CA BUILDING STANDARDS COMMISSION
JAN 16 2019
APPROVED

FINAL EXPRESS TERMS
FOR PROPOSED BUILDING STANDARDS
OF THE OFFICE OF STATEWIDE HEALTH PLANNING & DEVELOPMENT
REGARDING THE 2019 CALIFORNIA ELECTRICAL CODE,
CALIFORNIA CODE OF REGULATIONS, TITLE 24, PART 3

(OSHPD 01/17)

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 (Government Code Section 11346.2(a)(1)).

Note: Select the appropriate legend below and delete the legend that is not used.

LEGEND FOR EXPRESS TERMS (Based on model codes - Parts 2, 2.5, 3, 4, 5, 9, 10)

1. Model Code language appears upright.
2. Existing California amendments appear in *italics*.
3. Amended model code or new California amendments appear *underlined and in italics*.
4. Repealed model code language appears ~~upright and in strikeout~~.
5. Repealed California amendments appear in ~~*italics and strikeout*~~.

FINAL EXPRESS TERMS

CALIFORNIA ARTICLE 89 – GENERAL CODE PROVISIONS

Adopt entire 2017 National Electric Code (NEC) Article, carry forward existing amendments of the 2016 California Electrical Code (CEC) for OSHPD 1, 1R, 2, 3, 4 & 5, and make the following amendments:

SECTION 89.110

OFFICE OF STATEWIDE HEALTH PLANNING AND DEVELOPMENT

89.110.1 OSHPD 1 and OSHPD 1R. *Specific scope of application of the agency responsible for enforcement, enforcement agency, specific authority to adopt and enforce such provisions of this code, unless otherwise stated.*

Application – *[OSHPD 1] General acute care hospitals buildings, ~~and acute psychiatric hospitals, excluding distinct part units or distinct part freestanding~~*

~~*buildings providing skilled nursing or intermediate care services. For structural regulations: Skilled nursing facilities and/or intermediate care facilities except those skilled nursing facilities and intermediate care facilities of single story, Type V, wood or light steel-frame construction.*~~ *[OSHPD 1R] Non-conforming hospital buildings that have been removed from acute care service.*

Enforcing Agency. *Office of Statewide Health Planning and Development (OSHPD). The office shall enforce the Division of the State Architect access compliance regulations and the regulations of the Office of the State Fire Marshal for the above stated facility types.*

89.110.1.1 Applicable administrative standards.

1. Title 24, Part 1, California Code of Regulations: Chapters 6 & 7.

2. Title 24, Part 2, California Code of Regulations: Sections ~~101 and 110 of California~~ 1.1 and 1.10, Chapter 1 Division I, and ~~Appendix Chapter 1~~ as indicated in the adoption matrix for Chapter 1, Division II.

89.110.1.2 Applicable building standards.

California Building Standards Code, Title 24, Parts 2, 3, 4, 5, 6, 9, 10 and 11 ~~and 12~~.

89.110.2 OSHPD 2. *Specific scope of application of the agency responsible for enforcement, enforcement agency, specific authority to adopt and enforce such provisions of this code, unless otherwise stated.*

Application *– Skilled nursing facility~~ies~~ and intermediate care facility~~ies~~, buildings. ~~including distinct part skilled nursing and intermediate care services on a general acute care or acute psychiatric hospital license, providing either are in a separate unit or a freestanding building. For structural regulations: Single-story, Type V skilled nursing facility and/or intermediate care facilities utilizing wood or light steel-frame construction.~~*

Enforcing Agency --- *Office of Statewide Health Planning and Development (OSHPD). The office shall also enforce the Division of the State Architect access compliance regulations and the regulations of the Office of the State Fire Marshal for the above stated facility type.*

89.110.2.1 Applicable administrative standards:

1. Title 24, Part 1, California Code of Regulations: Chapter 7.

2. Title 24, Part 2, California Code of Regulations: Sections ~~101 and 110 of California~~ 1.1 and 1.10, Chapter 1 Division I, and ~~Appendix Chapter 1~~ as indicated in the adoption matrix for Chapter 1, Division II.

89.110.2.2 Applicable building standards.

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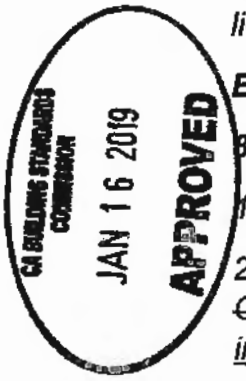
California Building Standards Code, Title 24, Parts 2, 3, 4, 5, 6, 9, 10, and 11 ~~and 12~~.

89.110.3 OSHPD 3. *Specific scope of application of the agency responsible for enforcement, enforcement agency, specific authority to adopt and enforce such provisions of this code, unless otherwise stated.*

Application --*Licensed clinics and any freestanding building under a hospital license where outpatient clinical services are provided.*



Enforcing Agency*--Local building department.*

89.110.3.1 Applicable administrative standards.

1. Title 24, Part 1, California Code of Regulations: Chapter 7.

2. Title 24, Part 2, California Code of Regulations: Sections ~~101 and 110 of California~~ 1.1 and 1.10, Chapter 1 Division I, and ~~Appendix Chapter 1~~ as indicated in the adoption matrix for Chapter 1, Division II.

89.110.3.2 Applicable building standards.

California Building Standards Code, Title 24, Parts 2, 3, 4, 5, 6, 9, 10, and 11 ~~and 12~~.

89.110.4 OSHPD 4. *Specific scope of application of the agency responsible for enforcement, enforcement agency, specific authority to adopt and enforce such provisions of this code, unless otherwise stated.*

Application *--Correctional Treatment Centers.*

Enforcing Agency -- *Office of Statewide Health Planning*

and Development (OSHPD). The Office shall also enforce the Division of the State Architect access compliance

regulations and the regulations of the Office of the State Fire Marshal for the above stated facility types.

89.110.4.1 Applicable administrative standards.

1. Title 24, Part 1, California Code of Regulations: Chapter 7.

2. Title 24, Part 2, California Code of Regulations: Sections ~~101 and 110 of California~~ 1.1 and 1.10, Chapter 1 Division I, and ~~Appendix Chapter 1~~ as indicated in the adoption matrix for Chapter 1, Division II.

89.110.4.2 Applicable building standards. *California Building Standards Code, Title 24, Parts 2, 3, 4, 5, 9, 10, and 11 ~~and 12~~.*

89.110.5 OSHPD 5. *Specific scope of application of the agency responsible for enforcement, enforcement agency and the specific authority to adopt and enforce such provisions of this code, unless otherwise stated.*

Application – *Acute psychiatric hospital buildings.*

Enforcing Agency --- *Office of Statewide Health Planning and Development (OSHPD). The office shall also enforce the Division of the State Architect access compliance regulations and the regulations of the Office of the State Fire Marshal for the above stated facility type.*

89.110.5.1 Applicable administrative standards:

1. Title 24, Part 1, California Code of Regulations: Chapter 7.

2. Title 24, Part 2, California Code of Regulations: Sections 1.1 and 1.10, Chapter 1 Division I, and as indicated in the adoption matrix for Chapter 1, Division II.

89.110.5.2 Applicable building standards.

California Building Standards Code, Title 24, Parts 2, 3, 4, 5, 6, 9, 10 and 11.

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 2017 National Electric Code (NEC) Article without amendments for OSPHD 1, 1R, 2, 3, 4 & 5.

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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CHAPTER 1 – GENERAL

ARTICLE 100 – DEFINITIONS

Adopt entire 2017 National Electric Code (NEC) Article without amendments for OSPHD 1, 1R, 2, 3, 4 & 5.

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 – REQUIREMENTS FOR ELECTRICAL INSTALLATIONS

Adopt entire 2017 National Electric Code (NEC) Article and carry forward existing amendments of the 2016 California Electrical Code (CEC) for OSPHD 1, 1R, 2, 3, 4 & 5.

110.2 Approval. The conductors and equipment required or permitted by this *Code* shall be acceptable only if approved.

[OSHPD 1, 1R, 2, 3 4 & 5] Equipment shall be approvable if it is listed, labeled or certified for its use by a Nationally Recognized Testing Laboratory (NRTL) as recognized by the U.S. department of Labor, Occupational Safety and Health Administration.

...

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, HCD 1 & 2] Roof mounted ballasted solar photovoltaic systems provided that the wiring and interconnections are designed to accommodate for maximum system displacement.

(B) Cooling. Electrical equipment that depends on the natural circulation of air and convection principles for cooling of exposed surfaces shall be installed so that room airflow over such surfaces is not prevented by walls or by adjacent installed equipment. For equipment designed for floor mounting, clearance between top surfaces and adjacent surfaces shall be provided to dissipate rising warm air.

NOTE: 110.13(C) relocated to after following paragraph.

Electrical equipment provided with ventilating openings shall be installed so that walls or other obstructions do not prevent the free circulation of air through the equipment.

(C) [OSHPD 1, 1R, 2, 3, 4 &~~4~~ 5] ~~Hospitals.~~ Anchorage and Bracing Electrical equipment and its supporting structure ~~installed in hospital buildings~~ shall be anchored

and braced to withstand the lateral forces, and shall accommodate calculated displacements as required by Part 2, Title 24, C.C.R.

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 CONDUCTORS

Adopt entire 2017 National Electric Code (NEC) Article without amendments for OSPHD 1, 1R, 2, 3, 4 & 5.

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 210 – BRANCH CIRCUITS

Adopt entire 2017 National Electric Code (NEC) Article without amendments for OSPHD 1, 1R, 2, 3, 4 & 5.

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 2017 National Electric Code (NEC) Article without amendments for OSPHD 1, 1R, 2, 3, 4 & 5.

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 2017 National Electric Code (NEC) Article for OSHPD 1R, 2, 3, 4 & 5.

Adopt entire 2017 National Electric Code (NEC) Article and carry forward existing amendment of the 2016 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

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ARTICLE 225 – OUTSIDE BRANCH CIRCUITS AND FEEDERS

Adopt entire 2017 National Electrical Code (NEC) Article without amendments for OSPHD 1, 1R, 2, 3, 4 & 5.

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 2017 National Electric Code (NEC) Article without amendments for OSPHD 1, 1R, 2, 3, 4 & 5.

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 2017 National Electric Code (NEC) Article without amendments for OSPHD 1, 1R, 2, 3, 4 & 5.

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 2017 National Electric Code (NEC) Article without amendments for OSPHD 1, 1R, 2, 3, 4 & 5.

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 2017 National Electric Code (NEC) Article without amendments for OSPHD 1, 1R, 2, 3, 4 & 5.

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 2017 National Electric Code (NEC) Article without amendments for OSPHD 1, 1R, 2, 3, 4 & 5.

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 3 – WIRING METHODS AND MATERIALS

ARTICLE 300 – GENERAL REQUIREMENTS FOR WIRING METHODS AND MATERIALS

Adopt entire 2017 National Electric Code (NEC) Article without amendments for OSPHD 1, 1R, 2, 3, 4 & 5.

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 2017 National Electric Code (NEC) Article without amendments for OSPHD 1, 1R, 2, 3, 4 & 5.

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 2017 National Electric Code (NEC) Article without amendments for OSPHD 1, 1R, 2, 3, 4 & 5.

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 2017 National Electric Code (NEC) Article without amendments for OSPHD 1, 1R, 2, 3, 4 & 5.

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 2017 National Electric Code (NEC) Article without amendments for OSPHD 1, 1R, 2, 3, 4 & 5.

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 2017 National Electric Code (NEC) Article without amendments for OSPHD 1, 1R, 2, 3, 4 & 5.

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 2017 National Electric Code (NEC) Article without amendments for OSPHD 1, 1R, 2, 3, 4 & 5.

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 2017 National Electric Code (NEC) Article without amendments for OSPHD 1, 1R, 2, 3, 4 & 5.

NOTATION:

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

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Reference: Health and Safety Code Section 129850

ARTICLE 328 – MEDIUM VOLTAGE CABLE: TYPE MV

Adopt entire 2017 National Electric Code (NEC) Article without amendments for OSPHD 1, 1R, 2, 3, 4 & 5.

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 2017 National Electric Code (NEC) Article without amendments for OSPHD 1, 1R, 2, 3, 4 & 5.

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 2017 National Electric Code (NEC) Article without amendments for OSPHD 1, 1R, 2, 3, 4 & 5.

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 2017 National Electric Code (NEC) Article without amendments for OSPHD 1, 1R, 2, 3, 4 & 5.

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 2017 National Electric Code (NEC) Article without amendments for OSPHD 1, 1R, 2, 3, 4 & 5.

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 2017 National Electric Code (NEC) Article without amendments for OSPHD 1, 1R, 2, 3, 4 & 5.

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 2017 National Electric Code (NEC) Article without amendments for OSPHD 1, 1R, 2, 3, 4 & 5.

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 2017 National Electric Code (NEC) Article without amendments for OSPHD 1, 1R, 2, 3, 4 & 5.

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 344 – RIGID METAL CONDUIT: TYPE RMC

Adopt entire 2017 National Electric Code (NEC) Article without amendments for OSPHD 1, 1R, 2, 3, 4 & 5.

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 348 – FLEXIBLE METAL CONDUIT: TYPE FMC

Adopt entire 2017 National Electric Code (NEC) Article without amendments for OSPHD 1, 1R, 2, 3, 4 & 5.

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 2017 National Electric Code (NEC) Article without amendments for OSPHD 1, 1R, 2, 3, 4 & 5.

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

Adopt entire 2017 National Electric Code (NEC) Article without amendments for OSPHD 1, 1R, 2, 3, 4 & 5

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 2017 National Electric Code (NEC) Article without amendments for OSPHD 1, 1R, 2, 3, 4 & 5.

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 2017 National Electric Code (NEC) Article without amendments for OSPHD 1, 1R, 2, 3, 4 & 5.

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 2017 National Electric Code (NEC) Article without amendments for OSPHD 1, 1R, 2, 3, 4 & 5.

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 356 – LIQUIDTIGHT FLEXIBLE NONMETALLIC CONDUIT: TYPE LFNC

Adopt entire 2017 National Electric Code (NEC) Article without amendments for OSPHD 1, 1R, 2, 3, 4 & 5.

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 358 – ELECTRICAL METALLIC TUBING: TYPE EMT

Adopt entire 2017 National Electric Code (NEC) Article without amendments for OSPHD 1, 1R, 2, 3, 4 & 5.

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 360 – FLEXIBLE METALLIC TUBING: TYPE FMT

Adopt entire 2017 National Electric Code (NEC) Article without amendments for OSPHD 1, 1R, 2, 3, 4 & 5.

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 2017 National Electric Code (NEC) Article without amendments for OSPHD 1, 1R, 2, 3, 4 & 5.

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 366 – AUXILIARY GUTTERS

Adopt entire 2017 National Electric Code (NEC) Article without amendments for OSPHD 1, 1R, 2, 3, 4 & 5.

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 2017 National Electric Code (NEC) Article without amendments for OSPHD 1, 1R, 2, 3, 4 & 5.

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 2017 National Electric Code (NEC) Article without amendments for OSPHD 1, 1R, 2, 3, 4 & 5

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 2017 National Electric Code (NEC) Article without amendments for OSPHD 1, 1R, 2, 3, 4 & 5.

NOTATION:

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

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Reference: Health and Safety Code Section 129850

ARTICLE 374 – CELLULAR METAL FLOOR RACEWAYS

Adopt entire 2017 National Electric Code (NEC) Article without amendments for OSPHD 1, 1R, 2, 3, 4 & 5.

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 2017 National Electric Code (NEC) Article without amendments for OSPHD 1, 1R, 2, 3, 4 & 5.

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 2017 National Electric Code (NEC) Article without amendments for OSPHD 1, 1R, 2, 3, 4 & 5.

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 380 – MULTIOUTLET ASSEMBLY

Adopt entire 2017 National Electric Code (NEC) Article without amendments for OSPHD 1, 1R, 2, 3, 4 & 5.

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 2017 National Electric Code (NEC) Article without amendments for OSPHD 1, 1R, 2, 3, 4 & 5.

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 2017 National Electric Code (NEC) Article without amendments for OSPHD 1, 1R, 2, 3, 4 & 5.

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 2017 National Electric Code (NEC) Article without amendments for OSPHD 1, 1R, 2, 3, 4 & 5.

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 2017 National Electric Code (NEC) Article without amendments for OSPHD 1, 1R, 2, 3, 4 & 5.

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 2017 National Electric Code (NEC) Article without amendments for OSPHD 1, 1R, 2, 3, 4 & 5.

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 2017 National Electric Code (NEC) Article without amendments for OSPHD 1, 1R, 2, 3, 4 & 5.

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 2017 National Electric Code (NEC) Article without amendments for OSPHD 1, 1R, 2, 3, 4 & 5.

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 2017 National Electric Code (NEC) Article without amendments for OSPHD 1, 1R, 2, 3, 4 & 5.

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 396 – MESSENGER-SUPPORTED WIRING

Adopt entire 2017 National Electric Code (NEC) Article without amendments for OSPHD 1, 1R, 2, 3, 4 & 5.

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 2017 National Electric Code (NEC) Article without amendments for OSPHD 1, 1R, 2, 3, 4 & 5.

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 2017 National Electric Code (NEC) Article without amendments for OSPHD 1, 1R, 2, 3, 4 & 5.

NOTATION:

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

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Reference: Health and Safety Code Section 129850

CHAPTER 4 – EQUIPMENT FOR GENERAL USE

ARTICLE 400 – FLEXIBLE CORDS AND CABLES

Adopt entire 2017 National Electric Code (NEC) Article without amendments for OSPHD 1, 1R, 2, 3, 4 & 5.

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 2017 National Electric Code (NEC) Article without amendments for OSPHD 1, 1R, 2, 3, 4 & 5.

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 2017 National Electric Code (NEC) Article for OSHPD 3.

Adopt entire 2017 National Electric Code (NEC) Article and carry forward existing amendment of the 2016 California Electrical Code (CEC) for OSHPD 1, 1R, 2, 4 & 5.

404.4 Damp or Wet Locations.

...

(C) Switches in Tub or Shower Spaces. Switches shall not be installed within tubs or shower spaces unless installed as part of a listed tub or shower assembly.

[OSHPD 1, 1R, 2, 4 & 5] Switches that are not part of a listed tub or shower assembly shall not be installed within shower rooms or stalls, or be accessible from within those areas. Switches shall not be installed within 5 feet (1.52m) of the perimeter of bathtubs or shower stalls.

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...

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 ATTACHMENT PLUGS (CAPS)

Adopt entire 2017 National Electric Code (NEC) Article for OSHPD 3.

Adopt entire 2017 National Electric Code (NEC) Article and carry forward existing amendment of the 2016 CEC for OSHPD 1, 1R, 2, 4 and 5.

406.9 Receptacles in Damp or Wet Locations.

...

C) Bathtub and Shower Space. Receptacles shall not be installed within or directly over a bathtub or shower stall.

(1) [OSHPD 1, 1R, 2, 4 & 5] Receptacles shall not be installed within shower rooms or stalls or be accessible from within these areas. Receptacles shall not be installed within 5 feet (1.52 m) of the perimeter of bathtubs or shower stalls.

...

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 2017 National Electric Code (NEC) Article without amendments for OSPHD 1, 1R, 2, 3, 4 & 5.

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 2017 National Electric Code (NEC) Article without amendments for OSPHD 1, 1R, 2, 3, 4 & 5.

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 2017 National Electric Code (NEC) Article without amendments for OSPHD 1, 1R, 2, 3, 4 & 5.

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 – LOW-VOLTAGE LIGHTING

Adopt entire 2017 National Electric Code (NEC) Article without amendments for OSPHD 1, 1R, 2, 3, 4 & 5.

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 2017 National Electric Code (NEC) Article without amendments for OSPHD 1, 1R, 2, 3, 4 & 5.

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 424 – FIXED ELECTRIC SPACE-HEATING EQUIPMENT

Adopt entire 2017 National Electric Code (NEC) Article without amendments for OSPHD 1, 1R, 2, 3, 4 & 5.

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 425 – FIXED RESISTANCE AND ELECTRODE INDUSTRIAL PROCESS HEATING EQUIPMENT

Adopt entire 2017 National Electric Code (NEC) Article without amendments for OSPHD 1, 1R, 2, 3, 4 & 5.

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 2017 National Electric Code (NEC) Article without amendments for OSPHD 1, 1R, 2, 3, 4 & 5.

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 2017 National Electric Code (NEC) Article without amendments for OSPHD 1, 1R, 2, 3, 4 & 5.

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 2017 National Electric Code (NEC) Article without amendments for OSPHD 1, 1R, 2, 3, 4 & 5.

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 440 – AIR-CONDITIONING AND REFRIGERATING EQUIPMENT

Adopt entire 2017 National Electric Code (NEC) Article without amendments for OSPHD 1, 1R, 2, 3, 4 & 5.

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 2017 National Electric Code (NEC) Article without amendments for OSPHD 1, 1R, 2, 3, 4 & 5.

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 2017 National Electric Code (NEC) Article without amendments for OSPHD 1, 1R, 2, 3, 4 & 5.

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 2017 National Electric Code (NEC) Article without amendments for OSPHD 1, 1R, 2, 3, 4 & 5.

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 2017 National Electric Code (NEC) Article without amendments for OSPHD 1, 1R, 2, 3, 4 & 5.

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 2017 National Electric Code (NEC) Article without amendments for OSPHD 1, 1R, 2, 3, 4 & 5.

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 480 – STORAGE BATTERIES

Adopt entire 2017 National Electric Code (NEC) Article without amendments for OSPHD 1, 1R, 2, 3, 4 & 5.

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 2017 National Electric Code (NEC) Article without amendments for OSPHD 1, 1R, 2, 3, 4 & 5.

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 5 – SPECIAL OCCUPANCIES

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

Adopt entire 2017 National Electric Code (NEC) Article without amendments for OSPHD 1, 1R, 2, 3, 4 & 5.

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 2017 National Electric Code (NEC) Article without amendments for OSPHD 1, 1R, 2, 3, 4 & 5.

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 2017 National Electric Code (NEC) Article without amendments for OSPHD 1, 1R, 2, 3, 4 & 5.

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 2017 National Electric Code (NEC) Article without amendments for OSPHD 1, 1R, 2, 3, 4 & 5.

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 2017 National Electric Code (NEC) Article without amendments for OSPHD 1, 1R, 2, 3, 4 & 5.

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 2017 National Electric Code (NEC) Article without amendments for OSPHD 1, 1R, 2, 3, 4 & 5.

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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 2017 National Electric Code (NEC) Article without amendments for OSPHD 1, 1R, 2, 3, 4 & 5.

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 2017 National Electric Code (NEC) Article without amendments for OSPHD 1, 1R, 2, 3, 4 & 5.

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 511 – COMMERCIAL GARAGES, REPAIR AND STORAGE

Adopt entire 2017 National Electric Code (NEC) Article without amendments for OSPHD 1, 1R, 2, 3, 4 & 5.

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 513 – AIRCRAFT HANGARS

Adopt entire 2017 National Electric Code (NEC) Article without amendments for OSPHD 1, 1R, 2, 3, 4 & 5.

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 2017 National Electric Code (NEC) Article without amendments for OSPHD 1, 1R, 2, 3, 4 & 5.

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 2017 National Electric Code (NEC) Article without amendments for OSPHD 1, 1R, 2, 3, 4 & 5.

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 MATERIALS

Adopt entire 2017 National Electric Code (NEC) Article without amendments for OSPHD 1, 1R, 2, 3, 4 & 5.

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 517 – HEALTH CARE FACILITIES

Adopt entire 2017 National Electric Code (NEC) Article, carry forward existing amendments of the 2016 California Electrical Code (CEC) for OSPHD 1, 1R, 2, 3, 4 & 5, and make the following amendments:

517.2 Definitions.

...

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

...

General Care (Category 2) Space. Space in which failure of equipment or a system is likely to cause minor injury to patients, staff, or visitors. [**99**: 3.3.127.2]

[OSHPD 1, 1R, 2, 3, 4 & 5] 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.

Informational Note: [Category 2] spaces were formerly known as general care rooms [(spaces)]. Examples include, but are not limited to, inpatient bedrooms, dialysis rooms, in vitro fertilization rooms, procedural rooms, and similar rooms. [99: A.3.3.127.2]

Critical Care (Category 1) Space. Space in which failure of equipment or a system is likely to cause major injury or death of patients, staff, or visitors. [**99:** 3.3.127.1]

[OSHPD 1,1R, 2, 3, 4 & 5] Includes special care units, intensive care units, coronary care units, sub-acute units, angiography laboratories, cardiac catheterization laboratories, delivery rooms, operating rooms, portions of emergency departments, electroconvulsive therapy procedure rooms, postoperative recovery rooms and similar areas in which patients are intended to be subjected to invasive procedures and are connected to line-operated electromedical devices

Informational Note: [Category 1] spaces, formerly known as critical care rooms [(spaces)], are typically where patients are intended to be subjected to invasive procedures and connected to line-operated, patient care–related appliances. Examples include, but are not limited to, special care patient rooms used for critical care, intensive care, and special care treatment rooms such as angiography laboratories, cardiac catheterization laboratories, delivery rooms, operating rooms, post-anesthesia care units, trauma rooms, and other similar rooms. [99: A.3.3.127.1]

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Support (Category 4) Space. Space in which failure of equipment or a system is not likely to have a physical impact on patient care. [**99**: 3.3.127.4]

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

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

Informational Note: [Category 4] spaces were formerly known as support rooms [(spaces)]. Examples of support spaces include, but are not limited to, anesthesia work rooms, sterile supply, laboratories, morgues, waiting rooms, utility rooms, and lounges. [**99:**A.3.3.127.4]

...

517.4 [OSHPD 1, 1R, 2, 4 & 5] Services/Systems and Utilities. *Refer to Section 1224.4.1.1, California Building Code.*

II. Wiring and Protection

517.10 Applicability.

(A) Applicability. Part II shall apply to patient care space of all health care facilities.

(B) Not Covered. Part II shall not apply to the following:

(1) Business offices, corridors, waiting rooms, and the like in clinics, medical and dental offices, and outpatient facilities

(2) Areas of nursing homes and limited care facilities wired in accordance with Chapters 1 through 4 of this *Code* where these areas are used exclusively as patient sleeping rooms. *Not adopted by [OSHPD 1, 1R, 2, 3, 4 & 5]*

~~***517.10.1 [OSHPD 1, 2, 3, & 4] Applicability.*** *Part II shall apply to hospitals, skilled nursing facilities, clinics, and correctional treatment centers.*~~

~~*Exception: Part II shall not apply to business offices, corridors, waiting rooms, and the like in clinics and outpatient facilities.*~~

...

517.12 Wiring Methods. Except as modified in this article, wiring methods shall comply with the applicable provisions of Chapters 1 through 4 of this *Code*.

(A) [OSHPD 1, 1R, 2, 4 & 5] Wall spaces in patient care rooms shall not be used for the installation of switchboards and panelboards, unless dedicated for that room.

517.18 General Care Areas (Category 2) Spaces.

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(A) Patient Bed Location. Each patient bed location shall be supplied by at least two branch circuits, one from the critical branch and one from the normal system. All branch circuits from the normal system shall originate in the same panelboard. The electrical receptacles or the cover plate for the electrical receptacles supplied from the critical branch shall have a distinctive color or marking so as to be readily identifiable and shall also indicate the panelboard and branch-circuit number supplying them.

Branch circuits serving patient bed locations shall not be part of a multiwire branch circuit.

Exception No. 1: Branch circuits serving only special purpose outlets or receptacles, such as portable X-ray outlets, shall not be required to be served from the same distribution panel or panels.

Exception No. 2: The requirements of 517.18(A) shall not apply to patient bed locations in clinics, medical and dental offices, and outpatient facilities; psychiatric, substance abuse, and rehabilitation hospitals; sleeping rooms of nursing homes; and limited care facilities meeting the requirements of 517.10(B)(2).

~~*[OSHPD 1, 2, 3, & 4] Section 517.10.1 Exception.*~~

~~*[OSHPD 1, 2, 3, & 4] Exception No. 2.1: Clinics, outpatient facilities, psychiatric, substance abuse, and rehabilitation hospitals, nursing homes, and correctional treatment centers providing only basic services.*~~

Exception No. 3: A general care (Category 2) patient bed location served from two separate transfer switches on the critical branch shall not be required to have circuits from the normal system.

(B) Patient Bed Location Receptacles. Each patient bed location shall be provided with a minimum of eight receptacles. They shall be permitted to be of the single, duplex, or quadruplex type or any combination of the three. All receptacles shall be listed "hospital grade" and shall be so identified. The grounding terminal of each receptacle shall be connected to an insulated copper equipment grounding conductor sized in accordance with Table 250.122.

Exception No. 1: The requirements of 517.18(B) shall not apply to psychiatric, substance abuse, and rehabilitation hospitals meeting the requirements of 517.10(B)(2). ~~*[OSHPD 1, 2, 3, & 4] Section 517.10.1.*~~

Exception No. 2: Psychiatric security rooms shall not be required to have receptacle outlets installed in the room.

Exception No 3: [OSHPD 1, 1R, 2, ~~3,~~ 4 & 5] Hospital grade receptacles shall not be required in patient sleeping areas in nursing homes.

Exception No.4: [OSHPD 1, 1R & 5] Psychiatric patient bedrooms shall not be required to have receptacle outlets installed in the room. If installed, the receptacles shall be

tamper-resistant, controlled by a switch outside the room that is under the control of staff, and shall be protected by a ground-fault circuit interrupter

Exception No.5: [OSHPD 1& 1R] Outpatient Observation bed and gurney locations shall be provided with a minimum of four receptacles.

...

(D) [OSHPD 1, ~~2~~ & 4] Nursery Receptacles. *One duplex receptacle shall be provided for every two bassinets.*

...

517.19 Critical Care (Category 1) Spaces.

...

(B) Patient Bed Location Receptacles.

(1) **Minimum Number and Supply.** Each patient bed location shall be provided with a minimum of 14 receptacles, at least one of which shall be connected to either of the following:
(1) The normal system branch circuit required in 517.19(A)
(2) A critical branch circuit supplied by a different transfer switch than the other receptacles at the same patient bed location

[OSHPD 1, 1R, 2, 4 & 5] Exception: Beds subject to the requirements of 517.40(B) shall be provided with a minimum of eight receptacles.

517.22 [OSHPD 1, 1R, 2, 3, 4 & 5] Artificial Lighting.

(A) Rooms and Passageways. *All rooms and passageways shall be provided with artificial illumination.*

(B) Illumination.

(1) [OSHPD 1, 1R, 3, 4 & 5] Illumination intensity.

...

517.24 [OSHPD 1, 1R, 2, 3, 4 & 5] Mobile Medical Facilities.

(A) Feeder. *The feeder shall be sized in accordance with the requirements of Article 220.*

(B) Service Receptacle. *The service receptacle shall be listed and rated for its use.*

(C) Disconnect. *A disconnecting means listed and rated for its use shall be located adjacent to and within sight of the service receptacle. It shall be capable of simultaneously disconnecting the ungrounded conductors which supply the service receptacle.*

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...

517.26 Application of Other Articles. The life safety branch [OSHPD 1, 1R, 2, 3, 4 & 5], *critical branch, and equipment* branch of the essential electrical system shall meet the requirements of Article 700, except as amended by Article 517.

...

[redacted]

517.29 Essential Electrical Systems for Hospitals and Other Health Care Facilities.

(A) Applicability. The requirements of Part III, 517.29 through 517.30, shall apply to critical care (Category 1) and general care (Category 2) hospitals and other health care facilities using Type 1 essential electrical systems where patients are sustained by electrical life-support equipment.

(A.1) [OSHPD 1, 1R, 2, 3, 4 & 5] Applicability. *The requirements of Part III, 517.~~30~~29 through 517.~~35~~30, shall apply to hospitals ~~[OSHPD 1, 2 (facilities complying with Article 517.40(B), 3 & 4]~~, facilities subject to the requirements of CEC 517.40(B), clinics subject to the requirements of CEC 517.45(B) or (C), ~~and~~ correctional treatment centers and acute psychiatric hospitals providing critical care (Category 1) and/or general care (Category 2) ~~optional~~ services ~~where an essential electrical system is required~~.*

[redacted]

~~517.35~~**517.30** Sources of Power.

(A) Two Independent Power Sources. Essential electrical systems shall have a minimum of the following two independent sources of power: a normal source generally supplying the entire electrical system and one or more alternate source(s) for use when the normal source is interrupted. [**99**:6.4.1.1.4]

(B) Types of Power Sources.

(1) Generating Units. Where the normal source consists of generating units on the premises, the alternate source shall be either another generating set or an external utility service. [**99**:6.4.1.1.5]

(1.1) [OSHPD 1, 1R, 3, 4 and 5] Generating Units. *The alternate source of power shall be one of the following:*

(A) Generator(s) driven by some form of prime mover(s) and located on the premises.

(B) Another generating unit(s) where the normal source consists of a generating unit(s) located on the premises.

(C) As provided in paragraph (B)(2) below.

All on-premises sources of power shall meet the on-premises fuel requirements specified in Article 700.12.

Note: The following amendment in Article 517.35(B)(4) of the 2016 California Electrical Code (CEC) will not be carried forward to Article 517.30(B) of the 2019 CEC as it is no longer applicable.

~~*[OSHPD 1, 2 & 4] A battery system located on the premises is not permitted except as allowed in 517.33(A)(5).*~~

(2) Fuel Cell Systems. Fuel cell systems shall be permitted to serve as the alternate source for all or part of an essential electrical system, provided the following conditions apply:

...

(C) Location of Essential Electrical System Components. Essential electrical systems components shall be located to minimize interruptions caused by natural forces common the area (e.g. storms, floods, earthquakes, or hazards created by adjoining structures or activities). Installation of electrical services shall be located to reduce possible interruption of normal electrical services resulting from similar causes as well as possible disruption of normal electrical service due to internal wiring and equipment failures. Feeders shall be located to provide physical separation of the feeders of the alternate source and from the feeders of the normal electrical source to prevent possible simultaneous interruption. *[OSHPD 1,1R, ~~2,~~ 4 & 5] Refer to California Building Code, Section ~~1616A.1.42~~ 1617A.1.40.*

...

NOTE: 2014 NEC Article 517.30 has been renumbered to 517.31 in the 2017 NEC.

~~517.30~~ 517.31 Requirements for the Essential Electrical System. ...

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(A) Separate Branches. ...

(B) Transfer Switches. ...

(1) 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.

(3) [For OSHPD 1, 1R, 2, 3, 4 & 5] 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 used to meet essential electrical system requirements. ~~considered to be on the essential system.~~

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(2) Contiguous Facilities. ...

~~(5)~~ **(3) Bypass Isolation** *[OSHPD 1, 1R, 2 (facilities complying with Article 517.40(B)), 3 (surgical clinics), 4 & 5] 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.*

(C) Wiring Requirements. ...

(3) Mechanical Protection of the Essential Electrical System. The wiring of the life safety and critical branches shall be mechanically protected. Where installed as branch circuits in patient care spaces, the installation shall comply with the requirements of 517.13(A) and (B). Only the following wiring methods shall be permitted:

(1) Nonflexible metal raceways, Type MI cable, Type RTRC marked with the suffix –XW, or Schedule 80 PVC conduit. Nonmetallic raceways shall not be used for branch circuits that supply patient care areas.

(2) Where encased in not less than 50 mm (2 in.) of concrete, Schedule 40 PVC conduit, flexible nonmetallic or jacketed metallic raceways, or jacketed metallic cable assemblies listed for installation in concrete. Nonmetallic raceways shall not be used for branch circuits that supply patient care areas.

(3) Listed flexible metal raceways and listed metal sheathed cable assemblies in any of the following:

a. Where used in listed prefabricated medical headwalls

b. In listed office furnishings

c. Where fished into existing walls or ceilings, not otherwise accessible and not subject to physical damage

d. Where necessary for flexible connection to equipment

e. For equipment that requires a flexible connection due to movement, vibration, or operation

f. Luminaires installed in rigid ceiling structures where there is no access above the ceiling space after the luminaire is installed

g. [OSHPD 1, 1R, 2, 3 (surgery clinics), 4 & 5] Where necessary to allow relative movement between immediately adjacent buildings

...

(D) Capacity of Systems. The essential electrical system shall have the capacity and rating to meet the maximum actual demand likely to be produced by the connected load.

Feeders shall be sized in accordance with 215.2 and Part III of Article 220. The generator set(s) shall have the capacity and rating to meet the demand produced by the load at any given time.

Demand calculations for sizing of the generator set(s) shall be based on any of the following:

(1) Prudent demand factors and historical data

(2) Connected load

(3) Feeder calculation procedures described in Article 220

(4) Any combination of the above

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The sizing requirements in 700.4 and 701.4 shall not apply to hospital generator sets(s).

(D.1) [OSHPD 1, 1R, 2, 3, ~~& 4~~ & 5] Capacity of Systems. *The essential electrical system shall have the capacity and rating to meet the maximum actual demand likely to be produced by the connected load.*

(E) Receptacle Identification. The cover plates for the electrical receptacles *[For OSHPD 1, 1R, 2, 3, 4 & 5] and light switches* or the electrical receptacles *[For OSHPD 1, 1R, 2, 3, 4 & 5] and light switches* themselves supplied from the essential electrical system shall have a distinctive color or marking so as to be readily identifiable. [**99**:6.4.2.2.6.2(C)]

NOTE: 2014 NEC Article 517.33 has been renumbered to 517.34 in the 2017 NEC

~~517.33~~ 517.34 Critical Branch.

(A) Task Illumination and Selected Receptacles. The critical branch of the essential electrical system shall supply power for task illumination, fixed equipment, selected receptacles, and special power circuits serving the following areas and functions related to patient care:

...

(5) Nurse call systems
[OSHPD 1, 1R, 2, 3, 4 & 5] Exception: Battery powered components of wireless emergency nurse call systems complying with the latest edition of ANSI/UL 1069, Standard for Hospital Signaling and Nurse Call Equipment

...

(8) Task illumination, selected receptacles, and selected power circuits for the following:

a. General care (Category 2) beds (at least one duplex receptacle in each patient bedroom)

b. Angiographic labs

c. Cardiac catheterization labs

d. Coronary care units

e. Hemodialysis rooms or areas

f. Emergency room treatment areas (selected)

g. Human physiology labs

h. Intensive care units

i. Postoperative recovery rooms (selected)

[Subsections j through ~~n~~ k OSHPD 1, 1R, 2, 3(surgery clinics), 4 & 5]

j. ~~Lithotripsy treatment rooms~~

~~k. Laser operating rooms~~

~~l. Electric clocks as required by Part 2, Title 24, C.C.R.~~

~~m.~~ j. Food preparation areas, central supply, and utility rooms

~~n.~~ k. Electrical and mechanical rooms

...

~~(10) [OSHPD 1, 2, 3, & 4] Sensor-operated fixtures when used to comply with Table 4-2, California Plumbing Code.~~

(10) [OSHPD 1, 1R, 2, 3, ~~&~~ 4 & 5] The following equipment:

- *a. Electric clocks required by California Building Code, where direct wired.*
- *b. Sensor-operated fixtures required by California Plumbing Code, where direct wired.*
- *c. Alarm systems for monitoring negative pressure isolation rooms and positive pressure isolation rooms.*
- *d. Medication dispensing units.*
- *e. Medication refrigerators and freezers.*
- *f. Patient food refrigeration (single phase only)*
- *g. Pharmacy compounding engineering controls such as hoods, laminar airflow workbenches, biological safety cabinets and barrier isolators.*

~~(11) [OSHPD 1 & 4] Alarm systems for monitoring negative pressure isolation rooms and positive pressure isolation rooms.~~

NOTE: 2014 NEC Article 517.34 has been renumbered to 517.30 in the 2017 NEC.

~~517.34~~ 517.35 **Equipment Branch Connection to Alternate Power Source.** The equipment branch shall be installed and connected to the alternate power source such that the equipment described in 517.35(A) is automatically restored to operation at appropriate time-lag intervals following the energizing of the essential electrical system. Its arrangement shall also provide for the subsequent connection of equipment described in 517.35(B).

Exception: For essential electrical systems under 150 kVA, deletion of the time-lag intervals feature for delayed automatic connection to the equipment system shall be permitted.

(A) Equipment for Delayed Automatic Connection. The following equipment shall be permitted to be arranged for delayed automatic connection to the alternate power source:

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(1) Central suction systems

...

(9) [OSHPD 1, 1R, 2, 3, (surgical clinics), 4 & 5] ~~All~~ eEquipment as required ~~listed~~ in the Essential Plumbing Provisions ~~Section 310.0~~ of the California Plumbing Code.

(10) [OSHPD 1, 1R, 2, 3, 4 & 5] Where provided, UPS systems serving telephone, data, technology and telecommunications equipment rooms and closets.

Exception: Sequential delayed automatic connection to the alternate power source to prevent overloading the generator shall be permitted where engineering studies indicate it is necessary.

(B) Equipment for Delayed Automatic or Manual Connection. The following equipment shall be permitted to be arranged for either delayed automatic or manual connection to the alternate power source:

(1) Heating equipment to provide heating for operating, delivery, labor, recovery, intensive care, coronary care, nurseries, infection/isolation rooms, emergency treatment spaces, and general patient rooms and pressure maintenance (jockey or make-up) pump(s) for water-based fire protection systems.

Exception: Heating of general patient rooms and infection/isolation rooms during disruption of the normal source shall not be required under any of the following conditions:

(1) The outside design temperature is higher than −6.7°C (20°F).

(2) The outside design temperature is lower than −6.7°C (20°F), and where a selected room(s) is provided for the needs of all confined patients only such room(s) need be heated.

(3) The facility is served by a dual source of normal power.

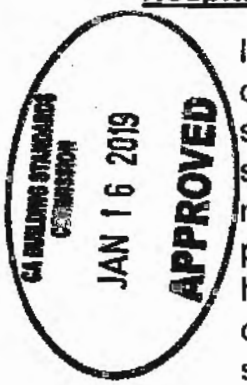
(1.1) [OSHPD 1, 1R, 2, 3(surgery clinics), 4 & 5] Heating, ventilating and cooling equipment as required by the California Mechanical Code.

(1.2) [OSPHD 1, 1R, 2, 3(surgery clinics), 4 & 5] Pressure maintenance (jockey or make-up) pumps for water-based fire suppression systems.

(2) An elevator(s) ...

...

517.40 Type 2 Essential Electrical Systems for Nursing Homes and Limited Care Facilities *[OSHPD 2], Correctional Treatment Centers and Acute Psychiatric Hospitals [OSHPD 4 & 5]*



Informational Note: Nursing homes and other limited care facilities can be classified as critical care (Category 1) or general care (Category 2) patient care space depending on the design and type of care administered in the facility. For small, less complex facilities, only minimal alternate lighting and alarm service may be required. At nursing homes and other limited care facilities where patients are not sustained by electrical life- support equipment or inpatient hospital care the requirements of 517.40 through 517.41 apply. If the level of care is comparable to that provided in a hospital, see the essential electrical system requirements of 517.29 through 517.30.

(A) Applicability. The requirements of Part III, 517.40(C) through 517.41, shall apply to nursing homes and limited care facilities.

Exception: The requirements of Part III, 517.40(C) through 517.41, shall not apply to freestanding buildings used as nursing homes and limited care facilities, provided that the following apply:

(1) Admitting and discharge policies are maintained that preclude the provision of care for any patient or resident who may need to be sustained by electrical life-support equipment.

(2) No surgical treatment requiring general anesthesia is offered.

(3) An automatic battery-operated system(s) or equipment shall be effective for at least 1½ hours and is otherwise in accordance with 700.12 and that shall be capable of supplying lighting for exit lights, exit corridors, stairways, nursing stations, medical preparation areas, boiler rooms, and communications areas. This system shall also supply power to operate all alarm systems.

Informational Note: See NFPA 101-2015, Life Safety Code

(A.1) [OSHPD ~~1,~~ 2, ~~&~~ 4 & 5] Applicability. *The requirements of Part III, 517.40(C) through 517.44, shall apply to nursing homes, intermediate and skilled nursing facilities, and correctional treatment centers and acute psychiatric hospitals ~~providing only basic services~~ not subject to 517.29(A.1).*

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...

517.41 Required Power Sources.

(A) **Two Independent Power Sources.** Essential electrical systems shall have a minimum of the following two independent sources of power: a normal source generally supplying the entire electrical system and one or more alternate sources for use when the normal source is interrupted. [**99**:6.4.1.1.4]

(B) **Types of Power Sources.** Where the normal source consists of generating units on the premises, the alternate source shall be either another generating set or an external utility service. [**99**:6.4.1.1.5]

(B.1) [OSHPD ~~1,~~ 2 & 4] Alternate Source of Power. *The alternate source of power shall be a generator(s) driven by some form of prime mover(s) and located on the premises.*

Exception No. 1 to B.1: [OSHPD ~~1,~~ 2 & 4]: Where the normal source consists of generating units on the premises, the alternate source shall be either another generator set or an external utility service.

Exception No. 2 to B.1 [OSHPD ~~1,~~ 2 & 4] Battery-powered components of wireless emergency nurse call systems complying with the latest edition of ANSI/UL 1069, Standard for Hospital Signaling and Nurse Call Equipment need not have the wireless components connected to the alternate source of power

NOTE: 2014 NEC Article 517.41 has been renumbered to 517.42 in the 2017 NEC.

517.~~44~~42 Essential Electrical Systems.

(A) General. Essential electrical systems for nursing homes and limited care facilities shall be divided into the following two branches, the life safety branch and the equipment branch.

The division between the branches shall occur at transfer switches where more than one transfer switch is required.

(B) Transfer Switches. The number of transfer switches to be used shall be based on reliability, design, and load considerations.

(1) Each branch of the essential electrical system shall have one or more transfer switches.

(2) One transfer switch shall be permitted to serve one or more branches or systems in a facility with a continuous load on the switch of 150 kVA (120 kW) or less.

(3) *[OSHPD ~~1,~~ 2 & 4] Transfer switches installed in skilled nursing facilities meeting the requirements of Article 517.40(B) shall comply with Article 517.31(B)(3) ~~30(B)(5)~~*

...

(E) Receptacle Identification. *The electrical receptacles [OSHPD 1, 1R, 2, ~~& 4~~ & 5] and light switches or the cover plates for the electrical receptacles[OSHPD 1, 1R, 2, ~~& 4~~ & 5] and light switches supplied from the life safety or equipment branches shall have a distinctive color or marking to be readily identifiable. [**99**:6.5.2.2.4.2]*

...

517.4~~2~~43Automatic Connection to Life Safety Branch.

...

(C) Alarm and Alerting Systems. Alarm and alerting systems, including the following:

...

~~*(3) [OSHPD 1, 2, & 4] Nurse call system*~~

~~*Exception: [OSHPD 1, 2 & 4] Battery-powered components of wireless emergency nurse call systems complying with the latest edition of ANSI/UL 1069, Standard for Hospital Signaling and Nurse Call Equipment*~~

...

517.4~~3~~44 Connection to Equipment Branch.

...

(A) Delayed Automatic Connections to Equipment Branch.

...

(6) Nurse call systems

[OSHPD 1, 1R, 2, 4 & 5] Exception No. 1: Battery powered components of wireless emergency nurse call systems complying with the latest edition of ANSI/UL 1069, Standard for Hospital Signaling and Nurse Call Equipment.

[OSHPD 2 & 4] Exception No. 2: Existing nurse call systems may remain on the life safety branch.

...

(~~6~~7) [OSHPD 1, 1R, 2, 4 & 5] Selected receptacles in patient room corridors so that any patient bed can be reached with fifty (50) foot extension cord.

(~~7~~8) [OSHPD 1, 1R, 2, 4 & 5] Task lighting and at least one receptacle in electrical and mechanical rooms.

(~~8~~9) [OSHPD 1, 1R, 2, ~~3~~, 4 & 5] Sensor-operated fixtures ~~when used to comply with Table 4-2,~~ required by the California Plumbing Code, where direct wired.

(~~9~~10) [OSHPD 1, 1R, 2, ~~3 (surgical clinics)~~, 4 & 5] ~~All~~ eEquipment as required ~~listed~~ in the Essential Plumbing Provisions ~~Section 310.0~~ of the California Plumbing Code.

...

(B) Delayed Automatic or Manual Connection to the Connections to Equipment Branch. The following equipment shall be permitted...

...

(1.1)[OSHPD 1, 1R, 2, 4 & 5] Heating, ventilating, and cooling equipment as required by California Mechanical Code.

...

517.45 Essential Electrical Systems for Other Health Care Facilities.

...

(E) Power Systems. If required, alternate power sources acceptable to the governing body shall comply with the requirements of NFPA 99-2015, Health Care Facilities Code.

(E.1) *[OSHPD ~~1~~, 2, ~~3, & 4~~] Ambulatory surgical clinics shall be provided with a generator with on-site fuel.*

(F) *[OSHPD 3 ~~& 4~~] Receptacle and Light Switch Identification. The cover plates for the electrical receptacles and light switches or the electrical receptacles and light switches themselves, supplied from the emergency system, shall have a distinctive color or marking so as to be readily identifiable.*

(G) *[OSHPD ~~1~~, 3, ~~& 4~~] Ambulatory Surgical Clinics. The essential electrical systems for Ambulatory Surgical Clinics shall be as described in 517.~~30~~29 through 517.35.*

(H) *[OSHPD ~~1, 2~~, 3, ~~& 4~~] Hemodialysis Clinic.*

(1) Illumination for means of egress and exit lights shall be provided, using battery-operated equipment with a capacity to sustain its connected load for a minimum of 1 ½ hours after loss of the normal source.

~~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.~~*

~~(A) General.~~

~~(1) Call station locations shall be as required in Table 1224.4.6.5, of the California Building Code.~~

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~~*(2) Electronically supervised call stations shall report to an attended location with visual and audible annunciation as described in Table 1224.4.6.5 Location of Nurse Call Devices. of the California Building Code.*~~

~~*(3) Where provided, nurse master stations shall provide audible/visual prompting and display pending patient station, bath station, staff emergency station, and code call station calls for its defined area of coverage. If display capabilities are limited, the system shall display calls in high priority descending order with oldest calls displayed first.*~~

~~*(4) In addition to these requirements, call systems shall meet the requirements of UL 1069: "Standard for Hospital Signaling and Nurse Call Equipment"*~~

~~***(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.*~~

~~*(2) The patient station shall be equipped with the following:*~~

~~*(a) A visual call assurance signal once the station has been activated.*~~

~~*(b) An indicator light or recurring audible tone, that remains active as long as the voice circuit is operating shall be provided. A tone may also sound at the patient station upon initial voice circuit operation.*~~

~~*(c) In rooms containing two or more patient stations, call assurance lamps shall be provided at each station.*~~

~~*(d) A switch for canceling a call.*~~

~~*(3) The patient station shall activate signals as follows:*~~

~~*(a) Visual signals visible from all parts of the corridor shall be provided above corridor doors to each patient bedroom, toilet room, and bath or shower room. In multi-corridor nursing units or patient care areas, additional visual signals shall be installed at corridor intersections.*~~

~~*(b) A visual and audible signal at nurse call duty stations. The audible signal may be temporarily silenced provided subsequent calls automatically reactivate the audible signal.*~~

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~~*(4) Diagnostic and treatment areas. A nurse call station shall be provided in each diagnostic and treatment area (including labor rooms, LDR rooms, emergency examination/treatment rooms or cubicles, and preoperative rooms or cubicles) as required in this article.*~~

~~***(C) Bath Stations.** A bath station that can be activated by a patient lying on the floor shall be provided at each room containing a patient water closet, bathtub, sitz bath, or shower stall. Pull cords shall extend to a maximum of 12 inches (30.48 centimeters) above the floor.*~~

~~*(1) An alarm in these areas shall be able to be turned off only at the bath station where it was initiated.*~~
~~*Exception: When two or more stations are located in the same bath area and all are visible from any call location, the alarm may be canceled at any of these locations.*~~

~~*(2) Bath stations in shower stalls and tubs shall be located 5 to 6 feet (1.52 to 1.83 meters) above the floor, within normal view of the user and within reach of staff without the need to step into the stall or tub.*~~

~~*(3) Bath stations shall be located to the side of toilets, within 12 inches (30.48 centimeters) of the front of the toilet bowl and 3 to 4 feet (.91 meter to 1.22 meters) above the floor. A bath station shall be permitted to serve both a toilet and a shower or other fixture if it is accessible to both.*~~

~~***(D) Staff Emergency Stations**. Call stations that initiate S staff emergency signals for summoning additional local staff assistance for non-life-threatening situations shall be provided in each patient care location as required in Table 1224.4.6.5, "Location of Nurse Call Devices" of the California Building Code.*~~

~~***(E) Code Call Stations.** Commonly referred to as a "Code Blue", code call stations are meant for use during a life-threatening situation to summon assistance from outside the unit or department.*~~

~~*(1) Call stations that initiate code call signals shall be as required in Table 1224.4.6.5, "Location of Nurse*~~
~~*Call Devices" of the California Building Code.*~~

~~*(2) The call station shall be equipped with a continuous audible or visual confirmation of activation to the person who initiated the code call.*~~

~~*(3) Audible and visual code call signals shall be provided at the PBX operator or other continuously monitored location.*~~

~~***(F) Alarm in Psychiatric Nursing Units**. A nurse call is not required in psychiatric units, but if one is included the following shall apply:*~~

~~*(1) Provisions shall be made for easy removal or for covering of call button outlets.*~~

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~~*(2) All hardware shall have tamper-resistant fasteners.*~~

~~*(3) Cords at all call stations in rooms designated for psychiatric patient use shall be detachable.*~~

517.123 [OSHPD 1,1R, 2, 3, 4 & 5] Call Systems

(A) General.

(1) Nurse call devices shall be installed in the locations required in Table 1224.4.6.5, of the California Building Code. One device shall be permitted to accommodate any combination of patient station, staff emergency, and code call, provided the individual functions and requirements listed below are met.

(2) Nurse call systems shall be listed and installed in accordance with UL 1069: "Standard for Hospital Signaling and Nurse Call Equipment"

(3) Initiation of any call station shall activate all of the following signals:

(a) Visual signal in the corridor at the patient room door or care space;

(b) Visual signals at corridor intersections where individual patient room door or care space signals are not directly visible from the associated nurses' stations; and

(c) Visual and audible signals at the nurse master station and associated duty stations.

(4) Each call station shall include a visual call assurance indicator to acknowledge that the station has been activated.

(5) Where nurse call is installed but not required in psychiatric nursing units, the equipment shall meet the following requirements:

(a) Provisions shall be made for easy removal or for covering of call button outlets.

(b) All hardware shall have tamper-resistant fasteners.

(c) Cords at all call stations in rooms designated for psychiatric patient use shall be detachable.

(B) ***Patient Stations****. A patient station shall be provided to allow each patient to summon assistance from the nursing staff.*

(1) The patient station shall be equipped with the following:

(a) An indicator light or recurring audible tone, that remains active as long as the voice circuit is operating.

(b) Two-way voice communication. Where provided, a visual or audible at each calling station to indicate voice circuit activation.

Exception: Two-way voice communication is not required at skilled nursing bed(s), in which case the calling station shall require manual resetting of calls.

(c) A switch for cancelling the call.

(2) Use of a dual call station shall be permitted to serve no more than the two adjacent beds, each of which shall be separately annunciated.

(3) Patient call stations shall be permitted to provide supplemental signaling of medical device alarms.

***(C) Bath Stations**. Bath stations shall meet the following requirements:*

(1) Shall be accessible to a patient lying on the floor. Pull cords shall be provided that extend to within 12 inches (304.8 mm) of the floor.

(2) The call may be reset only at the location where it was initiated.

(3) In shower stalls and tubs, the station shall be located between 5 and 6 feet (1524 to 1829 mm) above the floor, within normal view of the user and within reach of staff without the need to step into the stall or tub.

(4) At toilets, the call station shall be located to the side, within 12 inches (304.8 mm) of the front of the toilet bowl and between 3 and 4 feet (914 mm to 1219 mm) above the floor.

***(D) Staff Emergency Stations**. Staff emergency stations shall meet the following requirements:*

(1) Initiate a call for summoning additional local staff assistance; and

(2) The call may be reset only at the location of activation.

***(E) Code Call Stations (Code Blue)** The code call station shall meet the following requirements:*

(1) Be equipped with a continuous audible or visual confirmation of activation;

(2) Audible and visual code call signals shall be provided at the PBX operator or other continuously monitored location; and

(3) may only be reset at the location of activation.

***(F) Master Station**. Master stations shall meet the following requirements:*

(1) provide visible and audible signal of calls; and

(2) Display pending calls for its defined area of coverage.

***(G) Duty Station.** Duty stations shall meet the following requirements:*

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(1) provide visible and audible signal of calls. The audible signal may be temporarily silenced provided subsequent calls automatically reactivate the audible signal; and

(2) A visual and audible signal at nurse call duty stations. The audible signal may be temporarily silenced provided subsequent calls automatically reactivate the audible signal.

(F) Alarm in Psychiatric Nursing Units. *A nurse call is not required in psychiatric units, but if one is included the following shall apply:*

(1) Provisions shall be made for easy removal or for covering of call button outlets;

(2) All hardware shall have tamper-resistant fasteners; and

(3) Cords at all call stations in rooms designated for psychiatric patient use shall be detachable.

...

517.124 [OSHPD 1,1R, 4 &5] Technology and Telecommunications Rooms

...

ARTICLE 518 – ASSEMBLY OCCUPANCIES

Adopt entire 2017 National Electric Code (NEC) Article without amendments for OSPHD 1, 1R, 2, 3, 4 & 5.

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 2017 National Electric Code (NEC) Article without amendments for OSPHD 1, 1R, 2, 3, 4 & 5.

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 OSPHD 1, 1R, 2, 3, 4 & 5.

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 OSPHD 1, 1R, 2, 3, 4 & 5.

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 OSPHD 1, 1R, 2, 3, 4 & 5.

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 2017 National Electric Code (NEC) Article without amendments for OSPHD 1, 1R, 2, 3, 4 & 5.

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 2017 National Electric Code (NEC) Article without amendments for OSPHD 1, 1R, 2, 3, 4 & 5.

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 OSPHD 1, 1R, 2, 3, 4 & 5.

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 2017 National Electric Code (NEC) Article without amendments for OSPHD 1, 1R, 2, 3, 4 & 5.

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 OSPHD 1, 1R, 2, 3, 4 & 5.

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 2017 National Electric Code (NEC) Article without amendments for OSPHD 1, 1R, 2, 3, 4 & 5.

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 553 – FLOATING BUILDINGS

Article is not adopted for OSPHD 1, 1R, 2, 3, 4 & 5.

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, BOATYARDS, AND COMMERCIAL AND NONCOMMERCIAL DOCKING FACILITIES

Article is not adopted for OSPHD 1, 1R, 2, 3, 4 & 5.

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 2017 National Electric Code (NEC) Article without amendments for OSPHD 1, 1R, 2, 3, 4 & 5.

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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CHAPTER 6 – SPECIAL EQUIPMENT

ARTICLE 600 – ELECTRIC SIGNS AND OUTLINE LIGHTING

Adopt entire 2017 National Electric Code (NEC) Article without amendments for OSPHD 1, 1R, 2, 3, 4 & 5.

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 2017 National Electric Code (NEC) Article without amendments for OSPHD 1, 1R, 2, 3, 4 & 5.

NOTATION:

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

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Reference: Health and Safety Code Section 129850

ARTICLE 605 – OFFICE FURNISHINGS

Adopt entire 2017 National Electric Code (NEC) Article without amendments for OSPHD 1, 1R, 2, 3, 4 & 5.

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 610 – CRANES AND HOISTS

Adopt entire 2017 National Electric Code (NEC) Article without amendments for OSPHD 1, 1R, 2, 3, 4 & 5.

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 2017 National Electric Code (NEC) Article for OSHPD 1R, 2, 3, 4 & 5.

Adopt entire 2017 National Electric Code (NEC) Article and carry forward existing amendment of the 2016 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 2017 National Electric Code (NEC) Article without amendments for OSPHD 1, 1R, 2, 3, 4 & 5.

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 OSPHD 1, 1R, 2, 3, 4 & 5.

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 2017 National Electric Code (NEC) Article without amendments for OSPHD 1, 1R, 2, 3, 4 & 5.

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 2017 National Electric Code (NEC) Article without amendments for OSPHD 1, 1R, 2, 3, 4 & 5.

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 2017 National Electric Code (NEC) Article without amendments for OSPHD 1, 1R, 2, 3, 4 & 5.

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 2017 National Electric Code (NEC) Article without amendments for OSPHD 1, 1R, 2, 3, 4 & 5.

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 647 – SENSITIVE ELECTRONIC EQUIPMENT

Adopt entire 2017 National Electric Code (NEC) Article without amendments for OSPHD 1, 1R, 2, 3, 4 & 5.

NOTATION:

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

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Reference: Health and Safety Code Section 129850

ARTICLE 650 – PIPE ORGANS

Adopt entire 2017 National Electric Code (NEC) Article without amendments for OSPHD 1, 1R, 2, 3, 4 & 5.

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 2017 National Electric Code (NEC) Article without amendments for OSPHD 1, 1R, 2, 3, 4 & 5.

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 2017 National Electric Code (NEC) Article without amendments for OSPHD 1, 1R, 2, 3, 4 & 5.

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 2017 National Electric Code (NEC) Article without amendments for OSPHD 1, 1R, 2, 3, 4 & 5.

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 2017 National Electric Code (NEC) Article without amendments for OSPHD 1, 1R, 2, 3, 4 & 5.

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 670 – INDUSTRIAL MACHINERY

Adopt entire 2017 National Electric Code (NEC) Article without amendments for OSPHD 1, 1R, 2, 3, 4 & 5.

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 2017 National Electric Code (NEC) Article without amendments for OSPHD 1, 1R, 2, 3, 4 & 5.

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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 2017 National Electric Code (NEC) Article without amendments for OSPHD 1, 1R, 2, 3, 4 & 5.

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 682 – NATURAL and ARTIFICIALLY MADE BODIES OF WATER

Adopt entire 2017 National Electric Code (NEC) Article without amendments for OSPHD 1, 1R, 2, 3, 4 & 5.

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 2017 National Electric Code (NEC) Article without amendments for OSPHD 1, 1R, 2, 3, 4 & 5.

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 690 – SOLAR PHOTOVOLTAIC (PV) SYSTEMS

Adopt entire 2017 National Electric Code (NEC) Article without amendments for OSPHD 1, 1R, 2, 3, 4 & 5.

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 691 -- LARGE-SCALE PHOT0VOLTAIC (PV) ELECTRIC POWER PRODUCTION FACILITY

Adopt entire 2017 National Electric Code (NEC) Article without amendments for OSPHD 1, 1R, 2, 3, 4 & 5.

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 2017 National Electric Code (NEC) Article without amendments for OSPHD 1, 1R, 2, 3, 4 & 5.

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 2017 National Electric Code (NEC) Article without amendments for OSPHD 1, 1R, 2, 3, 4 & 5.

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 2017 National Electric Code (NEC) Article for OSPHD 1, 1R, 2, 3, 4 & 5, carry forward existing amendments of the 2016 California Electrical Code (CEC), and make the following amendments:

695.3 Power Source(s) for Electric Motor-Driven Fire Pumps. Electric motor-driven fire pumps shall have a reliable source of power. *[OSPHD 1, 1R, 2, 3, 4 & 5] Such reliable source of power shall consist of a normal source and an onsite generator as the alternate source.*

CHAPTER 7 SPECIAL CONDITIONS

ARTICLE 700 – EMERGENCY SYSTEMS

Adopt entire 2017 National Electric Code (NEC) Articles, carry forward existing amendments of the 2016 CEC for OSPHD 1, 1R, 2, 3, 4 & 5, and make the following amendments:

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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, 1R, 2, 3, 4 & 5] Permanently installed on-site generator sets for health care facilities shall be tested in accordance with NFPA 110, Standard for Emergency and Standby Power Systems, Section 7.13, Installation Acceptance. All safety devices shall be tested as specified in Section 7.13.4.5; however, the safety devices provided may

comply with NFPA 99, Health Facilities, Section 6.4.1.1.17 in lieu of NFPA 110, 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.

B) Tested Periodically. Systems shall be tested periodically on a schedule acceptable to the authority having jurisdiction to ensure the systems are maintained in proper operating condition. *[OSHPD 1, 1R and 2] The authority having jurisdiction is Department of Public Health, Licensing and Certification.*

...

700.5 Transfer Equipment.

...

(C) Automatic Transfer Switches. Automatic transfer switches shall be electrically operated and mechanically held. Automatic transfer switches shall be listed for emergency system use. *[OSHPD 1, 1R, 2, 3, 4 & 5] Automatic transfer switches rated above ~~600~~1000 VAC shall be listed for emergency system use or approved by an alternative testing and approval program acceptable to the authority having jurisdiction.*

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700.12 General Requirements.

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(B) Generator Set.

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(2) Internal Combustion Engines as Prime Movers. Where internal combustion engines are used as the prime mover, an on-site fuel supply shall be provided with an on-premises 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, OSHPD 1, 1R, 2, 3, ~~&~~ 4 & 5]

Exception No.1: [SFM, OSHPD 1, 1R, 2, 3, & 4 & 5] The on-premises 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-premises fuel supply shall be sufficient for no less than 72 hours full-demand operations.

Exception No. 2: [SFM, OSHPD 1, 1R, 2, 3, & 4 & 5] The on-premises 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, OSHPD 1, 1R, 2, 3, & 4 & 5] The on-premises fuel supply shall be sufficient for not less than 4 hours full-demand operation in ambulatory surgical clinics.

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ARTICLE 701 – LEGALLY REQUIRED STANDBY SYSTEMS

Adopt entire 2017 National Electric Code (NEC) Article without amendments for OSPHD 1, 1R, 2, 3, 4 & 5.

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 2017 National Electric Code (NEC) Article without amendments for OSPHD 1, 1R, 2, 3, 4 & 5.

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 2017 National Electric Code (NEC) Article without amendments for OSPHD 1, 1R, 2, 3, 4 & 5.

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 706 – ENERGY STORAGE SYSTEMS

Adopt entire 2017 National Electric Code (NEC) Article without amendments for OSPHD 1, 1R, 2, 3, 4 & 5.

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 2017 National Electric Code (NEC) Article and carry forward existing amendments of the 2016 California Electrical Code (CEC) for OSPHD 1, 1R, 2, 3, 4 & 5.

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 710 – STAND-ALONE SYSTEMS

Adopt entire 2017 National Electric Code (NEC) Article without amendments for OSPHD 1, 1R, 2, 3, 4 & 5.

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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 712 – DIRECT CURRENT MICROGRIDS

Adopt entire 2017 National Electric Code (NEC) Article without amendments for OSPHD 1, 1R, 2, 3, 4 & 5.

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 2017 National Electric Code (NEC) Article without amendments for OSPHD 1, 1R, 2, 3, 4 & 5.

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 725 – CLASS 1, CLASS 2, AND CLASS 3 REMOTE-CONTROL, SIGNALING, AND

POWER-LIMITED CIRCUITS

Adopt entire 2017 National Electric Code (NEC) Article without amendments for OSPHD 1, 1R, 2, 3, 4 & 5.

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 2017 National Electric Code (NEC) Article without amendments for OSPHD 1, 1R, 2, 3, 4 & 5.

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 2017 National Electric Code (NEC) Article without amendments for OSPHD 1, 1R, 2, 3, 4 & 5.

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 750 – ENERGY MANAGEMENT SYSTEMS

Adopt entire 2017 National Electric Code (NEC) Article without amendments for OSPHD 1, 1R, 2, 3, 4 & 5.

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 760 – FIRE ALARM SYSTEMS

Adopt entire 2017 National Electric Code (NEC) Article without amendments for OSPHD 1, 1R, 2, 3, 4 & 5.

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

Adopt entire 2017 National Electric Code (NEC) Article without amendments for OSPHD 1, 1R, 2, 3, 4 & 5.

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 2017 National Electric Code (NEC) Article without amendments for OSPHD 1, 1R, 2, 3, 4 & 5.

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 2017 National Electric Code (NEC) Article without amendments for OSPHD 1, 1R, 2, 3, 4 & 5.

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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 2017 National Electric Code (NEC) Article without amendments for OSPHD 1, 1R, 2, 3, 4 & 5.

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 2017 National Electric Code (NEC) Article without amendments for OSPHD 1, 1R, 2, 3, 4 & 5.

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 2017 National Electric Code (NEC) Article without amendments for OSPHD 1, 1R, 2, 3, 4 & 5.

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 2017 National Electric Code (NEC) Article without amendments for OSPHD 1, 1R, 2, 3, 4 & 5.

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

Title 24 Part 3 California Electrical Code

Summary of Proposed Changes