEC) Article without amendments for OSHPD 1, 2, 3 & 4.

#### NOTATION:

Authority: Health and Safety Code Sections 1226, 1275, 18928, 129790 and 129850; Government Code Section 11152.5 Reference: Health and Safety Code Section 129850

#### ARTICLE 350 - LIQUIDTIGHT FLEXIBLE METAL CONDUIT: TYPE LFMC

Adopt entire 2014 National Electric Code (NEC) Article without amendments for OSHPD 1, 2, 3 & 4.

#### NOTATION:

Authority: Health and Safety Code Sections 1226, 1275, 18928, 129790 and 129850; Government Code Section 11152.5 Reference: Health and Safety Code Section 129850

#### ARTICLE 352 - RIGID POLYVINYL CHLORIDE CONDUIT: TYPE PVC

Repeal existing amendments and adopt entire 2014 National Electric Code (NEC) Article without amendments for OSHPD 1, 2, 3 & 4

#### 352.12 Uses Not Permitted.

PVC conduit shall not be used under the conditions specified in 352.12(A) through (E).

RNC shall not be used under the following conditions.

[OSHPD 1, 2, 3 & 4] PVC conduit shall not be used under the conditions specified in 352.12 (AJ through (F)

#### NOTATION:

Authority: Health and Safety Code Sections 1226, 1275, 18928, 129790 and 129850; Government Code Section 11152.5 Reference: Health and Safety Code Section 129850

#### ARTICLE 353 - HIGH DENSITY POLYETHYLENE CONDUIT: TYPE HDPE CONDUIT

Adopt entire 2014 National Electric Code (NEC) Article without amendments for OSHPD 1, 2, 3 & 4.

#### NOTATION:

Authority: Health and Safety Code Sections 1226, 1275, 18928, 129790 and 129850; Government Code Section 11152.5 Reference: Health and Safety Code Section 129850

#### ARTICLE 354 - NONMETALLIC UNDERGROUND CONDUIT WITH CONDUCTORS: TYPE NUCC

Adopt entire 2014 National Electric Code (NEC) Article without amendments for OSHPD 1, 2, 3 & 4.

#### NOTATION:

Authority: Health and Safety Code Sections 1226, 1275, 18928, 129790 and 129850; Government Code Section 11152.5 Reference: Health and Safety Code Section 129850

#### ARTICLE 355 - REINFORCED THERMOSETTING RESIN CONDUIT: TYPE RTRC

Adopt entire 2014 National Electric Code (NEC) Article without amendments for OSHPD 1, 2, 3 & 4.

#### NOTATION:

Authority: Health and Safety Code Sections 1226, 1275, 18928, 129790 and 129850; Government Code Section 11152.5 Reference: Health and Safety Code Section 129850

#### ARTICLE 356 - LIQUIDTIGHT FLEXIBLE NONMETALLIC CONDUIT: TYPE LFNC

Adopt entire 2014 National Electric Code (NEC) Article without amendments for OSHPD 1, 2, 3 & 4.

#### NOTATION:

Authority: Health and Safety Code Sections 1226, 1275, 18928, 129790 and 129850; Government Code Section 11152.5 Reference: Health and Safety Code Section 129850

#### ARTICLE 358 – ELECTRICAL METALLIC TUBING: TYPE EMT

Adopt entire 2014 National Electric Code (NEC) Article without amendments for OSHPD 1, 2, 3 & 4.

#### NOTATION:

Authority: Health and Safety Code Sections 1226, 1275, 18928, 129790 and 129850; Government Code Section 11152.5 Reference: Health and Safety Code Section 129850

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#### ARTICLE 360 - FLEXIBLE METALLIC TUBING: TYPE FMT

Adopt entire 2014 National Electric Code (NEC) Article without amendments for OSHPD 1, 2, 3 & 4.

#### NOTATION:

Authority: Health and Safety Code Sections 1226, 1275, 18928, 129790 and 129850; Government Code Section 11152.5 Reference: Health and Safety Code Section 129850

#### ARTICLE 362 – ELECTRICAL NONMETALLIC TUBING: TYPE ENT

Adopt entire 2014 National Electric Code (NEC) Article without amendments for OSHPD 1, 2, 3 & 4.

#### NOTATION:

Authority: Health and Safety Code Sections 1226, 1275, 18928, 129790 and 129850; Government Code Section 11152.5 Reference: Health and Safety Code Section 129850

#### **ARTICLE 366 – AUXILIARY GUTTERS**

Adopt entire 2014 National Electric Code (NEC) Article without amendments for OSHPD 1, 2, 3 & 4.

#### NOTATION:

Authority: Health and Safety Code Sections 1226, 1275, 18928, 129790 and 129850; Government Code Section 11152.5 Reference: Health and Safety Code Section 129850

#### **ARTICLE 368 – BUSWAYS**

Adopt entire 2014 National Electric Code (NEC) Article without amendments for OSHPD 1, 2, 3 & 4.

#### NOTATION:

Authority: Health and Safety Code Sections 1226, 1275, 18928, 129790 and 129850; Government Code Section 11152.5 Reference: Health and Safety Code Section 129850

#### **ARTICLE 370 - CABLEBUS**

Adopt entire 2014 National Electric Code (NEC) Article without amendments for OSHPD 1, 2, 3 & 4.

#### NOTATION:

Authority: Health and Safety Code Sections 1226, 1275, 18928, 129790 and 129850; Government Code Section 11152.5 Reference: Health and Safety Code Section 129850

#### ARTICLE 372 - CELLULAR CONCRETE FLOOR RACEWAYS

Adopt entire 2014 National Electric Code (NEC) Article without amendments for OSHPD 1, 2, 3 & 4.

#### NOTATION:

Authority: Health and Safety Code Sections 1226, 1275, 18928, 129790 and 129850; Government Code Section 11152.5 Reference: Health and Safety Code Section 129850

#### **ARTICLE 374 - CELLULAR METAL FLOOR RACEWAYS**

Adopt entire 2014 National Electric Code (NEC) Article without amendments for OSHPD 1, 2, 3 & 4.

#### NOTATION:

Authority: Health and Safety Code Sections 1226, 1275, 18928, 129790 and 129850; Government Code Section 11152.5 Reference: Health and Safety Code Section 129850

#### **ARTICLE 376 - METAL WIREWAYS**

Adopt entire 2014 National Electric Code (NEC) Article without amendments for OSHPD 1, 2, 3 & 4.

#### NOTATION:

Authority: Health and Safety Code Sections 1226, 1275, 18928, 129790 and 129850; Government Code Section 11152.5 Reference: Health and Safety Code Section 129850

#### **ARTICLE 378 - NONMETALLIC WIREWAYS**

Adopt entire 2014 National Electric Code (NEC) Article without amendments for OSHPD 1, 2, 3 & 4.

#### NOTATION:

#### ARTICLE 380 - MULTIOUTLET ASSEMBLY

Adopt entire 2014 National Electric Code (NEC) Article without amendments for OSHPD 1, 2, 3 & 4.

#### NOTATION:

Authority: Health and Safety Code Sections 1226, 1275, 18928, 129790 and 129850; Government Code Section 11152.5 Reference: Health and Safety Code Section 129850

#### **ARTICLE 382 - NONMETALLIC EXTENSIONS**

Adopt entire 2014 National Electric Code (NEC) Article without amendments for OSHPD 1, 2, 3 & 4.

#### NOTATION:

Authority: Health and Safety Code Sections 1226, 1275, 18928, 129790 and 129850; Government Code Section 11152.5 Reference: Health and Safety Code Section 129850

#### ARTICLE 384 - STRUT-TYPE CHANNEL RACEWAY

Adopt entire 2014 National Electric Code (NEC) Article without amendments for OSHPD 1, 2, 3 & 4.

#### NOTATION:

Authority: Health and Safety Code Sections 1226, 1275, 18928, 129790 and 129850; Government Code Section 11152.5 Reference: Health and Safety Code Section 129850

#### **ARTICLE 386 - SURFACE METAL RACEWAYS**

Adopt entire 2014 National Electric Code (NEC) Article without amendments for OSHPD 1, 2, 3 & 4.

#### NOTATION:

Authority: Health and Safety Code Sections 1226, 1275, 18928, 129790 and 129850; Government Code Section 11152.5 Reference: Health and Safety Code Section 129850

#### ARTICLE 388 – SURFACE NONMETALLIC RACEWAYS

Adopt entire 2014 National Electric Code (NEC) Article without amendments for OSHPD 1, 2, 3 & 4.

#### NOTATION:

Authority: Health and Safety Code Sections 1226, 1275, 18928, 129790 and 129850; Government Code Section 11152.5 Reference: Health and Safety Code Section 129850

#### ARTICLE 390 - UNDERFLOOR RACEWAYS

Adopt entire 2014 National Electric Code (NEC) Article without amendments for OSHPD 1, 2, 3 & 4.

#### NOTATION:

Authority: Health and Safety Code Sections 1226, 1275, 18928, 129790 and 129850; Government Code Section 11152.5 Reference: Health and Safety Code Section 129850

#### **ARTICLE 392 - CABLE TRAYS**

Adopt entire 2014 National Electric Code (NEC) Article without amendments for OSHPD 1, 2, 3 & 4,

#### NOTATION:

Authority: Health and Safety Code Sections 1226, 1275, 18928, 129790 and 129850; Government Code Section 11152.5 Reference: Health and Safety Code Section 129850

#### ARTICLE 393 - LOW-VOLTAGE SUSPENDED CEILING POWER DISTRIBUTION SYSTEMS

Adopt entire 2014 National Electric Code (NEC) Article without amendments for OSHPD 1, 2, 3 & 4.

#### NOTATION:

Authority: Health and Safety Code Sections 1226, 1275, 18928, 129790 and 129850; Government Code Section 11152.5 Reference: Health and Safety Code Section 129850

#### **ARTICLE 394 - CONCEALED KNOB-AND-TUBE WIRING**

Adopt entire 2014 National Electric Code (NEC) Article without amendments for OSHPD 1, 2, 3 & 4.

#### NOTATION:

#### ARTICLE 396 - MESSENGER-SUPPORTED WIRING

Adopt entire 2014 National Electric Code (NEC) Article without amendments for OSHPD 1, 2, 3 & 4.

#### NOTATION:

Authority: Health and Safety Code Sections 1226, 1275, 18928, 129790 and 129850; Government Code Section 11152.5 Reference: Health and Safety Code Section 129850

#### **ARTICLE 398 – OPEN WIRING ON INSULATORS**

Adopt entire 2014 National Electric Code (NEC) Article without amendments for OSHPD 1, 2, 3 & 4.

#### NOTATION:

Authority: Health and Safety Code Sections 1226, 1275, 18928, 129790 and 129850; Government Code Section 11152.5 Reference: Health and Safety Code Section 129850

#### **ARTICLE 399 – OUTDOOR OVERHEAD CONDUCTORS OVER 1000 VOLTS**

Adopt entire 2014 National Electric Code (NEC) Article without amendments for OSHPD 1, 2, 3 & 4.

#### NOTATION:

Authority: Health and Safety Code Sections 1226, 1275, 18928, 129790 and 129850; Government Code Section 11152.5 Reference: Health and Safety Code Section 129850

#### Chapter 4 - Equipment for General Use

#### ARTICLE 400 - FLEXIBLE CORDS AND CABLES

Adopt entire 2014 National Electric Code (NEC) Article without amendments for OSHPD 1, 2, 3 & 4.

#### NOTATION:

Authority: Health and Safety Code Sections 1226, 1275, 18928, 129790 and 129850; Government Code Section 11152.5 Reference: Health and Safety Code Section 129850

#### **ARTICLE 402 – FIXTURE WIRES**

Adopt entire 2014 National Electric Code (NEC) Article without amendments for OSHPD 1, 2, 3 & 4.

#### NOTATION:

Authority: Health and Safety Code Sections 1226, 1275, 18928, 129790 and 129850; Government Code Section 11152.5 Reference: Health and Safety Code Section 129850

#### **ARTICLE 404 - SWITCHES**

Adopt entire 2014 National Electric Code (NEC) Article for OSHPD 3.

Adopt entire 2014 National Electric Code (NEC) Article and carry forward existing amendment of the 2013 California Electrical Code (CEC) for OSHPD 1, 2, & 4.

#### NOTATION:

Authority: Health and Safety Code Sections 1226, 1275, 18928, 129790 and 129850; Government Code Section 11152.5 Reference: Health and Safety Code Section 129850

#### ARTICLE 406 - RECEPTACLES, CORD CONNECTORS, AND ATTACHEMENTS PLUGS (CAPS)

Adopt entire 2014 National Electric Code (NEC) Article for OSHPD 3.

Adopt entire 2014 National Electric Code (NEC) Article and carry forward existing amendment of the 2013 CEC for OSHPD 1, 2, and 4.

#### NOTATION

Authority: Health and Safety Code Sections 1226, 1275, 18928, 129790 and 129850; Government Code Section 11152.5 Reference: Health and Safety Code Section 129850

#### ARTICLE 408 - SWITCHBOARDS, SWITCHGEAR, AND PANELBOARDS

Adopt entire 2014 National Electric Code (NEC) Article without amendments for OSHPD 1, 2, 3 & 4.

#### NOTATION:

Authority: Health and Safety Code Sections 1226, 1275, 18928, 129790 and 129850; Government Code Section 11152.5 Reference: Health and Safety Code Section 129850

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#### **ARTICLE 409 - INDUSTRIAL CONTROL PANELS**

Adopt entire 2014 National Electric Code (NEC) Article without amendments for OSHPD 1, 2, 3 & 4.

#### NOTATION:

Authority: Health and Safety Code Sections 1226, 1275, 18928, 129790 and 129850; Government Code Section 11152.5 Reference: Health and Safety Code Section 129850

#### ARTICLE 410 - LUMINAIRES, LAMPHOLDERS, AND LAMPS

Adopt entire 2014 National Electric Code (NEC) Article without amendments for OSHPD 1, 2, 3 & 4.

#### NOTATION:

Authority: Health and Safety Code Sections 1226, 1275, 18928, 129790 and 129850; Government Code Section 11152.5 Reference: Health and Safety Code Section 129850

## ARTICLE 411 – LIGHTING SYSTEMS OPERATING AT 30 VOLTS OR LESS AND LIGHTING EQUIPMENT CONNECTED TO CLASS-2 POWER SOURCES

Adopt entire 2014 National Electric Code (NEC) Article without amendments for OSHPD 1, 2, 3 & 4.

#### NOTATION:

Authority: Health and Safety Code Sections 1226, 1275, 18928, 129790 and 129850; Government Code Section 11152.5 Reference: Health and Safety Code Section 129850

#### **ARTICLE 422 - APPLIANCES**

Adopt entire 2014 National Electric Code (NEC) Article without amendments for OSHPD 1, 2, 3 & 4.

#### NOTATION:

Authority: Health and Safety Code Sections 1226, 1275, 18928, 129790 and 129850; Government Code Section 11152.5 Reference: Health and Safety Code Section 129850

#### ARTICLE 424 - FIXED ELECTRIC SPACE-HEATING EQUIPMENT

Adopt entire 2014 National Electric Code (NEC) Article without amendments for OSHPD 1, 2, 3 & 4.

#### NOTATION:

Authority: Health and Safety Code Sections 1226, 1275, 18928, 129790 and 129850; Government Code Section 11152.5 Reference: Health and Safety Code Section 129850

#### ARTICLE 426 – FIXED OUTDOOR ELECTRIC DEICING AND SNOW-MELTING EQUIPMENT

Adopt entire 2014 National Electric Code (NEC) Article without amendments for OSHPD 1, 2, 3 & 4.

#### NOTATION:

Authority: Health and Safety Code Sections 1226, 1275, 18928, 129790 and 129850; Government Code Section 11152.5 Reference: Health and Safety Code Section 129850

#### ARTICLE 427 - FIXED ELECTRIC HEATING EQUIPMENT FOR PIPELINES AND VESSELS

Adopt entire 2014 National Electric Code (NEC) Article without amendments for OSHPD 1, 2, 3 & 4.

#### NOTATION:

Authority: Health and Safety Code Sections 1226, 1275, 18928, 129790 and 129850; Government Code Section 11152.5 Reference: Health and Safety Code Section 129850

#### ARTICLE 430 - MOTORS, MOTOR CIRCUITS, AND CONTROLLERS

Adopt entire 2014 National Electric Code (NEC) Article without amendments for OSHPD 1, 2, 3 & 4.

#### NOTATION:

#### ARTICLE 440 - AIR-CONDITIONING AND REFRIGERATING EQUIPMENT

Adopt entire 2014 National Electric Code (NEC) Article without amendments for OSHPD 1, 2, 3 & 4.

#### NOTATION:

Authority: Health and Safety Code Sections 1226, 1275, 18928, 129790 and 129850; Government Code Section 11152.5 Reference: Health and Safety Code Section 129850

#### **ARTICLE 445 – GENERATORS**

Adopt entire 2014 National Electric Code (NEC) Article without amendments for OSHPD 1, 2, 3 & 4.

#### NOTATION:

Authority: Health and Safety Code Sections 1226, 1275, 18928, 129790 and 129850; Government Code Section 11152.5 Reference: Health and Safety Code Section 129850

#### ARTICLE 450 – TRANSFORMERS AND TRANSFORMER VAULTS (INCLUDING SECONDARY TIES)

Adopt entire 2014 National Electric Code (NEC) Article without amendments for OSHPD 1, 2, 3 & 4.

#### NOTATION:

Authority: Health and Safety Code Sections 1226, 1275, 18928, 129790 and 129850; Government Code Section 11152.5 Reference: Health and Safety Code Section 129850

#### **ARTICLE 455 – PHASE CONVERTERS**

Adopt entire 2014 National Electric Code (NEC) Article without amendments for OSHPD 1, 2, 3 & 4.

#### NOTATION:

Authority: Health and Safety Code Sections 1226, 1275, 18928, 129790 and 129850; Government Code Section 11152.5 Reference: Health and Safety Code Section 129850

#### **ARTICLE 460 - CAPACITORS**

Adopt entire 2014 National Electric Code (NEC) Article without amendments for OSHPD 1, 2, 3 & 4.

#### NOTATION:

Authority: Health and Safety Code Sections 1226, 1275, 18928, 129790 and 129850; Government Code Section 11152.5 Reference: Health and Safety Code Section 129850

#### **ARTICLE 470 - RESISTORS AND REACTORS**

Adopt entire 2014 National Electric Code (NEC) Article without amendments for OSHPD 1, 2, 3 & 4.

#### NOTATION:

Authority: Health and Safety Code Sections 1226, 1275, 18928, 129790 and 129850; Government Code Section 11152.5 Reference: Health and Safety Code Section 129850

#### **ARTICLE 480 - STORAGE BATTERIES**

Adopt entire 2014 National Electric Code (NEC) Article without amendments for OSHPD 1, 2, 3 & 4.

#### NOTATION:

Authority: Health and Safety Code Sections 1226, 1275, 18928, 129790 and 129850; Government Code Section 11152.5 Reference: Health and Safety Code Section 129850

#### ARTICLE 490 - EQUIPMENT, OVER 1000 VOLTS, NOMINAL

Adopt entire 2014 National Electric Code (NEC) Article without amendments for OSHPD 1, 2, 3 & 4.

#### NOTATION:

#### Chapter 5 - Special Occupancies

## ARTICLE 500 – HAZARDOUS (CLASSIFIED) LOCATIONS, CLASSES I, II, AND III, DIVISIONS 1 AND 2

Adopt entire 2014 National Electric Code (NEC) Article without amendments for OSHPD 1, 2, 3 & 4.

#### NOTATION:

Authority: Health and Safety Code Sections 1226, 1275, 18928, 129790 and 129850; Government Code Section 11152.5 Reference: Health and Safety Code Section 129850

#### **ARTICLE 501 – CLASS I LOCATIONS**

Adopt entire 2014 National Electric Code (NEC) Article without amendments for OSHPD 1, 2, 3 & 4.

#### NOTATION:

Authority: Health and Safety Code Sections 1226, 1275, 18928, 129790 and 129850; Government Code Section 11152.5 Reference: Health and Safety Code Section 129850

#### **ARTICLE 502 - CLASS II LOCATIONS**

Adopt entire 2014 National Electric Code (NEC) Article without amendments for OSHPD 1, 2, 3 & 4.

#### NOTATION:

Authority: Health and Safety Code Sections 1226, 1275, 18928, 129790 and 129850; Government Code Section 11152.5 Reference: Health and Safety Code Section 129850

#### **ARTICLE 503 – CLASS III LOCATIONS**

Adopt entire 2014 National Electric Code (NEC) Article without amendments for OSHPD 1, 2, 3 & 4.

#### NOTATION:

Authority: Health and Safety Code Sections 1226, 1275, 18928, 129790 and 129850; Government Code Section 11152.5 Reference: Health and Safety Code Section 129850

#### ARTICLE 504 - INTRINSICALLY SAFE SYSTEMS

Adopt entire 2014 National Electric Code (NEC) Article without amendments for OSHPD 1, 2, 3 & 4.

#### NOTATION:

Authority: Health and Safety Code Sections 1226, 1275, 18928, 129790 and 129850; Government Code Section 11152.5 Reference: Health and Safety Code Section 129850

#### ARTICLE 505 - ZONE 0, 1, AND 2 LOCATIONS

Adopt entire 2014 National Electric Code (NEC) Article without amendments for OSHPD 1, 2, 3 & 4.

#### NOTATION:

Authority: Health and Safety Code Sections 1226, 1275, 18928, 129790 and 129850; Government Code Section 11152.5 Reference: Health and Safety Code Section 129850

## ARTICLE 506 – ZONE 20, 21, AND 22 LOCATIONS FOR COMBUSTIBLE DUSTS OR IGNITABLE FIBERS/FLYINGS

Adopt entire 2014 National Electric Code (NEC) Article without amendments for OSHPD 1, 2, 3 & 4.

#### NOTATION:

Authority: Health and Safety Code Sections 1226, 1275, 18928, 129790 and 129850; Government Code Section 11152.5 Reference: Health and Safety Code Section 129850

#### ARTICLE 510 - HAZARDOUS (CLASSIFIED) LOCATIONS - SPECIFIC

Adopt entire 2014 National Electric Code (NEC) Article without amendments for OSHPD 1, 2, 3 & 4.

#### NOTATION:

#### ARTICLE 511 - COMMERCIAL GARAGES, REPAIR AND STORAGE

Adopt entire 2014 National Electric Code (NEC) Article without amendments for OSHPD 1, 2, 3 & 4.

#### NOTATION:

Authority: Health and Safety Code Sections 1226, 1275, 18928, 129790 and 129850; Government Code Section 11152.5 Reference: Health and Safety Code Section 129850

#### **ARTICLE 513 – AIRCRAFT HANGARS**

Adopt entire 2014 National Electric Code (NEC) Article without amendments for OSHPD 1, 2, 3 & 4.

#### NOTATION:

Authority: Health and Safety Code Sections 1226, 1275, 18928, 129790 and 129850; Government Code Section 11152.5 Reference: Health and Safety Code Section 129850

#### **ARTICLE 514 - MOTOR FUEL DISPENSING FACILITIES**

Adopt entire 2014 National Electric Code (NEC) Article without amendments for OSHPD 1, 2, 3 & 4.

#### NOTATION:

Authority: Health and Safety Code Sections 1226, 1275, 18928, 129790 and 129850; Government Code Section 11152.5 Reference: Health and Safety Code Section 129850

#### ARTICLE 515 – BULK STORAGE PLANTS

Adopt entire 2014 National Electric Code (NEC) Article without amendments for OSHPD 1, 2, 3 & 4.

#### NOTATION:

Authority: Health and Safety Code Sections 1226, 1275, 18928, 129790 and 129850; Government Code Section 11152.5 Reference: Health and Safety Code Section 129850

## ARTICLE 516 – SPRAY APPLICATION, DIPPING, COATING, AND PRINTING PROCESSES USING FLAMMABLE OR COMBUSTIBLE MATERIAL

Adopt entire 2014 National Electric Code (NEC) Article without amendments for OSHPD 1, 2, 3 & 4.

#### NOTATION:

Authority: Health and Safety Code Sections 1226, 1275, 18928, 129790 and 129850; Government Code Section 11152.5 Reference: Health and Safety Code Section 129850

#### **ARTICLE 517 - HEALTH CARE FACILITIES**

Adopt entire 2014 National Electric Code (NEC) Article and carry forward existing amendments of the 2013 California Electrical Code (CEC) for OSHPD 1, 2, 3 & 4 and the make following amendments:

#### 517.2 Definitions

Patient Care Space. Space within a health care facility wherein patients are intended to be examined or treated.

Basic Care Space. Space in which failure of equipment or a system is not likely to cause injury to the patients or caregivers but may cause patient discomfort.

General Care Space. Space in which failure of equipment or a system is likely to cause minor injury to patients or caregivers. [OSHPD 1, 2, 3, & 4] Includes areas such as patient bedrooms, examining rooms, treatment rooms, clinics, and similar areas where the patient may come into contact with electromedical devices or ordinary appliances such as a nurse call system, electric beds, examining lamps, telephones, and entertainment devices.

Critical Care Space. Space in which failure of equipment or a system is likely to cause major injury or death to patients or caregivers. <u>[OSHPD 1, 2, 3, & 4] Includes special care units, intensive care units, coronary care units, angiography laboratories, cardiac catheterization laboratories, delivery rooms, operating rooms, post-operative recovery rooms and similar areas in which patients are intended to be subjected to invasive procedures and are connected to line-operated electromedical devices.</u>

Support Space. Space in which failure of equipment or a system is not likely to have a physical impact on patients or caregivers.

[OSHPD 1, 2, 3, & 4] General Care Area. see General Care Space

[OSHPD 1, 2, 3, & 4] Critical Care Area. see Critical Care Space

#### 517.19 Critical Care Areas.

#### (B) Patient Bed Location Receptacles.

Exception No.1: [OSHPD 1, 2, & 4] Each intensive care newborn nursery bed equivalent and each bed location in intensive care and coronary care units shall be equipped with at least 10 single or 5 duplex receptacles listed "Hospital Grade" and so identified; each receptacle shall be grounded to the reference grounding point by means of an insulated grounding conductor.

#### 517.26 Application of Other Articles

The life safety branch, <u>[OSHPD 1, 2, 3, & 4] critical branch</u>, and equipment branch of the essential electrical system shall meet the requirements of Article 700, except as amended by Article 517.

#### 517.30 Essential Electrical Systems for Hospitals.

(A) Applicability. The requirements of Part III, 517.30 through 517.35, shall apply to hospitals [OSHPD 1, 2 (facilities complying with Article 517.40(B), 3 (ambulatory surgical clinics only), & 4] correctional treatment centers providing optional services where an essential electrical system is required.

#### (B) General.

- (53) Optional Loads. Loads served by the generating equipment not specifically named in Article 517 shall be served by their own transfer switches such that the following conditions apply:
  - (1) These loads shall not be transferred if the transfer will overload the generating equipment.
  - (2) These loads shall be automatically shed upon generating equipment overloading. [For OSHPD 1, 3, & 4] Loads served by such transfer switches, including the receptacles required to be supplied by the normal system pursuant to Articles 517-18 and 517-19, shall not be considered to be on the essential system.]
- (4) Contiguous Facilities. Hospital power sources and alternate power sources shall be permitted to serve the essential electrical systems of contiguous or same site facilities. [99:l3.3.4.3]
- (75) [OSHPD 1, 2 (facilities complying with Article 517.40(B)), 3, & 4] All automatic transfer switches in general acute care hospitals, skilled nursing facilities complying with Article 517.40(B), and correctional treatment centers providing optional services shall be provided with an in-phase monitor relay and shall have provisions for electrically by-passing and isolating the transfer switch. The by-pass switch shall be capable of by-passing loads to the emergency source or normal source if the selected by-pass source voltage is available. Transfer switches rated over 150 volts to ground and equal to or greater than 1000 amps shall not be located in the same room with the normal service equipment.
- (D) Capacity of Systems. ...

(D.1) [OSHPD 1, 2, 3, & 4] Capacity of Systems. The essential electrical system shall have the adequate capacity and rating to meet the maximum actual demand for the operation of all functions and equipment to be served by each system and branch likely to be produced by the connected load.

517.33 Critical Branch.

(A) Task Illumination and Selected Receptacles. ...

(7) Telephone and data *[OSHPD-1, 3, & 4] and information-technology* equipment rooms and closets

517.34 Equipment Branch Connection to Alternate Power Source.

- **(A) Equipment for Delayed Automatic Connection.** The following equipment shall be permitted to be arranged for delayed automatic connection to the alternate power source:
- (8) Supply, return ...
- (9) [OSHPD 1, 2, 3 (surgical clinics), & 4] All equipment listed in Section 321.0 of the California Plumbing Code.

#### 517.41 Essential Electrical Systems

(B) Transfer Switches. The number of transfer switches to be used shall be based on reliability, design, and load considerations. Each branch of the essential electrical system shall be served by one or more transfer switches. One transfer switch shall be permitted to serve one or more branches or systems in a facility with a maximum demand of the essential electrical system of 150 kVA. [OSHPD 1, 2, & 4] Transfer switches installed in skilled nursing facilities meeting the requirements of Article 517.40(B) shall comply with Article 517.30(B)(5).

#### 517.43 Connection to Critical Branch.

- (A) Delayed Automatic Connection. The following equipment shall be permitted to be connected to the critical branch and shall be arranged for delayed automatic connection to the alternate power source:
- (9) [OSHPD 1, 2, 3 (surgical clinics), & 4] All equipment listed in Section 321.0 of the California Plumbing Code.
- **517.123 [OSHPD 1, 2, 3 & 4] Call Systems.** Hospital signaling and nurse call equipment includes four types of call stations: patient stations, bath stations, staff emergency stations, and code call stations.
- **(B) Patient Stations.** A patient station shall be provided to allow each patient to summon assistance from the nursing staff.
  - (1) Each patient sleeping bed, except nursery beds, shall be provided with a patient station equipped for two-way voice communication. Use of a dual call station shall be permitted when beds are located adjacent to each other.

**Exception:** Two-way voice communication is not required at skilled nursing bed(s). However, the system shall require resetting at the calling station unless a two-way voice communication component is included.

NOTATION:

#### **ARTICLE 518 - ASSEMBLY OCCUPANCIES**

Adopt entire 2014 National Electric Code (NEC) Article without amendments for OSHPD 1, 2, 3 & 4.

#### NOTATION:

Authority: Health and Safety Code Sections 1226, 1275, 18928, 129790 and 129850; Government Code Section 11152.5 Reference: Health and Safety Code Section 129850

## ARTICLE 520 – THEATERS, AUDIENCE AREAS OF MOTION PICTURE AND TELEVISION STUDIOS, PERFORMANCE AREAS, AND SIMILAR LOCATIONS

Adopt entire 2014 National Electric Code (NEC) Article without amendments for OSHPD 1, 2, 3 & 4.

#### NOTATION:

Authority: Health and Safety Code Sections 1226, 1275, 18928, 129790 and 129850; Government Code Section 11152.5 Reference: Health and Safety Code Section 129850

## ARTICLE 522 – CONTROL SYSTEMS FOR PERMANENT AMUSEMENT ATTRACTIONS Article is not adopted for OSHPD 1, 2, 3 & 4.

#### NOTATION

Authority: Health and Safety Code Sections 1226, 1275, 18928, 129790 and 129850; Government Code Section 11152.5 Reference: Health and Safety Code Section 129850

#### ARTICLE 525 - CARNIVALS, CIRCUSES, FAIRS, AND SIMILAR EVENTS

Article is not adopted for OSHPD 1, 2, 3 & 4.

#### NOTATION:

Authority: Health and Safety Code Sections 1226, 1275, 18928, 129790 and 129850; Government Code Section 11152.5 Reference: Health and Safety Code Section 129850

## ARTICLE 530 – MOTION PICTURE AND TELEVISION STUDIOS AND SIMILAR LOCATIONS Article is not adopted for OSHPD 1, 2, 3 & 4.

#### NOTATION:

Authority: Health and Safety Code Sections 1226, 1275, 18928, 129790 and 129850; Government Code Section 11152.5 Reference: Health and Safety Code Section 129850

#### ARTICLE 540 - MOTION PICTURE PROJECTION ROOMS

Adopt entire 2014 National Electric Code (NEC) Article without amendments for OSHPD 1, 2, 3 & 4.

#### NOTATION:

Authority: Health and Safety Code Sections 1226, 1275, 18928, 129790 and 129850; Government Code Section 11152.5 Reference: Health and Safety Code Section 129850

#### **ARTICLE 545 – MANUFACTURED BUILDINGS**

Adopt entire 2014 National Electric Code (NEC) Article without amendments for OSHPD 1, 2, 3 & 4.

#### NOTATION:

Authority: Health and Safety Code Sections 1226, 1275, 18928, 129790 and 129850; Government Code Section 11152.5 Reference: Health and Safety Code Section 129850

#### **ARTICLE 547 – AGRICULTURAL BUILDINGS**

Article is not adopted for OSHPD 1, 2, 3 & 4.

#### NOTATION:

Authority: Health and Safety Code Sections 1226, 1275, 18928, 129790 and 129850; Government Code Section 11152.5 Reference: Health and Safety Code Section 129850

#### ARTICLE 550 - MOBILE HOMES, MANUFACTURED HOMES, AND MOBILE HOME PARKS

Adopt entire 2014 National Electric Code (NEC) Article without amendments for OSHPD 1, 2, 3 & 4.

#### NOTATION:

Authority: Health and Safety Code Sections 1226, 1275, 18928, 129790 and 129850; Government Code Section 11152.5 Reference: Health and Safety Code Section 129850

#### ARTICLE 551 – RECREATIONAL VEHICLES AND RECREATIONAL VEHICLE PARKS

Article is not adopted for OSHPD 1, 2, 3 & 4.

#### NOTATION:

Authority: Health and Safety Code Sections 1226, 1275, 18928, 129790 and 129850; Government Code Section 11152.5 Reference: Health and Safety Code Section 129850

#### **ARTICLE 552 – PARK TRAILERS**

Adopt entire 2014 National Electric Code (NEC) Article without amendments for OSHPD 1, 2, 3, & 4.

#### NOTATION:

Authority: Health and Safety Code Sections 1226, 1275, 18928, 129790 and 129850; Government Code Section 11152.5 Reference: Health and Safety Code Section 129850

#### **ARTICLE 553 - FLOATING BUILDINGS**

Article is not adopted for OSHPD 1, 2, 3 & 4.

#### NOTATION:

Authority: Health and Safety Code Sections 1226, 1275, 18928, 129790 and 129850; Government Code Section 11152.5 Reference: Health and Safety Code Section 129850

#### **ARTICLE 555 - MARINAS AND BOATYARDS**

Article is not adopted for OSHPD 1, 2, 3 & 4.

#### NOTATION:

Authority: Health and Safety Code Sections 1226, 1275, 18928, 129790 and 129850; Government Code Section 11152.5 Reference: Health and Safety Code Section 129850

#### **ARTICLE 590 - TEMPORARY INSTALLATIONS**

Adopt entire 2014 National Electric Code (NEC) Article without amendments for OSHPD 1, 2, 3 & 4.

#### NOTATION:

Authority: Health and Safety Code Sections 1226, 1275, 18928, 129790 and 129850; Government Code Section 11152.5 Reference: Health and Safety Code Section 129850

#### Chapter 6 - Special Equipment

#### ARTICLE 600 - ELECTRIC SIGNS AND OUTLINE LIGHTING

Adopt entire 2014 National Electric Code (NEC) Article without amendments for OSHPD 1, 2, 3 & 4.

#### NOTATION:

Authority: Health and Safety Code Sections 1226, 1275, 18928, 129790 and 129850; Government Code Section 11152.5 Reference: Health and Safety Code Section 129850

#### **ARTICLE 604- MANUFACTURED WIRING SYSTEMS**

Adopt entire 2014 National Electric Code (NEC) Article without amendments for OSHPD 1, 2, 3 & 4.

#### NOTATION:

Authority: Health and Safety Code Sections 1226, 1275, 18928, 129790 and 129850; Government Code Section 11152.5 Reference: Health and Safety Code Section 129850

#### ARTICLE 605 - OFFICE FURNISHINGS

Adopt entire 2014 National Electric Code (NEC) Article without amendments for OSHPD 1, 2, 3 & 4.

#### NOTATION:

#### ARTICLE 610 - CRANES AND HOISTS

Adopt entire 2014 National Electric Code (NEC) Article without amendments for OSHPD 1, 2, 3 & 4.

#### NOTATION:

Authority: Health and Safety Code Sections 1226, 1275, 18928, 129790 and 129850; Government Code Section 11152.5 Reference: Health and Safety Code Section 129850

## ARTICLE 620 – ELEVATORS, DUMBWAITERS, ESCALATORS, MOVING WALKS, PLATFORM LIFTS AND STAIRWAY CHAIRLIFTS

Adopt entire 2014 National Electric Code (NEC) Article for OSHPD 2, 3, & 4.

Adopt entire 2014 National Electric Code (NEC) Article and carry forward existing amendment of the 2013 California Electrical Code (CEC) for OSHPD 1.

#### NOTATION:

Authority: Health and Safety Code Sections 1226, 1275, 18928, 129790 and 129850; Government Code Section 11152.5 Reference: Health and Safety Code Section 129850

#### ARTICLE 625 - ELECTRIC VEHICLE CHARGING SYSTEM

Adopt entire 2014 National Electric Code (NEC) Article without amendments for OSHPD 1, 2, 3 & 4.

#### NOTATION:

Authority: Health and Safety Code Sections 1226, 1275, 18928, 129790 and 129850; Government Code Section 11152.5 Reference: Health and Safety Code Section 129850

#### ARTICLE 626 – ELECTRIFIED TRUCK PARKING SPACES

Article is not adopted for OSHPD 1, 2, 3 & 4.

#### NOTATION:

Authority: Health and Safety Code Sections 1226, 1275,18928, 129790 and 129850; Government Code Section 11152.5 Reference: Health and Safety Code Section 129850

#### **ARTICLE 630 - ELECTRIC WELDERS**

Adopt entire 2014 National Electric Code (NEC) Article without amendments for OSHPD 1, 2, 3 & 4.

#### NOTATION:

Authority: Health and Safety Code Sections 1226, 1275, 18928, 129790 and 129850; Government Code Section 11152.5 Reference: Health and Safety Code Section 129850

## ARTICLE 640 – AUDIO SIGNAL PROCESSING, AMPLIFICATION, AND REPRODUCTION EQUIPMENT

Adopt entire 2014 National Electric Code (NEC) Article without amendments for OSHPD 1, 2, 3 & 4.

#### NOTATION

Authority: Health and Safety Code Sections 1226, 1275, 18928, 129790 and 129850; Government Code Section 11152.5 Reference: Health and Safety Code Section 129850

#### ARTICLE 645 - INFORMATION TECHNOLOGY EQUIPMENT

Adopt entire 2014 National Electric Code (NEC) Article without amendments for OSHPD 1, 2, 3 & 4.

#### NOTATION:

Authority: Health and Safety Code Sections 1226, 1275, 18928, 129790 and 129850; Government Code Section 11152.5 Reference: Health and Safety Code Section 129850

#### **ARTICLE 646 - MODULAR DATA CENTERS**

Adopt entire 2014 National Electric Code (NEC) Article without amendments for OSHPD 1, 2, 3 & 4.

#### NOTATION:

#### ARTICLE 647 - SENSITIVE ELECTRONIC EQUIPMENT

Adopt entire 2014 National Electric Code (NEC) Article without amendments for OSHPD 1, 2, 3 & 4.

#### NOTATION:

Authority: Health and Safety Code Sections 1226, 1275, 18928, 129790 and 129850; Government Code Section 11152.5 Reference: Health and Safety Code Section 129850

#### **ARTICLE 650 - PIPE ORGANS**

Adopt entire 2014 National Electric Code (NEC) Article without amendments for OSHPD 1, 2, 3 & 4.

#### NOTATION:

Authority: Health and Safety Code Sections 1226, 1275, 18928, 129790 and 129850; Government Code Section 11152.5 Reference: Health and Safety Code Section 129850

#### **ARTICLE 660 - X-RAY EQUIPMENT**

Adopt entire 2014 National Electric Code (NEC) Article without amendments for OSHPD 1, 2, 3 & 4.

#### NOTATION:

Authority: Health and Safety Code Sections 1226, 1275, 18928, 129790 and 129850; Government Code Section 11152.5 Reference: Health and Safety Code Section 129850

#### ARTICLE 665 – INDUCTION AND DIELECTRIC HEATING EQUIPMENT

Adopt entire 2014 National Electric Code (NEC) Article without amendments for OSHPD 1, 2, 3 & 4.

#### NOTATION:

Authority: Health and Safety Code Sections 1226, 1275, 18928, 129790 and 129850; Government Code Section 11152.5 Reference: Health and Safety Code Section 129850

#### **ARTICLE 668 – ELECTROLYTIC CELLS**

Adopt entire 2014 National Electric Code (NEC) Article without amendments for OSHPD 1, 2, 3 & 4,

#### NOTATION:

Authority: Health and Safety Code Sections 1226, 1275, 18928, 129790 and 129850; Government Code Section 11152.5 Reference: Health and Safety Code Section 129850

#### **ARTICLE 669 - ELECTROPLATING**

Adopt entire 2014 National Electric Code (NEC) Article without amendments for OSHPD 1, 2, 3 & 4.

#### NOTATION:

Authority: Health and Safety Code Sections 1226, 1275, 18928, 129790 and 129850; Government Code Section 11152.5 Reference: Health and Safety Code Section 129850

#### **ARTICLE 670 - INDUSTRIAL MACHINERY**

Adopt entire 2014 National Electric Code (NEC) Article without amendments for OSHPD 1, 2, 3 & 4.

#### NOTATION

Authority: Health and Safety Code Sections 1226, 1275, 18928, 129790 and 129850; Government Code Section 11152.5 Reference: Health and Safety Code Section 129850

#### ARTICLE 675 – ELECTRICALLY DRIVEN OR CONTROLLED IRRIGATION MACHINES

Adopt entire 2014 National Electric Code (NEC) Article without amendments for OSHPD 1, 2, 3 & 4.

#### NOTATION:

Authority: Health and Safety Code Sections 1226, 1275, 18928, 129790 and 129850; Government Code Section 11152.5 Reference: Health and Safety Code Section 129850

#### ARTICLE 680 – SWIMMING POOLS, FOUNTAINS, AND SIMILAR INSTALLATIONS

Adopt entire 2014 National Electric Code (NEC) Article without amendments for OSHPD 1, 2, 3 & 4.

#### NOTATION:

#### ARTICLE 682 - NATURAL and ARTIFICIALLY MADE BODIES of WATER

Adopt entire 2014 National Electric Code (NEC) Article without amendments for OSHPD 1, 2, 3 & 4,

#### NOTATION:

Authority: Health and Safety Code Sections 1226, 1275, 18928, 129790 and 129850; Government Code Section 11152.5 Reference: Health and Safety Code Section 129850

#### **ARTICLE 685 - INTEGRATED ELECTRICAL SYSTEMS**

Adopt entire 2014 National Electric Code (NEC) Article without amendments for OSHPD 1, 2, 3 & 4.

#### NOTATION:

Authority: Health and Safety Code Sections 1226, 1275, 18928, 129790 and 129850; Government Code Section 11152.5 Reference: Health and Safety Code Section 129850

#### ARTICLE 690 - SOLAR PHOTOVOLTAIC (PV) SYSTEMS

Adopt entire 2014 National Electric Code (NEC) Article without amendments for OSHPD 1, 2, 3 & 4.

#### NOTATION:

Authority: Health and Safety Code Sections 1226, 1275, 18928, 129790 and 129850; Government Code Section 11152.5 Reference: Health and Safety Code Section 129850

#### **ARTICLE 692 – FUEL CELL SYSTEMS**

Adopt entire 2014 National Electric Code (NEC) Article without amendments for OSHPD 1, 2, 3 & 4.

#### NOTATION:

Authority: Health and Safety Code Sections 1226, 1275, 18928, 129790 and 129850; Government Code Section 11152.5 Reference: Health and Safety Code Section 129850

#### **ARTICLE 694 – WIND ELECTRIC SYSTEMS**

Adopt entire 2014 National Electric Code (NEC) Article without amendments for OSHPD 1, 2, 3 & 4.

#### NOTATION:

Authority: Health and Safety Code Sections 1226, 1275, 18928, 129790 and 129850; Government Code Section 11152.5 Reference: Health and Safety Code Section 129850

#### **ARTICLE 695 - FIRE PUMPS**

Adopt entire 2014 National Electric Code (NEC) Article for OSHPD 1, 2, 3 & 4 and make the following amendments:

#### 695.3 Power Source(s) for Electric Motor-Driven Fire Pumps.

- (E) Arrangement. ...
- **(F) Transfer of Power.** Transfer of power to the fire pump controller between the individual source and one alternate source shall take place within the pump room. [20:9.6.4]
  - (1) **Power Source selection.** Selection of power source shall be performed by a transfer switch listed for fire pump service. [20:10.8.1.3.1] [OSHPD 1, 2 (facilities complying with Article 517.40(B), & 4] Transfer switch shall comply with Article 517.30(B)(5).

#### (G) Phase Converters. ...

#### NOTATION:

#### Chapter 7 - Special Conditions

#### **ARTICLE 700 - EMERGENCY SYSTEMS**

Adopt entire 2014 National Electric Code (NEC) Articles and carry forward existing amendments of the 2013 CEC for OSHPD 1, 2, 3 & 4 and make the following amendments:

#### 700.3 Tests and Maintenance.

(A) Conduct or Witness Test. The authority having jurisdiction shall conduct or witness a test of the complete system upon installation and periodically afterward.

[OSHPD 1, 2, 3 & 4] Permanently installed on-site generator sets for health care facilities shall be tested in accordance with NFPA 110-2005, Standard for Emergency and Standby Power Systems, Section 7.13, Installation Acceptance. All safety devices shall be tested as specified in Section 7.13.11-7.13.4.5; however, the safety devices provided may comply with NFPA 99-2005, Health Facilities, Section 4.4.1.1.16-6.4.1.1.17 in lieu of NFPA 110-2005, Section 5.6.5.2. The emergency power supply system shall be considered as a Level 1 system for testing purposes. Upon loss of normal power, the emergency power supply system shall provide emergency power within 10 seconds as required by 700.12.

#### NOTATION:

Authority: Health and Safety Code Sections 1226, 1275, 18928, 129790 and 129850; Government Code Section 11152.5 Reference: Health and Safety Code Section 129850

#### **ARTICLE 701 – LEGALLY REQUIRED STANDBY SYSTEMS**

Adopt entire 2014 National Electric Code (NEC) Article without amendments for OSHPD 1, 2, 3 & 4.

#### NOTATION:

Authority: Health and Safety Code Sections 1226, 1275, 18928, 129790 and 129850; Government Code Section 11152.5 Reference: Health and Safety Code Section 129850

#### **ARTICLE 702 - OPTIONAL STANDBY SYSTEMS**

Adopt entire 2014 National Electric Code (NEC) Article without amendments for OSHPD 1, 2, 3 & 4.

#### NOTATION:

Authority: Health and Safety Code Sections 1226, 1275, 18928, 129790 and 129850; Government Code Section 11152.5 Reference: Health and Safety Code Section 129850

#### ARTICLE 705 - INTERCONNECTED ELECTRIC POWER PRODUCTION SOURCES

Adopt entire 2014 National Electric Code (NEC) Article without amendments for OSHPD 1, 2, 3 & 4.

#### NOTATION:

Authority: Health and Safety Code Sections 1226, 1275, 18928, 129790 and 129850; Government Code Section 11152.5 Reference: Health and Safety Code Section 129850

#### ARTICLE 708 - CRITICAL OPERATIONS POWER SYSTEMS (COPS)

Adopt entire 2014 National Electric Code (NEC) Article and carry forward existing amendments of the 2013 California Electrical Code (CEC) for OSHPD 1, 2, 3 & 4.

#### NOTATION:

Authority: Health and Safety Code Sections 1226, 1275, 18928, 129790 and 129850; Government Code Section 11152.5 Reference: Health and Safety Code Section 129850

#### ARTICLE 720 - CIRCUITS AND EQUIPMENT OPERATING AT LESS THAN 50 VOLTS

Adopt entire 2014 National Electric Code (NEC) Article without amendments for OSHPD 1, 2, 3 & 4.

#### NOTATION:

# ARTICLE 725 – CLASS 1, CLASS 2, AND CLASS 3 REMOTE-CONTROL, SIGNALING, AND POWER-LIMITED CIRCUITS

Adopt entire 2014 National Electric Code (NEC) Article without amendments for OSHPD 1, 2, 3 & 4.

#### NOTATION:

Authority: Health and Safety Code Sections 1226, 1275, 18928, 129790 and 129850; Government Code Section 11152.5 Reference: Health and Safety Code Section 129850

#### ARTICLE 727 - INSTRUMENTATION TRAY CABLE: TYPE ITC

Adopt entire 2014 National Electric Code (NEC) Article without amendments for OSHPD 1, 2, 3 & 4.

#### NOTATION:

Authority: Health and Safety Code Sections 1226, 1275, 18928, 129790 and 129850; Government Code Section 11152.5 Reference: Health and Safety Code Section 129850

#### ARTICLE 728 - FIRE-RESISTIVE CABLE SYSTEMS

Adopt entire 2014 National Electric Code (NEC) Article without amendments for OSHPD 1, 2, 3 & 4.

#### NOTATION:

Authority: Health and Safety Code Sections 1226, 1275, 18928, 129790 and 129850; Government Code Section 11152.5 Reference: Health and Safety Code Section 129850

# **ARTICLE 750 - ENERGY MANAGEMENT SYSTEMS**

Adopt entire 2014 National Electric Code (NEC) Article without amendments for OSHPD 1, 2, 3 & 4.

#### NOTATION:

Authority: Health and Safety Code Sections 1226, 1275, 18928, 129790 and 129850; Government Code Section 11152.5 Reference: Health and Safety Code Section 129850

#### **ARTICLE 760 - FIRE ALARM SYSTEMS**

Adopt entire 2014 National Electric Code (NEC) Article without amendments for OSHPD 1, 2, 3 & 4.

#### NOTATION-

Authority: Health and Safety Code Sections 1226, 1275, 18928, 129790 and 129850; Government Code Section 11152.5 Reference: Health and Safety Code Section 129850

#### ARTICLE 770 - OPTICAL FIBER CABLES AND RACEWAYS

Adopt entire 2014 National Electric Code (NEC) Article without amendments for OSHPD 1, 2, 3 & 4.

### NOTATION:

Authority: Health and Safety Code Sections 1226, 1275, 18928, 129790 and 129850; Government Code Section 11152.5 Reference: Health and Safety Code Section 129850

#### **Chapter 8 – Communications Systems**

## **ARTICLE 800 - COMMUNICATIONS CIRCUITS**

Adopt entire 2014 National Electric Code (NEC) Article without amendments for OSHPD 1, 2, 3 & 4.

#### NOTATION:

Authority: Health and Safety Code Sections 1226, 1275, 18928, 129790 and 129850; Government Code Section 11152.5 Reference: Health and Safety Code Section 129850

## **ARTICLE 810 - RADIO AND TELEVISION EQUIPMENT**

Adopt entire 2014 National Electric Code (NEC) Article without amendments for OSHPD 1, 2, 3 & 4.

#### NOTATION:

Authority: Health and Safety Code Sections 1226, 1275, 18928, 129790 and 129850; Government Code Section 11152.5 Reference: Health and Safety Code Section 129850

# ARTICLE 820 - COMMUNITY ANTENNA TELEVISION AND RADIO DISTRIBUTION SYSTEMS

Adopt entire 2014 National Electric Code (NEC) Article without amendments for OSHPD 1, 2, 3 & 4.

#### NOTATION:

Authority: Health and Safety Code Sections 1226, 1275, 18928, 129790 and 129850; Government Code Section 11152.5 Reference: Health and Safety Code Section 129850

#### **ARTICLE 830 – NETWORK-POWERED BROADBAND COMMUNICATIONS SYSTEMS**

Adopt entire 2014 National Electric Code (NEC) Article without amendments for OSHPD 1, 2, 3 & 4.

#### NOTATION:

Authority: Health and Safety Code Sections 1226, 1275, 18928, 129790 and 129850; Government Code Section 11152.5 Reference: Health and Safety Code Section 129850

#### ARTICLE 840 – PREMISES-POWERED BROADBAND COMMUNICATIONS SYSTEMS

Adopt entire 2014 National Electric Code (NEC) Article without amendments for OSHPD 1, 2, 3 & 4.

#### NOTATION:

Authority: Health and Safety Code Sections 1226, 1275, 18928, 129790 and 129850; Government Code Section 11152.5 Reference: Health and Safety Code Section 129850

# Chapter 9 - TABLES

Adopt entire 2014 National Electric Code (NEC) Article without amendments for OSHPD 1, 2, 3 & 4.

#### NOTATION:

Authority: Health and Safety Code Sections 1226, 1275, 18928, 129790 and 129850; Government Code Section 11152.5 Reference: Health and Safety Code Section 129850

# FINAL EXPRESS TERMS FOR PROPOSED BUILDING STANDARDS OF THE OFFICE OF THE STATE FIRE MARSHAL

# REGARDING PROPOSED CHANGES TO 2016 CALIFORNIA ELECTRICAL CODE CALIFORNIA CODE OF REGULATIONS, TITLE 24, PART 3

## LEGEND FOR EXPRESS TERMS

- 1. Existing California amendments or code language being modified are in italics when they appear in the model code text: All such language appears in *italics*, modified language is <u>underlined</u>.
- 2. New California amendments: All such language appears <u>underlined and in italics</u>.
- 3. Repealed text: All such language appears in strikeout.

The Office of the State Fire Marshal (SFM) proposes to adopt the 2014 edition of the National Electrical Code (NEC) into the 2016 edition of the California Electrical Code (CEC). SFM further proposes to:

- Repeal the adoption by reference of the 2011 National Electrical Code and incorporate and adopt
  by reference in its place the 2014 National Electrical Code for application and effectiveness in the
  2016 California Electrical Code.
- Repeal certain amendments to the 2011 National Electrical Code and/or California Building Standards not addressed by the model code that are no longer necessary.
- Adopt new building standards or necessary amendments to the 2014 National Electrical Code that address inadequacies of the 2014 National Electrical Code as they pertain to California laws.
- Bring forward previously existing California building standards or amendments, which represent no change in their effect from the 2013 California Building Standards Code.
- Codify non-substantive editorial and formatting amendments from the format based upon the 2011 National Electrical Code to the format of the 2014 National Electrical Code.

[1. The SFM is proposing to maintain the adoption of those existing California provisions contained Sections 89.101 through 89.101.12 with modification.]

# CALIFORNIA ARTICLE 89 GENERAL CODE PROVISIONS

# SECTION 89.101 GENERAL

- **89.101.1 Title.** These regulations shall be known as the California Electrical Code, may be cited as such and will be referred to herein as "this code." The California Electrical Code is Part 3 of twelvethirteen parts of the official compilation and publication of the adoption, amendment, and repeal of electrical regulations to the California Code of Regulations, Title 24, also referred to as the California Building Standards Code. This part incorporates by adoption the 2011/2014 National Electrical Code of the National Fire Protection Association with necessary California amendments.
- 89.101.2 Purpose. The purpose of this code is to establish the minimum requirements to safeguard the public health, safety and general welfare through structural strength, means of egress facilities, stability, access to persons with disabilities, sanitation, adequate lighting and ventilation, and energy conservation; safety to life and property from fire and other hazards attributed to the built environment; and to provide safety to fire fighters and emergency responders during emergency operations.
- **89.101.3 Scope.** The provisions of this code shall apply to the construction, alteration, movement, enlargement, replacement, repair, equipment, use and occupancy, location, maintenance, removal and demolition of every building or structure or any appurtenances connected or attached to such building or structures throughout the State of California.
- **89.101.3.1 Nonstate-Regulated Buildings, Structures, and Applications.** Except as modified by local ordinance pursuant to Section 89.101.8, the building standards in the California Code of Regulations, Title 24, Parts 2, 2.5, 3, 4, 5, 6, 9, 10 and 11 shall apply to all occupancies and applications not regulated by a state agency.
- 89.101.3.2 State-Regulated Buildings, Structures, and Applications. The model code, state amendments to the model code, and/or state amendments where there are no relevant model code provisions shall apply to the following buildings, structures, and applications regulated by state agencies and as specified in Sections 89.102 through 89.114, except where modified by local ordinance pursuant to Section 89.101.8. When adopted by a state agency, the provisions of this code shall be enforced by the appropriate enforcing agency, but only to the extent of authority granted to such agency by the state legislature.

Note: See Preface to distinguish the model code provisions from the California provisions.

- 1. State-owned buildings, including buildings constructed by the Trustees of the California State University, and to the extent permitted by California laws, buildings designed and constructed by the Regents of the University of California, and regulated by the Building Standards Commission. See Section 89.102 for additional scope provisions.
- 2. Reserved for Corrections Standards Authority. See Section 89.103 for additional scope provisions.
- 3. Reserved for the Department of Consumer Affairs. See Section 89.104 for additional scope provisions.
- 4. Reserved for the California Energy Commission. See Section 89.105 for additional scope provisions.
- 5. Reserved for the Department of Food and Agriculture. See Section 89.106 for additional scope provisions.
- 6. Organized camps, laboratory animal quarters, public swimming pools, radiation protection,

commissaries serving mobile food preparation vehicles and wild animal quarantine facilities regulated by the California Department of Public Health (DPH). See Section 89.107 for additional scope provisions.

- 7. Hotels, motels, lodging houses, apartment houses apartments, dwellings, dormitories, condominiums, shelters for homeless persons, congregate residences, employee housing, factory-built housing and other types of dwellings containing sleeping accommodations with or without common toilets or cooking facilities. See Section 1.8.2.1.1 for additional scope provisions.
- 8. Accommodations for persons with disabilities in buildings containing newly constructed covered multifamily dwellings, new common use spaces serving existing covered multifamily dwellings, additions to existing buildings where the addition alone meets the definition of "COVERED MULTIFAMILY DWELLINGS," and <a href="new">new</a> common-use spaces <a href="meets">areas</a> serving <a href="new">new</a> covered multifamily dwellings which are regulated by the Department of Housing and Community Development. See Section 1.8.2.1.2 for additional scope provisions.
- 9. Permanent buildings and permanent accessory buildings or structures constructed within mobilehome parks and special occupancy parks regulated by the Department of Housing and Community Development. See Section 89.108.2.1.3 for additional scope provisions.
- 10. Accommodations for persons with disabilities regulated by the Division of the State Architect. See Section 89.109.1 for additional scope provisions.
- 11. Public elementary and secondary schools, community college buildings, and state-owned or state-leased essential service buildings regulated by the Division of the State Architect. See Section 89.109.2 for additional scope provisions.
- 12. Qualified historical buildings and structures and their associated sites regulated by the State Historical Building Safety Board with the Division of the State Architect. See Section 89.109.3 for additional scope provisions.
- 13. General acute care hospitals, acute psychiatric hospitals, skilled nursing and/or intermediate care facilities, clinics licensed by the California Department of Public Health (DPH) and correctional treatment centers regulated by the Office of Statewide Health Planning and Development. See Section 89.110 for additional scope provisions.
- 14. Applications regulated by the Office of the State Fire Marshal include, but are not limited to, the following in accordance with Section 89.111:
- 1. Buildings or structures used or intended for use as an:
- 1.1. Asylum, jail, prison.
- 1.2. Mental hospital, hospital, home for the elderly, children's nursery, children's home or institution, school or any similar occupancy of any capacity.
- 1.3. Theater, dancehall, skating rink, auditorium, assembly hall, meeting hall, nightclub, fair building, or similar place of assemblage where 50 or more persons may gather together in a building, room or structure for the purpose of amusement, entertainment, instruction, deliberation, worship, drinking or dining, awaiting transportation, or education.
- 1.4. Small family day care homes, large family day care homes, residential facilities and residential facilities for the elderly and residential care facilities.
- 1.5. State institutions or other state-owned or state-occupied buildings.
- 1.6. High rise structures.
- 1.7. Motion picture production studios.
- 1.8. Organized camps.
- 1.9. Residential structures.
- Tents, awnings or other fabric enclosures used in connection with any occupancy.
- Fire alarm devices, equipment and systems in connection with any occupancy.
- 4. Hazardous materials, flammable and combustible liquids.
- 5. Public school automatic fire detection, alarm, and sprinkler systems.
- 6. Wildland-Urban Interface (WUI) fire areas.
- 15. Reserved for the State Librarian. See Section 89.112 for additional scope provisions.
- 16. Reserved for the Department of Water Resources. See Section 89.113 for additional scope provisions.
- 17. Reserved for the California State Lands Commission. See Section 89.114 for additional scope

provisions.

# 89.101.3.3 Exempted from this Code. This code does not cover:

- (A) 1. Installations in ships, watercraft other than floating dwelling units, railway rolling stock, aircraft, automotive vehicles, commercial coaches, mobilehomes, and recreational vehicles.
- (B) 2. Installations underground in mines, mine shafts and tunnels.
- **(C) 3.** Installations of railways for generation, transformation, transmission, or distribution of power used exclusively for operation of rolling stock or installations used exclusively for signaling and communication purposes.
- (D) 4. Installation of communication equipment under the exclusive control of communication utilities, located outdoors or in building spaces used exclusively for such installations.
- (E) 5. Installations under the exclusive control of electrical utilities for the purpose of communication, or metering; or for the generation, control, transformation, transmission, and distribution of electrical energy located in buildings used exclusively by utilities for such purposes or located outdoors on property owned or leased by the utility or on public highways, streets, roads, etc., or outdoors by established rights on private property.
- **Exception to (D)4 and (E)5:** In places of employment, the following shall apply: installations of conductors, equipment and associated enclosures subject to the jurisdiction of the California Public Utilities Commission, that are owned, operated and maintained by an electric, communications or electric railway utility, but not including conduit, vaults, and other like enclosures containing conductors and equipment of such a utility when located indoors or on premises not used exclusively for utility purposes, but do not apply to the utility's conductors and equipment therein.
- (F) 6. Installations on highways or bridges.
- 89.101.4 Annexes. Provisions contained in the annexes of this code shall not apply unless specifically adopted by a state agency or adopted by a local enforcing agency in compliance with Health and Safety Code Section 18901 et seq. for Building Standards Law, Health and Safety Code Section 17950 for State Housing Law and Health and Safety Code Section 13869.7 for Fire Protection Districts. See Section 89.101.8 of this code.
- 89.101.5 Referenced Codes. The codes, standards and publications adopted and set forth in this code, including other codes, standards and publications referred to therein are, by title and date of publication, hereby adopted as standard reference documents of this code. When this code does not specifically cover any subject related to building design and construction, recognized architectural or engineering practices shall be employed. The National Fire Codes, standards and the Fire Protection Handbook of the National Fire Protection Association are permitted to be used as authoritative guides in determining recognized fire prevention engineering practices.
- **89.101.6** Non-Building Standards, Orders and Regulations. Requirements contained in the National Electrical Code, or in any other referenced standard, code or document, which are not building standards as defined in Health and Safety Code Section 18909 shall not be construed as part of the provisions of this code. For nonbuilding standards, orders, and regulations, see other titles of the California Code of Regulations.

## 89.101.7 Order of Precedence and Use.

- **89.101.7.1 Differences**. In the event of any differences between these building standards and the standard reference documents, the text of these building standards shall govern.
- **89.101.7.2 Specific Provisions.** Where a specific provision varies from a general provision, the specific provision shall apply.

**89.101.7.3 Conflicts.** When the requirements of this code conflict with the requirements of any other part of the California Building Standards Code, Title 24, the most restrictive requirements shall prevail.

Exception: Detached one-and two-family dwellings, efficiency dwelling units, lodging houses, live/work units, townhouses not more than three stories above grade plane with a separate means of egress, and their accessory structures, shall not be required to comply with the California Residential Code if constructed in accordance with the California Building Code.

89.101.8 City, County, or City and County Amendments, Additions or Deletions. The provisions of this code do not limit the authority of city, county, or city and county governments to establish more restrictive and reasonably necessary differences to the provisions contained in this code pursuant to complying with Section 89.101.8.1. The effective date of amendments, additions, or deletions to this code by city, county or city and county filed pursuant to Section 89.101.8.1 shall be the date filed. However, in no case shall the amendments, additions or deletions to this code be effective any sooner than the effective date of this code.

Local modifications shall comply with Health and Safety Code Section 18941.5 for Building Standards Law, Health and Safety Code Section 17958 for State Housing Law or Health and Safety Code Section 13869.7 for Fire Protection Districts.

**89.101.8.1 Findings and Filings.** 1. The city, county, or city and county shall make express findings for each amendment, addition or deletion based upon climatic, topographical, or geological conditions.

Exception: Hazardous building ordinances and programs mitigating unreinforced masonry buildings.

- 2. The city, county, or city and county shall file the amendments, additions, or deletions expressly marked and identified as to the applicable findings. Cities, counties, cities and counties, and fire departments shall file the amendments, additions or deletions, and the findings with the California Building Standards Commission at 2525 Natomas Park Drive, Suite 130, Sacramento, CA 95833.
- 3. Findings prepared by fire protection districts shall be ratified by the local city, county, or city and county and filed with the California Department of Housing and Community Development, Division of Codes and Standards, P.O. Box 1407, Sacramento, CA 95812-1407 or at 1800-3rd-Street, Room 260, Sacramento, CA 95811-2020 West El Camino Avenue, Suite 250, Sacramento, CA 95833-1829.

### 89.101.8.2 Locally adopted energy standards - California Energy Code, Part 6

In addition to the provisions of Section 1.1.8.1 of this Part, the provisions of this section apply to cities, counties, and city and county amending adopted energy standards affecting buildings and structures subject to the California Energy Code, Part 6.

Applicable provisions of Public Resources Code Section 25402.1 and applicable provisions of Chapter 10 of the California Administrative Code, Part 1 apply to local amendment of energy standards adopted by the California Energy Commission.

- 89.101.9 Effective Date of this Code. Only those standards approved by the California Building Standards Commission that are effective at the time an application for building permit is submitted shall apply to the plans and specifications for, and to the construction performed under, that permit. For the effective dates of the provisions contained in this code, see the History Note page of this code.
- **89.101.10** Availability of Codes. At least one complete copy each of Titles 8, 19, 20, 24, and 25 with all revisions shall be maintained in the office of the building official responsible for the administration and enforcement of this code. Each state department concerned and each city, county or city and county shall

have an up-to-date copy of the code available for public inspection. See Health and Safety Code Section 18942 (d e) (1) and (2).

**89.101.11 Format.** This part fundamentally adopts the National Electrical Code by reference on a chapter-by-chapter basis.

When a specific chapter of the National Electrical Code is not printed in the code and is marked "Reserved" such chapter of the National Electrical Code is not adopted as a portion of this code. When a specific chapter of the National Electrical Code is marked "Not adopted by the State of California" but appears in the code, it may be available for adoption by local ordinance.

**Note:** Matrix Adoption Tables at the front of each chapter may aid the code user in determining which chapter or sections within a chapter are applicable to buildings under the authority of a specific state agency, but they are not to be considered regulatory.

**89.101.12 Validity.** If any chapter, article, section, subsection, sentence, clause or phrase of this code is for any reason held to be unconstitutional, contrary to statute, exceeding the authority of the state as stipulated by statutes, or otherwise inoperative, such decision shall not affect the validity of the remaining portion of this code.

#### Notation:

Authority: Health and Safety Code Sections 13108, 13143, 17921, 18949.2

References: Health and Safety Code Sections 13143, 18949.2

[1.1. The SFM is proposing to maintain the adoption of those existing California provisions contained Sections 89.111 through 89.111.10 without modification.]

# SECTION 89.111 OFFICE OF THE STATE FIRE MARSHAL

89.111.1 SFM - Office of the State Fire Marshal. Specific scope of application of the agency responsible for enforcement, the enforcement agency and the specific authority to adopt and enforce such provisions of this code, unless otherwise stated.

## Application:

Institutional, educational or any similar occupancy. Any building or structure used or intended for use as an asylum, jail, mental hospital, hospital, sanitarium, home for the aged, children's nursery, children's home, school or any similar occupancy of any capacity.

Authority cited – Health and Safety Code Section 13143. Reference – Health and Safety Code Section 13143.

Assembly or similar place of assemblage. Any theater, dancehall, skating rink, auditorium, assembly hall, meeting hall, nightclub, fair building or similar place of assemblage where 50 or more persons may gather together in a building, room or structure for the purpose of amusement, entertainment, instruction, deliberation, worship, drinking or dining, awaiting transportation, or education.

Authority cited -- Health and Safety Code Section 13143. Reference -- Health and Safety Code Section 13143.

Small family day care homes.

Authority cited – Health and Safety Code Sections 1597.45, 1597.54, 13143 and 17921. Reference – Health and Safety Code Section 13143.

Large family day care homes.

Authority cited – Health and Safety Code Sections 1597.46, 1597.54 and 17921. Reference – Health and Safety Code Section 13143.

Residential facilities and residential facilities for the elderly.

**Authority cited** – Health and Safety Code Section 13133. **Reference** – Health and Safety Code Section 13143.

Any state institution or other state-owned or state-occupied building.

Authority cited – Health and Safety Code Section 13108. Reference – Health and Safety Code Section 13143.

High-rise structures.

Authority cited – Health and Safety Code Section 13211. Reference – Health and Safety Code Section 13143.

Motion picture production studios.

Authority cited – Health and Safety Code Section 13143.1. Reference – Health and Safety Code Section 13143.

Organized camps.

Authority cited – Health and Safety Code Section 18897.3. Reference – Health and Safety Code Section 13143.

**Residential.** All hotels, motels, lodging houses, apartment houses and dwellings, including congregate residences and buildings and structures accessory thereto. Multiple-story structures existing on January 1, 1975, let for human habitation, including and limited to, hotels, motels and apartment houses, less than 75 feet (22 860 mm) above the lowest floor level having building access, wherein rooms used for sleeping are let above the ground floor.

Authority cited – Health and Safety Code Sections 13143.2 and 17921. Reference – Health and Safety Code Section 13143.

Residential care facilities. Certified family care homes, out-of-home placement facilities, halfway houses, drug and/or alcohol rehabilitation facilities and any building or structure used or intended for use as a home or institution for the housing of any person of any age when such person is referred to or placed within such home or institution for protective social care and supervision services by any governmental agency.

Authority cited – Health and Safety Code Section 13143.6. Reference – Health and Safety Code Section 13143.

Tents, awnings or other fabric enclosures used in connection with any occupancy.

Authority cited – Health and Safety Code Section 13116. Reference – Health and Safety Code Section 13143.

Fire alarm devices, equipment and systems in connection with any occupancy.

Authority cited – Health and Safety Code Section 13114. Reference – Health and Safety Code Section 13143.

Hazardous materials.

Authority cited – Health and Safety Code Section 13143.9. Reference – Health and Safety Code Section 13143.

Flammable and combustible liquids.

Authority cited – Health and Safety Code Section 13143.6. Reference – Health and Safety Code Section 13143.

Public School Automatic Fire Detection, Alarm and Sprinkler Systems.

Authority cited -- Health and Safety Code Section 13143 and California Education Code Article 7.5, Sections

17074.50, 17074.52 and 17074.54.

Reference – Government Code Section 11152.5, Health and Safety Code Section 13143 and California Education Code Chapter 12.5, Leroy F. Greene School Facilities Act of 1998, Article 1.

#### Wildland-Urban Interface Fire Area.

Authority cited – Health and Safety Code Sections 13143, 13108.5(a) and 18949.2(b) and (c) and Government Code Section 51189.

Reference – Health and Safety Code Sections 13143, Government Code Sections 51176, 51177, 51178 and 51179 and Public Resources Code Sections 4201 through 4204.

# 89.111.2 Duties and Powers of the Enforcing Agency

#### 89.111.2.1 Enforcement.

- **89.111.2.1.1** The responsibility for enforcement of building standards adopted by the State Fire Marshal and published in the California Building Standards Code relating to fire and panic safety and other regulations of the State Fire Marshal shall except as provided in Section 89.111.2.1.2 be as follows:
- 1. The city, county or city and county with jurisdiction in the area affected by the standard or regulation shall delegate the enforcement of the building standards relating to fire and panic safety and other regulations of the State Fire Marshal as they relate to Group R-3 occupancies, as described in Section 310.1 of Part 2 of the California Building Standards Code, to either of the following:
- 1.1. The chief of the fire authority of the city, county or city and county, or an authorized representative.
- 1.2. The chief building official of the city, county or city and county, or an authorized representative.
- 2. The chief of any city or county fire department or of any fire protection district, and authorized representatives, shall enforce within the jurisdiction the building standards and other regulations of the State Fire Marshal, except those described in Item 1 or 4.

- 3. The State Fire Marshal shall have authority to enforce the building standards and other regulations of the State Fire Marshal in areas outside of corporate cities and districts providing fire protection services.
- 4. The State Fire Marshal shall have authority to enforce the building standards and other regulations of the State Fire Marshal in corporate cities and districts providing fire protection services on request of the chief fire official or the governing body.
- 5. Any fee charged pursuant to the enforcement authority of this section shall not exceed the estimated reasonable cost of providing the service for which the fee is charged pursuant to Section 66014 of the Government Code.

89.111.2.1.2 Pursuant to Health and Safety Code Section 13108, and except as otherwise provided in this section, building standards adopted by the State Fire Marshal published in the California Building Standards Code relating to fire and panic safety shall be enforced by the State Fire Marshal in all state-owned buildings, state-occupied buildings, and state institutions throughout the state. Upon the written request of the chief fire official of any city, county or fire protection district, the State Fire Marshal may authorize such chief fire official and his or her authorized representatives, in their geographical area of responsibility, to make fire prevention inspections of state-owned or state-occupied buildings, other than state institutions, for the purpose of enforcing the regulations relating to fire and panic safety adopted by the State Fire Marshal pursuant to this section and building standards relating to fire and panic safety published in the California Building Standards Code. Authorization from the State Fire Marshal shall be limited to those fire departments or fire districts which maintain a fire prevention bureau staffed by paid personnel.

Pursuant to Health and Safety Code Section 13108, any requirement or order made by any chief fire official who is authorized by the State Fire Marshal to make fire prevention inspections of state-owned or state-occupied buildings, other than state institutions, may be appealed to the State Fire Marshal. The State Fire Marshal shall, upon receiving an appeal and subject to the provisions of Chapter 5 (commencing with Section 18945) of Part 2.5 of Division 13 of the Health and Safety Code, determine if the requirement or order made is reasonably consistent with the fire and panic safety regulations adopted by the State Fire Marshal and building standards relating to fire and panic safety published in the California Building Code.

Any person may request a code interpretation from the State Fire Marshal relative to the intent of any regulation or provision adopted by the State Fire Marshal. When the request relates to a specific project, occupancy or building, the State Fire Marshal shall review the issue with the appropriate local enforcing agency prior to rendering such code interpretation.

89.111.2.1.3 Pursuant to Health and Safety Code Section 13112, any person who violates any order, rule or regulation of the state fire marshal is guilty of a misdemeanor punishable by a fine of not less than \$100.00 or more than \$500.00, or by imprisonment for not less than six months, or by both. A person is guilty of a separate offense each day during which he or she commits, continues or permits a violation of any provision of, or any order, rule or regulation of, the state fire marshal as contained in this code.

Any inspection authority who, in the exercise of his or her authority as a deputy state fire marshal, causes any legal complaints to be filed or any arrest to be made shall notify the state fire marshal immediately following such action.

#### 89.111.2.2 Right of entry.

The fire chief of any city, county or fire-protection district, or such person's authorized representative, may enter any state institution or any other state-owned or state-occupied building for the purpose of preparing a fire-suppression preplanning program or for the purpose of investigating any fire in a state-occupied building.

The State Fire Marshal, his or her deputies or salaried assistants, the chief of any city or county fire

department or fire protection district and his or her authorized representatives may enter any building or premises not used for dwelling purposes at any reasonable hour for the purpose of enforcing this chapter. The owner, lessee, manager or operator of any such building or premises shall permit the State Fire Marshal, his or her deputies or salaried assistants and the chief of any city or county fire department or fire-protection district and his or her authorized representatives to enter and inspect them at the time and for the purpose stated in this section.

## 89.111.2.3 More Restrictive Fire and Panic Safety Building Standards.

- 89.111.2.3.1 Any fire-protection district organized pursuant to Health and Safety Code Part 2.7 (commencing with Section 13800) of Division 12 may adopt building standards relating to fire and panic safety that are more stringent than those building standards adopted by the State Fire Marshal and contained in the California Building Standards Code. For these purposes, the district board shall be deemed a legislative body and the district shall be deemed a local agency. Any changes or modifications that are more stringent than the requirements published in the California Building Standards Code relating to fire and panic safety shall be subject to 101.8.1.
- **89.111.2.3.2** Any fire protection district that proposes to adopt an ordinance pursuant to this section shall, not less than 30 days prior to noticing a proposed ordinance for public hearing, provide a copy of that ordinance, together with the adopted findings made pursuant to Section 89.111.2.3.1, to the city, county, or city and county where the ordinance will apply. The city, county, or city and county, may provide the district with written comments, which shall become part of the fire protection district's public hearing record.
- 89.111.2.3.3 The fire-protection district shall transmit the adopted ordinance to the city, county, or city and county where the ordinance will apply. The legislative body of the city, county, or city and county, may ratify, modify or deny an adopted ordinance and transmit its determination to the district within 15 days of the determination. Any modification or denial of an adopted ordinance shall include a written statement describing the reasons for any modifications or denial. No ordinance adopted by the district shall be effective until ratification by the city, county, or city and county where the ordinance will apply. Upon ratification of an adopted ordinance, the city, county, or city and county, shall file a copy of the findings of the district, and any findings of the city, county, or city and county, together with the adopted ordinance expressly marked and identified to which each finding refers. in accordance with Section 101.8.1:3.
- 89.111.2.4 Request for alternate means of protection. Requests for approval to use an alternative material, assembly or materials, equipment, method of construction, method of installation of equipment, or means of protection shall be made in writing to the enforcing agency by the owner or the owner's authorized representative and shall be accompanied by a full statement of the conditions. Sufficient evidence or proof shall be submitted to substantiate any claim that may be made regarding its conformance. The enforcing agency may require tests and the submission of a test report from an approved testing organization as set forth in Title 19, California code of Regulation, to substantiate the equivalency of the proposed alternative means of protection.

The authority having jurisdiction may consider implementation of the findings and recommendations identified in a Risk Management Plan (RMP) as developed in accordance with Title 19, Division 2, Chapter 3, when evaluating requests for alternative means of protection.

Approval of a request for use of an alternative material, assembly of materials, equipment, method of construction, method of installation of equipment, or means of protection made pursuant to these provisions shall be limited to the particular case covered by request and shall not be construed as establishing any precedent for any future request.

89.111.2.5 Appeals. When a request for an alternate means of protection has been denied by the

enforcing agency, the applicant may file a written appeal to the state fire marshal for consideration of the applicant's proposal. In considering such appeal, the state fire marshal may seek the advice of the State Board of Fire Services. The State Fire Marshal shall, after considering all of the facts presented, including any recommendations of the State board of Fire Services, determine if the proposal is for the purposes intended, at least equivalent to that specified in these regulations in quality, strength, effectiveness, fire resistance, durability and safety, and shall transmit such findings and any recommendations to the applicant and to the enforcing agency.

- **89.111.3 Construction Documents.** In addition to the provisions of this Section, see Title 24, Part 2, California Building Code, Appendix Chapter 1, Section 106 for additional requirements.
- **89.111.3.1 Public schools.** Plans and specifications for the construction, alteration or addition to any building owned, leased or rented by any public school district shall be submitted to the Division of the State Architect.
- **89.111.3.2 Movable walls and partitions.** Plans or diagrams shall be submitted to the enforcing agency for approval before the installation of, or rearrangement of, any movable wall or partition in any occupancy. Approval shall be granted only if there is no increase in the fire hazard.
- **89.111.3.3** New construction high-rise buildings. 1. Complete plans or specifications, or both, shall be prepared covering all work required to comply with new construction high-rise buildings. Such plans and specifications shall be submitted to the enforcing agency having jurisdiction.
- 2. All plans and specifications shall be prepared under the responsible charge of an architect or a civil or structural engineer authorized by law to develop construction plans and specifications, or by both such architect and engineer. Plans and specifications shall be prepared by an engineer duly qualified in that branch of engineering necessary to perform such services. Administration of the work of construction shall be under the charge of the responsible architect or engineer except that where plans and specifications involve alterations or repairs, such work of construction may be administered by an engineer duly qualified to perform such services and holding a valid certificate under Chapter 7 (commencing with Section 65700) of Division 3 of the Business and Professions Code for performance of services in that branch of engineering in which said plans, specifications and estimates and work of construction are applicable.

This section shall not be construed as preventing the design of fire-extinguishing systems by persons holding a C-16 license issued pursuant to Division 3, Chapter 9, Business and Professions Code. In such instances, however, the responsibility charge of this section shall prevail.

- **89.111.3.4 Existing high-rise buildings.** 1. Complete plans or specifications, or both, shall be prepared covering all work required by Section 3412, for existing high-rise buildings. Such plans or specifications shall be submitted to the enforcing agency having jurisdiction.
- 2. When new construction is required to conform with the provisions of these regulations, complete plans or specifications, or both, shall be prepared in accordance with the provisions of this subsection. As used in this section "new construction" is not intended to include repairs, replacements or minor alterations which do not disrupt or appreciably add to or affect the structural aspects of the building.
- **89.111.3.5 Retention of Plans.** Refer to Building Standards Law, Health and Safety Code Sections 19850 and 19851, for permanent retention of plans.

## 89.111.4 Fees

**89.111.4.1 Other fees.** Pursuant to Health and Safety Code Section 13146.2, a city, county or district which inspects a hotel, motel, lodging house, or apartment house may charge and collect a fee for the inspection from the owner of the structure in an amount, as determined by the city, county or district,

sufficient to pay its costs of that inspection.

- **89.111.4.2** Large Family Day Care. Pursuant to Health and Safety Code Section 1597.46, Large Family Day-care Homes, the local government shall process any required permit as economically as possible, and fees charged for review shall not exceed the costs of the review and permit process.
- 89.111.4.3 High-Rise. Pursuant to Health and Safety Code Section 13217, High-rise Structure Inspection: Fees and Costs, a local agency which inspects a high-rise structure pursuant to Health and Safety Code Section 13217 may charge and collect a fee for the inspection from the owner of the high-rise structure in an amount, as determined by the local agency, sufficient to pay its costs of that inspection.
- 89.111.4.4 Fire Clearance Preinspection. Pursuant to Health and Safety Code Section 13235, Fire Clearance Preinspection, fee; upon receipt of a request from a prospective licensee of a community care facility, as defined in Section 1502, of a residential-care facility for the elderly, as defined in Section 1569.2, or of a child day-care facility, as defined in Section 1596.750, the local fire enforcing agency, as defined in Section 13244, or state fire marshal, whichever has primary jurisdiction, shall conduct a preinspection of the facility prior to the final fire clearance approval. At the time of the preinspection, the primary fire enforcing agency shall price consultation and interpretation of the fire safety regulations, and shall notify the prospective licensee of the facility in writing of the specific fire safety regulations which shall be enforced in order to obtain fire clearance approval. A fee equal to, but not exceeding, the actual cost of the preinspection services may be charged for the preinspection of a facility with a capacity to serve 25 or fewer persons. A fee equal to, but not exceeding, the actual cost of the preinspection services may be charged for a preinspection of a facility with a capacity to serve 26 or more persons.
- 89.111.4.5 Care Facilities. The primary fire enforcing agency shall complete the final fire clearance inspection for a community care facility, residential-care facility for the elderly, or child day-care facility within 30 days of receipt of the request for the final inspection, or as of the date the prospective facility requests the final prelicensure inspection by the State Department of Social Services, whichever is later.

Pursuant to Health and Safety Code Section 13235, a preinspection fee equal to, but not exceeding, the actual cost of the preinspection services may be charged for a facility with a capacity to serve 25 or less clients. A fee equal to, but not exceeding, the actual cost of the preinspection services may be charged for a preinspection of a facility with a capacity to serve 26 or more clients.

Pursuant to Health and Safety Code Section 13131.5, a reasonable final inspection fee, not to exceed the actual cost of inspection services necessary to complete a final inspection may be charged for Occupancies classified as residential care facilities for the elderly (RCFE).

Pursuant to Health and Safety Code Section 1569.84, neither the state fire marshal nor any local public entity shall charge any fee for enforcing fire inspection regulations pursuant to state law or regulation or local ordinance, with respect to residential-care facilities for the elderly (RCFE) which service six or fewer persons.

- **89.111.4.6** Requests of the Office of the State Fire Marshal. Whenever a local authority having jurisdiction requests that the State Fire Marshal perform plan review and/or inspection services related to a building permit, the applicable fees for such shall be payable to the Office of the State Fire Marshal.
- **89.111.5** Inspections. Work performed subject to the provisions of this code shall comply with the inspection requirements of Title 24, Part 2, California Building Standards Code, Sections 109.1, 109.3, 109.3.4, 109.3.5, 109.3.6, 109.3.8, 109.3.9, 109.3.10 109.5 and 109.6 as adopted by the Office of the State Fire Marshal.

89.111.5.1 Existing Group I-1 or R occupancies. Licensed 24-hour care in a Group I-1 or R occupancy in existence and originally classified under previously adopted state codes be reinspected under the appropriate previous code provided there is no change in the use or character which would place the facility in a different occupancy group.

**89.111.6 Certificate of Occupancy.** A Certificate of Occupancy shall be issued as specified in Title 24, Part 2, California Building Code, Section 111.

Exception: Group R, Division 3 and Group U occupancies.

89.111.7 Temporary Structures and Uses. See Title 24, Part 2, California Building Code, Section 107.

89.111.8 Service Utilities. See Title 24, Part 2, California Building Code Section 112.

89.111.9 Stop Work Order. See Title 24, Part 2, California Building Code, Section 115.

89.111.10 Unsafe Buildings, Structures and Equipment. See Title 24, Part 2, California Building Code, Section 116.

#### Notation:

Authority: Health and Safety Code Sections 1250, 1569.72, 1569.78, 1568.02, 1502, 1597.44, 1597.65, 13108, 13143, 17921, 18949.2

References: Health and Safety Code Sections 13143, 18949.2

# [2. The SFM is proposing to not adopt Article 90.]

# ARTICLE 90 INTRODUCTION

#### **Notation:**

Authority: Health and Safety Code Sections 1250, 1569.72, 1569.78, 1568.02, 1502, 1597.44, 1597.65, 13109, 13143, 17031, 18040.3

13108, 13143, 17921, 18949.2

References: Health and Safety Code Sections 13143, 18949.2

# [3. The SFM is proposing to maintain the existing SFM amendment of Articles 100 and 110 with amendment.]

# Chapter 1 General ARTICLES 100-110

# ARTICLE 100 Definitions

**Ballasted Solar Photovoltaic System. [SFM]** A roof mounted system composed of panels and supporting members that are unattached or partially attached to the roof and must rely on their weight, aerodynamics and friction to counter the effect of wind and seismic forces.

# ARTICLE 110 Requirements for Electrical Installations

#### **SECTION 110.13 MOUNTING AND COOLING OF EQUIPMENT**

**(A) Mounting.** Electrical equipment shall be firmly secured to the surface on which it is mounted. Wooden plugs driven into holes in masonry, concrete, plaster, or similar materials shall not be used.

**Exception:** [SFM] Roof mounted ballasted solar photovoltaic systems provided that the wiring and interconnections are designed to accommodate for maximum system displacement.

#### **Notation:**

Authority: Health and Safety Code Sections 1250, 1569.72, 1569.78, 1568.02, 1502, 1597.44, 1597.65,

13108, 13143, 17921, 18949.2

References: Health and Safety Code Sections 13143, 18949.2

[4. The SFM is proposing the adoption by reference Articles 200, 210, 215, 220, 225, 230, 240, 250, 280, and 285 without amendment.]

# Chapter 2 Wiring and Protection ARTICLES 200-285

#### Notation:

Authority: Health and Safety Code Sections 1250, 1569.72, 1569.78, 1568.02, 1502, 1597.44, 1597.65,

13108, 13143, 17921, 18949.2

References: Health and Safety Code Sections 13143, 18949.2

[5. The SFM is proposing the adoption by reference Articles 300, 310, 312, 314, 320, 322, 324, 326, 328, 330, 332, 334, 336, 338, 340, 342, 344, 348, 350, 352, 353, 354, 355, 356, 358, 360, 362, 366, 368, 370, 372, 374, 376, 378, 380, 382, 384, 386, 388, 390, 392, 393, 394, 396, 398, and 399 without amendment.]

# Chapter 3 Wiring Methods and Materials ARTICLES 300-399

## Notation:

Authority: Health and Safety Code Sections 1250, 1569.72, 1569.78, 1568.02, 1502, 1597.44, 1597.65,

13108, 13143, 17921, 18949.2

References: Health and Safety Code Sections 13143, 18949.2

[6. The SFM is proposing the adoption by reference Articles 400, 402, 404, 406, 408, 409, 410, 411, 422, 424, 426, 427, 430, 440, 445, 450, 455, 460, 470, 480, and 490 without amendment.]

# Chapter 4 Equipment for General Use ARTICLES 400-490

#### **Notation:**

Authority: Health and Safety Code Sections 1250, 1569.72, 1569.78, 1568.02, 1502, 1597.44, 1597.65, 13108, 13143, 17921, 18949.2

References: Health and Safety Code Sections 13143, 18949.2

[7. The SFM is proposing the adoption by reference Articles 500, 501, 502, 503, 504, 505, 506, 510, 511, 513, 514, 515, 516, 518, 520, 522, 525, 530, 540, 545, 547, 553, and 555 without amendment.]

17.1. The SFM is proposing the adoption by reference of the entire Article 517 (OSHPD)

[7.1. The SFM is proposing the adoption by reference of the entire Article 517 (OSHPD amendment) as amended.]

[7.2. The SFM is proposing the adoption by reference of the entire Article 590 (except Section 590.3(C)) as amended.]

[7.3. The SFM is proposing to maintain the existing SFM amendment of Section 590.3(C) without modification.]

## Chapter 5 Special Occupancies ARTICLES 500-590

**590.3 (C.1) Emergencies and Tests. [SFM]** Temporary electrical power and lighting installations shall be permitted during emergencies and for tests, experiments, and developmental work as approved by the authority having jurisdiction.

#### Notation:

Authority: Health and Safety Code Sections 1250, 1569.72, 1569.78, 1568.02, 1502, 1597.44, 1597.65, 13108, 13143, 17921, 18949.2

References: Health and Safety Code Sections 13143, 18949.2

- [8. The SFM is proposing the adoption by reference Articles 600, 604, 605, 610, 620, 626, 630, 640, 645, 646, 647, 650, 660, 665, 668, 669, 670, 675, 680, 682, 685, 690, 692, 694, and 695 without amendment.]
- [8.1. The SFM is proposing the adoption by reference of the entire Article 625 (except Section 625.52 (B)) as amended.]
- [8.2. The SFM is proposing the new SFM amendment of Section 620.71.]
- [8.3. The SFM is proposing to maintain the existing SFM amendment of Section 625.52(C) without modification.]

# Chapter 6 Special Equipment ARTICLES 600-695

**620.71 Guarding Equipment**. Elevator, dumbwaiter, escalator, and moving walk driving machines; motor-generator sets; motor controllers; and disconnecting means shall be installed in a room er space—set aside for that purpose unless otherwise permitted in 620.71(A) or (B). The room er space shall be secured against unauthorized access. *Installation of Elevator motor controller and/or motion controller in the hoistway is prohibited.* 

- (A) Motor Controllers for dumbwaiters, escalators, and moving walks. Motor controllers shall be permitted outside the spaces-room herein specified, provided they are in enclosures with doors or removable panels that are capable of being locked in the closed position and the disconnecting means is located adjacent to or is an integral part of the motor controller. Motor controller enclosures for escalator or moving walks shall be permitted in the balustrade on the side located away from the moving steps or moving treadway. If the disconnecting means is an integral part of the motor controller, it shall be operable without opening the enclosure.
- **(B) Driving Machines.** Elevators with driving machines located on the car, on the counterweight, or in the hoistway, and driving machines for dumbwaiters, platform lifts, and stairway lifts, shall be permitted outside the spaces <u>room</u> herein specified.

625.29 (E) 625.52 (C) Ventilation Required. [SFM] Where the electric vehicle supply equipment listed or labeled as suitable for charging electric vehicles that require ventilation for indoor charging and marked in accordance with Section 625.15(C), mechanical ventilation, such as fans, shall be provided as specified in the California Building Code.

#### Notation:

Authority: Health and Safety Code Sections 1250, 1569.72, 1569.78, 1568.02, 1502, 1597.44, 1597.65,

13108, 13143, 17921, 18949.2

References: Health and Safety Code Sections 13143, 18949.2

- [9. The SFM is proposing the adoption by reference Articles 701, 702, 705, 708, 720, 725, 727, 728, 750 and 770 without amendment.]
- [9.1. The SFM is proposing the adoption by reference of the entire Article 700 as amended.]
- [9.2. The SFM is proposing to maintain the existing SFM amendment of Section 700.12(B)(2) without modification.]
- [9.3. The SFM is proposing the adoption by reference of the entire Article 760 as amended.]
- [9.4. The SFM is proposing to maintain the existing SFM amendment of Sections 760.1.1, 760.176(F) and 760.179(G) without modification.]

# Chapter 7 Special Conditions ARTICLES 700-770

**700.12 (B) (2) Internal Combustion as Prime Movers.** Where internal combustion engines are used as the prime mover, an on-site fuel supply shall be provided with an on-premise fuel supply sufficient for not less than 2 hours' full-demand operation of the system. Where power is needed for the operation of the fuel transfer pumps to deliver fuel to a generator set day tank, this pump shall be connected to the emergency power system.

#### Exceptions [SFM]

Exception No.1: [SFM] The on-premise fuel supply shall be sufficient for not less than 24 hours full-demand operation in acute general care hospitals and correctional treatment centers that provide optional services. For acute care hospital facilities required to meet NPC-5, the on-premise fuel supply shall be sufficient for no less than 72 hours full-demand operations.

Exception No. 2: [SFM] The on-premise fuel supply shall be sufficient for not less than 6 hours full-demand operation in the following health facilities of seven or more beds: correctional treatment centers that provide only basic services, acute psychiatric hospitals, intermediate care facilities, and skilled nursing facilities.

Exception No. 3: [SFM] The on-premise fuel supply shall be sufficient for not less than 4 hours full-

demand operation in ambulatory surgical clinics.

**760.1.1 Equipment and Systems. [SFM]** Fire alarm equipment and systems required to be installed in any occupancy within the scope of these regulations shall conform to the applicable performance and construction standards specified in NFPA 72-2010 2013.

# 760.176 Listing and Marking of NPLFA Cables.

- (F) Fire Alarm Circuit Integrity (CI) Cable or Electrical Circuit Protective System. Cables that are used for survivability of critical circuits under fire conditions shall meet either 760.176(F)(1) or (F)(2) as follows:
- (1) Circuit Integrity (CI) Cables. Circuit integrity (CI) cables, specified in 760.176(C), (D), and (E), and used for survivability of critical circuits, shall have an additional classification using the suffix "CI." Circuit integrity (CI) cables shall only be permitted to be installed in a raceway where specifically listed and marked as part of an electrical circuit protective system as covered in 760.176(F)(2).
- (2) Electrical Circuit Protective System. Cables specified in 760.176(C), (D), (E), and (F)(1), that are part of an electrical circuit protective system, shall be identified with the protective system number and hourly rating printed on the outer jacket of the cable and installed in accordance with the listing of the protective system.

Informational Note No. 1: Fire alarm circuit integrity (CI) cable and electrical circuit protective systems may be used for fire alarm circuits to comply with the survivability requirements of NFPA 72-2010 2013, National Fire Alarm and Signaling Code, 12.4.3 24.4.1.8.4.3 24.4.2.8.5.3 and 12.4.4.24.4.1.8.4.4 24.4.2.8.5.4, that the circuit maintain its electrical function during fire conditions for a defined period of time.

Informational Note No. 2: One method of defining circuit integrity (CI) cable or an electrical circuit protective system is by establishing a minimum 2-hour fire-resistive rating for the cable when tested in accordance with UL 2196-2012, *Standard for Tests of Fire Resistive Cables*.

Informational Note No. 3: UL guide information for electrical circuit protective systems (FHIT) contains information on proper installation requirements for maintaining then fire rating.

- **760.179** Listing and Marking of PLFA Cables and Insulated Continuous Line-Type Fire Detectors. (G) Fire Alarm Circuit Integrity (CI) Cable or Electrical Circuit Protective System. Cables that are used for survivability of critical circuits under fire conditions shall meet either 760.179(G)(1) or (G)(2) as follows:
- (1) Circuit Integrity (CI) Cables. Circuit integrity (CI) cables specified in 760.179(D), (E), (F), and (H), and used for survivability of critical circuits, shall have an additional classification using the suffix "CI." Circuit integrity (CI) cables shall only be permitted to be installed in a raceway where specifically listed and marked as part of an electrical circuit protective system as covered in 760.179(G)(2).
- (2) Electrical Circuit Protective System. Cables specified in 760.179(D), (E), (F), (H), and (G)(1), that are part of an electrical circuit protective system, shall be identified with the protective system number and hourly rating printed on the outer jacket of the cable and installed in accordance with the listing of the protective system.

Informational Note No. 1: Fire alarm circuit integrity (CI) cable and electrical circuit protective systems may be used for fire alarm circuits to comply with the survivability requirements of *NFPA® 72 2010 2013*, *National Fire Alarm Code*, 42.4.3 24.4.1.8.4.3 24.4.2.8.5.3 and 42.4.4.24.4.1.8.4.4 24.4.2.8.5.4, that the circuit maintain its electrical function during fire conditions for a defined period of time.

Informational Note No. 2: One method of defining circuit integrity (CI) cable or an electrical circuit protective system is by establishing a minimum 2-hour fire-resistive rating for the cable when tested in

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accordance with UL 2196-2012, Standard for Tests of Fire Resistive Cables.

Informational Note No. 3: UL guide information for electrical circuit protective systems (FHIT) contains information on proper installation requirements for maintaining the fire rating.

#### **Notation:**

Authority: Health and Safety Code Sections 1250, 1569.72, 1569.78, 1568.02, 1502, 1597.44, 1597.65,

13108, 13143, 17921, 18949.2

References: Health and Safety Code Sections 13143, 18949.2

# [10. The SFM is proposing the adoption by reference Articles 800, 810, 820, 830, and 840 without amendment.]

# **Chapter 8 Communications Systems ARTICLES 800-840**

#### Notation:

Authority: Health and Safety Code Sections 1250, 1569.72, 1569.78, 1568.02, 1502, 1597.44, 1597.65,

13108, 13143, 17921, 18949.2

References: Health and Safety Code Sections 13143, 18949.2

## [11. The SFM is proposing the adoption by reference Tables 1-12 without amendment.]

# Chapter 9 **Tables**

#### Notation:

Authority: Health and Safety Code Sections 1250, 1569.72, 1569.78, 1568.02, 1502, 1597.44, 1597.65,

13108, 13143, 17921, 18949.2

References: Health and Safety Code Sections 13143, 18949.2

# [12. The SFM is proposing the adoption by reference Annex A and Annex B without amendment.]

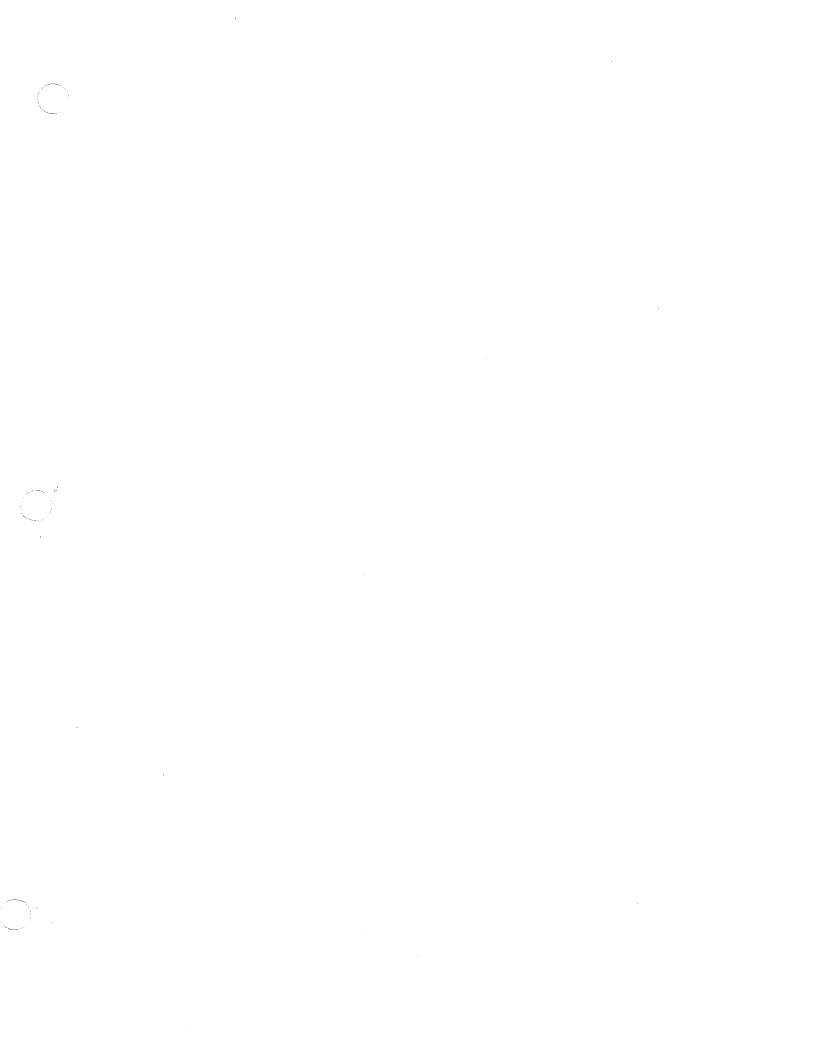
## **Annexes**

#### **Notation:**

Authority: Health and Safety Code Sections 1250, 1569.72, 1569.78, 1568.02, 1502, 1597.44, 1597.65,

13108, 13143, 17921, 18949.2

References: Health and Safety Code Sections 13143, 18949.2



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