

**INITIAL STATEMENT OF REASONS
FOR PROPOSED BUILDING STANDARDS
OF THE OFFICE OF STATEWIDE HEALTH PLANNING AND DEVELOPMENT
REGARDING THE 2022 CALIFORNIA ELECTRICAL CODE
CALIFORNIA CODE OF REGULATIONS, TITLE 24, PART 3
(OSHDP 04/22)**

The Administrative Procedure Act (APA) requires that an Initial Statement of Reasons be available to the public upon request when rulemaking action is being undertaken. The following information required by the APA pertains to this particular rulemaking action:

STATEMENT OF SPECIFIC PURPOSE, PROBLEM, RATIONALE and BENEFITS

Government Code Section 11346.2(b)(1) requires a statement of specific purpose of each adoption, amendment, or repeal and the problem the agency intends to address and the rationale for the determination by the agency that each adoption, amendment, or repeal is reasonably necessary to carry out the purpose and address the problem for which it is proposed. The statement shall enumerate the benefits anticipated from the regulatory action, including the benefits or goals provided in the authorizing statute.

ITEM 1

Chapter 2 Wiring and Protection

ARTICLE 220 Branch-Circuit, Feeder, and Service Load Calculations

Part VI. Health Care Facilities

220.1 Scope, 220.40 General, 220.110 Receptacle Loads, Table 220.110(1) & Table 220.110(2)

Part VI. Health Care Facilities is added to ARTICLE 220 with Section *220.110 Receptacle Loads*. This modification allows the Design Professionals of Record (DPOR) to apply increased demand factors for receptacles supplied by branch circuits in patient care spaces. Ultimately, this could result in cost savings to projects as calculated loads could be reduced and therefore electrical ratings of equipment could be reduced as well. The language for this addition to the code is taken verbatim from the currently approved 2023 NFPA 70 National Electric Code. As part of this change, Tables 220.110(1) Demand Factors for Receptacles Supplied by General-Purpose Branch Circuits in Category 1 and Category 2 Patient Care spaces and Table 220.110(2) Demand Factors for Receptacles Supplied by General-Purpose Branch Circuits in Category 3 and Category 4 Patient Care spaces have been added. These two tables introduce new demand factors that will reduce connected load calculations for patient care areas in health care facilities. We are adding this to current code to speed up the timing of when these demand factors can be used for Health Care projects designed and built in California. (July 1, 2024 for the Intervening Code Cycle vs. January 1, 2026 for the Triennial Code Cycle, or 18 months advancement.)

CAC Recommendation (if applicable):

[Enter CAC recommendation(s), if any]

Agency Response:

[Enter the agency's response to CAC recommendation(s)]

ITEM 2

Chapter 5 Special Occupancies ARTICLE 517 Health Care Facilities Part I. General

517.1 Scope.

AB 2511 (Chapter 788, Statutes of 2022) amended Health and Safety Code, Section 1418 and added Section 1418.22 to require that Skilled Nursing Facilities (SNFs) have an alternative source of power to protect resident health and safety for no fewer than 96 hours for power outages that may result from a public safety power shutoff, an emergency, a natural disaster, or other cause. As such, these systems are required to remain functional post-earthquake and are required to have special seismic certification. SNFs have previously been required to provide 6 hours of on-site fuel storage for emergency power system sources such as emergency generators and have not been required to have backup power for cooling loads. The electrical source and distribution systems at existing SNFs will most likely need to be augmented to address the new statutory requirements. The proposed amendment is in response to the new law.

CAC Recommendation (if applicable):

[Enter CAC recommendation(s), if any]

Agency Response:

[Enter the agency's response to CAC recommendation(s)]

ITEM 3

Chapter 5 Special Occupancies ARTICLE 517 Health Care Facilities Part I. General

517.2 Definitions.

Two new definitions are added to ARTICLE 517: 1) Health Care Microgrid, and 2) Health Care Microgrid Control System. The language for these definitions is taken from the 2021 NFPA 99 Health Care Facilities Code. Health Care Microgrids and Health Care Microgrid Control Systems are added to the definitions in this code cycle to support the proposed revisions to sections 517.30 and 517.42 which will add health care microgrids as acceptable Essential Power System Sources for Hospitals and Skilled Nursing Facilities.

CAC Recommendation (if applicable):

[Enter CAC recommendation(s), if any]

Agency Response:

[Enter the agency's response to CAC recommendation(s)]

ITEM 4

Chapter 5 Special Occupancies ARTICLE 517 Health Care Facilities Part 1. General

517.2 Definitions.

Two new definitions are added to ARTICLE 517: 1) Life-Saving Equipment, and 2) Oxygen-Generating Devices. These definitions are required for new terms added to the code to meet Health and Safety Code, Section 1418.22 statutory requirements.

CAC Recommendation (if applicable):

[Enter CAC recommendation(s), if any]

Agency Response:

[Enter the agency's response to CAC recommendation(s)]

ITEM 5

**Chapter 5 Special Occupancies
ARTICLE 517 Health Care Facilities
Part II. Wiring and Protection**

517.13 Equipment Grounding Conductor for Receptacles and Fixed Electrical Equipment in Patient Care Spaces.

Ground System Testing requirements are added for the purpose of defining requirements that must be satisfied for final approval of installed electrical systems in patient care spaces. The added requirements are copied verbatim from NFPA 99 with OSHPD banners added.

These testing requirements were required by 2019 CBC 407.11 which stated that for Electrical Systems in Group I-2 or I-2.1 occupancies, electrical construction and installation shall be in accordance with NFPA 99. These testing requirements were inadvertently removed when the requirement to comply with NFPA 99 was dropped in the 2019 Intervening Code updates. We propose to add back into code the previously included testing requirements for grounding of devices in patient care areas to meet the standard of care for patient safety in these areas.

CAC Recommendation (if applicable):

[Enter CAC recommendation(s), if any]

Agency Response:

[Enter the agency's response to CAC recommendation(s)]

ITEM 6

**Chapter 5 Special Occupancies
ARTICLE 517 Health Care Facilities
Part II. Wiring and Protection**

517.18 Category 2 (General Care) Spaces.

Revises the requirements for receptacles at patient beds in Skilled Nursing Facilities and Intermediate Care Facilities. This revision was added to clarify that patient sleeping rooms in SNFs and Intermediate Care Facilities do not have the same receptacle requirements regarding number of circuits and number of receptacles as patient beds in other healthcare facilities. This change brings our code in line with model code in regard to receptacle requirements in sleeping rooms for SNFs and Intermediate Care Facilities.

CAC Recommendation (if applicable):

[Enter CAC recommendation(s), if any]

Agency Response:

[Enter the agency's response to CAC recommendation(s)]

ITEM 7

**Chapter 5 Special Occupancies
ARTICLE 517 Health Care Facilities
Part II. Wiring and Protection**

517.20 Wet Procedure Locations.

Wet Procedure Locations language is added to 517.20. The proposed added requirements which are copied verbatim from NFPA 99 and are: *“Operating rooms shall be considered to be a wet procedure location, unless a risk assessment conducted by the health care governing body determines otherwise.”*

This wet procedure location language was included in 2019 CBC 407.11 which stated that for Electrical Systems in Group I-2 or I-2.1 occupancies, electrical construction and installation shall be in accordance with NFPA 99. This designation for Operating Rooms was inadvertently removed when the requirement to comply with NFPA 99 was dropped in the 2019 Intervening Code updates. We propose to add back into code the previously included designation of Operating Rooms as wet procedure locations, unless a risk assessment determines otherwise, to meet the standard of care for patient safety in Hospital Operating Rooms.

CAC Recommendation (if applicable):

[Enter CAC recommendation(s), if any]

Agency Response:

[Enter the agency's response to CAC recommendation(s)]

ITEM 8

**Chapter 5 Special Occupancies
ARTICLE 517 Health Care Facilities
Part III. Essential Electrical System (EES)**

517.30 Sources of Power.

Health Care Microgrids as an acceptable Essential Electrical System Source for hospitals is added to ARTICLE 517. The language for these additions is taken verbatim from the currently approved 2023 NFPA 70 code.

The revisions to this section include:

B1 Which states that the EES shall be permitted to be any of those specific in 517.30(B)(1) through 517.30(B)(4). 517.30(B)(4) lists the Health Care Microgrid as an approved Essential Electrical System Source.

We are adding this to the current code to speed up the timing of when the Health Care Microgrids can be used as an Essential Electrical System Source for hospitals designed and built in California. (July 1, 2024 vs. January 1, 2026, or 18 months advancement.) This approach will allow clean energy producers to be used for emergency power sources in lieu of diesel generators.

(B.1) (1.1) has been revised to only say generating units with previous sub paragraphs A-D deleted, as this is no longer needed (note paragraphs below remain).

(B.1) (4) is added which lists Health Care Microgrids and an acceptable source for the Essential Electrical System.

CAC Recommendation (if applicable):

[Enter CAC recommendation(s), if any]

Agency Response:

[Enter the agency's response to CAC recommendation(s)]

ITEM 9

Chapter 5 Special Occupancies

ARTICLE 517 Health Care Facilities

Part III. Essential Electrical System (EES)

517.31 Requirements for the Essential Electrical System.

Revises receptacle and switch identification requirements at hospitals to remove labeling requirements for switches (to align with model code) and to allow the distinctive color or marking requirements to be accomplished either at the cover plate or device (for devices circuited to the life safety or the critical branch). OSHPD has listed acceptable labeling methods as “Provide either red device, red cover plate or metal cover plate with engraved text and red paint fill”, to help clarify acceptable means of labeling.

CAC Recommendation (if applicable):

[Enter CAC recommendation(s), if any]

Agency Response:

[Enter the agency's response to CAC recommendation(s)]

ITEM 10

Chapter 5 Special Occupancies

ARTICLE 517 Health Care Facilities

Part III. Essential Electrical System (EES)

517.35 Equipment Branch Connection to Alternate Power Source.

This revision clarifies that minimal autoclaving equipment (at least one per building) shall be required to be connected to the emergency branch of the facilities Essential Electrical System. This is a clerical fix to some confusing language in the model code.

CAC Recommendation (if applicable):

[Enter CAC recommendation(s), if any]

Agency Response:

[Enter the agency's response to CAC recommendation(s)]

ITEM 11

Chapter 5 Special Occupancies

ARTICLE 517 Health Care Facilities

Part III. Essential Electrical System (EES)

517.41 Required Power Sources.

Health Care Microgrids is added as an acceptable Essential Electrical System Source for Skilled Nursing Facilities and Intermediate Care Facilities. This proposed change revises this section to match the requirement for Sources of Power found in 517.30.

517.41(B.1) is added which lists Generating Unit(s), Fuel Cell Systems, Battery Systems and Health Care Microgrids as acceptable Essential Electrical System Sources.

The subsequent paragraphs (2) Fuel Cell Systems, (3) Battery Systems and (4) Health Care Microgrid are copied from CEC 517.30 as well.

We are adding this to the current code to speed up the timing of when the Health Care Microgrids can be used as an Essential Electrical System Source for SNFs, and Intermediate Care Facilities designed and built in California. (July 1, 2024 vs. January 1, 2026, or 18 months advancement.) This approach will allow clean energy producers to be used for emergency power sources in lieu of diesel generators.

CAC Recommendation (if applicable):

[Enter CAC recommendation(s), if any]

Agency Response:

[Enter the agency's response to CAC recommendation(s)]

ITEM 12

Chapter 5 Special Occupancies

ARTICLE 517 Health Care Facilities

Part III. Essential Electrical System (EES)

517.42 Essential Electrical Systems for Nursing Homes and Limited Care Facilities.

(E) Receptacle Identification. [OSHPD 1, 2, 4 & 5] Revises receptacle and switch identification requirements at Nursing Homes and Limited Care Facilities to remove labeling requirements for switches (to align with model code) and to allow the distinctive color or marking requirements to be accomplished either at the cover plate or device (for devices circuited to life safety or the equipment branch). OSHPD has listed acceptable labeling methods as "Provide either red device, red cover plate or metal cover plate with engraved text and red paint fill", to help clarify acceptable means of labeling.

(F) Coordination. [OSHPD 2, 4 & 5] Adds the requirements for selective coordination for Nursing Homes and Limited Care Facilities electrical systems to align with the acute care hospital requirements for selective coordination of Overcurrent Protective Devices (OCPD). The change will state that coordination is required for "Overcurrent protective devices serving essential electrical systems for fault's that last more than 0.1 seconds." This proposed revision would change current code requirements for full coordination of OCPD's (CEC 700.32) in SNFs, Correctional Facilities and Acute Psychiatric Hospitals [OSHPD 2, 4 & 5]. This will make it easier and less expensive to meet OCPD coordination requirements in non-acute care facilities and is in line with coordination requirements for essential system OCPD's in hospitals.

CAC Recommendation (if applicable):

[Enter CAC recommendation(s), if any]

Agency Response:

[Enter the agency's response to CAC recommendation(s)]

ITEM 13

Chapter 5 Special Occupancies

ARTICLE 517 Health Care Facilities

Part III. Essential Electrical System (EES)

517.44 Connection to Equipment Branch.

(A) Delayed Automatic Connections to Equipment Branch.

Adds language to clarify that receptacles are not required for psychiatric patent beds in non-critical care spaces.

Revises this section to allow receptacles in OSHPD 1, 2, 4 & 5 facilities in patient room or corridors so that any patient bed can reach a receptacle with fifty (50) foot extension cord or less. This language was added to clarify that if the receptacles are provided in the patient rooms that they are not required in the corridors within 50 feet, to help avoid misinterpretations of this requirement.

CAC Recommendation (if applicable):

[Enter CAC recommendation(s), if any]

Agency Response:

[Enter the agency's response to CAC recommendation(s)]

ITEM 14

Chapter 5 Special Occupancies

ARTICLE 517 Health Care Facilities

Part III. Essential Electrical System (EES)

517.45 Essential Electrical Systems for Other Health Care Facilities.

Revises receptacle and switch identification requirements at "Other Healthcare Facilities" to remove the labeling requirements for switches circuited to either the life safety or the

critical branch. This change will align with model code. OSHPD also has listed acceptable labeling methods as “Provide either red device, red cover plate or metal cover plate with engraved text and red paint fill”, to help clarify acceptable means of labeling.

CAC Recommendation (if applicable):

[Enter CAC recommendation(s), if any]

Agency Response:

[Enter the agency's response to CAC recommendation(s)]

ITEM 15

**Chapter 5 Special Occupancies
ARTICLE 517 Health Care Facilities
Part VII. Isolated Power Systems**

517.160 Isolated Power Systems.

Adds the Line Isolation Monitor (LIM) and LIM circuit tests for the purpose of defining requirements that must be satisfied for final approval of installed electrical systems. The added requirements are copied verbatim from NFPA 99 and are:

(1) Line Isolation Monitor Tests Test per NFPA 99:6.3.3.3.2.

(2) LIM circuit Tests. Test per NFPA 99:6.3.3.3.3.

These testing requirements were required by 2019 CBC 407.11 which stated that for Electrical Systems in Group I-2 or I-2.1 occupancies, electrical construction and installation shall be in accordance with NFPA 99. These testing requirements were inadvertently removed when the requirement to comply with NFPA 99 was dropped in the 2019 Intervening Code updates. We propose to add back into code the previously included testing requirements for Line Isolation Monitors and LIM circuits to meet the standard of care for patient safety in these areas.

CAC Recommendation (if applicable):

[Enter CAC recommendation(s), if any]

Agency Response:

[Enter the agency's response to CAC recommendation(s)]

ITEM 16

**Chapter 6 Special Equipment
ARTICLE 695 Fire Pumps**

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

Revision to state that for facilities that house patients who need to be sustained by electrical life support equipment or have critical care spaces, the fire pump transfer switches shall comply with Article 517.31(B)(3). This is a housekeeping item that is consistent with the understanding that for facilities that house patients who need to be sustained by electrical life support equipment or have critical care spaces, the fire pump transfer switch will need to be a bypass isolation type (similar to other requirements for wiring, Essential Power Systems, etc., in these type of facilities).

CAC Recommendation (if applicable):

[Enter CAC recommendation(s), if any]

Agency Response:

[Enter the agency's response to CAC recommendation(s)]

ITEM 17

Chapter 7 Special Conditions

ARTICLE 705 Interconnected Electric Power Production Sources

Part 1. General

705.20 Disconnecting Means, Source.

Adds the requirement for the disconnecting means to be installed either inside or outside of the building that houses equipment that will have connection(s) from electric power production equipment. The disconnecting means shall be located as near as practicable to where the conductors enter OSHPD Jurisdiction. This matches the requirement for feeders entering a building and will assist fire fighters by allowing them to disconnect the Interconnected Electric Power Source(s) feeds to a building without needing to enter the building.

CAC Recommendation (if applicable):

[Enter CAC recommendation(s), if any]

Agency Response:

[Enter the agency's response to CAC recommendation(s)]

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

Government Code Section 11346.2(b)(3) requires an identification of each technical, theoretical, and empirical study, report, or similar document, if any, upon which the agency relies in proposing the regulation(s).

There are no formal studies, reports, or documents to be identified as the basis for the proposed amendments.

STATEMENT OF JUSTIFICATION FOR PRESCRIPTIVE STANDARDS

Government Code Section 11346.2(b)(1) requires a statement of the reasons why an agency believes any mandates for specific technologies or equipment or prescriptive standards are required.

The proposed changes do not mandate any specific technologies or equipment and do not require any prescriptive standards.

CONSIDERATION OF REASONABLE ALTERNATIVES

Government Code Section 11346.2(b)(4)(A) requires a description of reasonable alternatives to the regulation and the agency's reasons for rejecting those alternatives. In the case of a regulation that would mandate the use of specific technologies or equipment or prescribe specific action or procedures, the imposition of performance standards shall

be considered as an alternate. It is not the intent of this paragraph to require the agency to artificially construct alternatives or describe unreasonable alternatives.

There were no alternatives for consideration by the Office. The proposed amendments will provide clarification and consistency within the code and are in alignment with national standards.

REASONABLE ALTERNATIVES THE AGENCY HAS IDENTIFIED THAT WOULD LESSEN ANY ADVERSE IMPACT ON SMALL BUSINESS

Government Code Section 11346.2(b)(4)(B) requires a description of any reasonable alternatives that have been identified or that have otherwise been identified and brought to the attention of the agency that would lessen any adverse impact on small business.

The revisions proposed were based on implementing the statute for Item 2. Other Items have no adverse impact on small business. Alternatives were not explored.

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

Government Code Section 11346.2(b)(5)(A) requires the facts, evidence, documents, testimony, or other evidence on which the agency relies to support an initial determination that the action will not have a significant adverse economic impact on business.

The Office has identified that there will be no adverse economic impact on businesses on the basis that the provisions proposed are optional or are being implement based on new statute.

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

Government Code Sections 11346.3(b)(1) and 11346.5(a)(10)

OSHPD has assessed whether and to what extent this proposal will affect the following:

- A. The creation or elimination of jobs within the State of California.**
The proposed regulations will not create or eliminate jobs within the State of California.
- B. The creation of new businesses or the elimination of existing businesses within the State of California.**
The proposed regulations will not create new businesses or eliminate existing businesses with the State of California.
- C. The expansion of businesses currently doing business within the State of California.**
The proposed regulations will not cause expansion of businesses currently doing business with the State of California.
- D. The benefits of the regulation to the health and welfare of California residents, worker safety, and the state's environment.**
The proposed building standards and regulations regarding the design and construction of licensed health facilities ensure protection of the public's health, safety, and welfare of California residents through updated amendments. The regulations will not affect worker safety, or the state's environment.

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

Government Code Section 11346.2(b)(5)(B)(i) states if a proposed regulation is a building standard, the initial statement of reasons shall include the estimated cost of compliance, the estimated potential benefits, and the related assumptions used to determine the estimates.

OSHPD finds that the proposed building standards will result in no cost and/or cost that is reasonable if the facility chooses to incorporate a specific building standard into the project design.

DUPLICATION OR CONFLICTS WITH FEDERAL REGULATIONS

Government Code Section 11346.2(b)(6) requires a department, board, or commission within the Environmental Protection Agency, the Resources Agency, or the Office of the State Fire Marshal to describe its efforts, in connection with a proposed rulemaking action, to avoid unnecessary duplication or conflicts with federal regulations contained in the Code of Federal Regulations addressing the same issues. These agencies may adopt regulations different from these federal regulations upon a finding of one or more of the following justifications: (A) The differing state regulations are authorized by law and/or (B) The cost of differing state regulations is justified by the benefit to human health, public safety, public welfare, or the environment.

The proposed regulations do not duplicate or conflict with Federal regulations.