First Revision No. 942-NFPA 99-2021 [Section No. 3.3.4]

3.3.149 ~~Alternate~~ Power Source<u>s</u> .

~~One or more generator sets, or battery systems where permitted, intended to provide power during the interruption of the normal electrical service; or the public utility electrical service intended to provide power during interruption of service normally provided by the generating facilities on the premises~~ <u>A system of one or more off-site or one or more on-site power generation or storage components intended to provide power to nonessential loads and the essential electrical system</u> . (ELS)

Submitter Information Verification

Committee: HEA-ELS

Submittal Date: Tue Jul 13 17:36:30 EDT 2021

Committee Statement

Committee Statement: This first revision recognizes there is no necessary distinction between the alternate power source and the normal power source. Additionally there is no definition for the term "normal power source".

Response Message: FR-942-NFPA 99-2021

<u>Public Input No. 310-NFPA 99-2021 [Section No. 3.3.4]</u>

First Revision No. 925-NFPA 99-2021 [Section No. 3.3.52]

3.3.52* Essential Electrical System.

~~A system comprised of alternate power sources and all connected distribution systems and ancillary equipment, designed~~ A distribution system designed to ensure continuity of electrical power to designated areas and functions of a health care facility ~~during disruption of normal power sources, and also to minimize disruption within the internal wiring system~~ upon loss of one of the on-site or off-site sources with reliability and capacity sufficient to provide effective facility operation consistent with the facility's emergency operations plan . (ELS)

Submitter Information Verification

Committee: HEA-ELS

Submittal Date: Tue Jul 13 11:07:51 EDT 2021

Committee Statement

Committee Statement: The revision clearly distinguishes sources from distribution systems.

Response Message: FR-925-NFPA 99-2021

Public Input No. 308-NFPA 99-2021 [Section No. 3.3.52]

First Revision No. 910-NFPA 99-2021 [Section No. 3.3.93]

3.3.92* Isolated Power System (IPS) .

A system comprising an isolation transformer or its equivalent, a line isolation monitor, and its ungrounded circuit conductors. (ELS)

A.3.3.92 Isolated Power System (IPS) .

See *NFPA 70*. (ELS)

Submitter Information Verification

Committee: HEA-ELS

Submittal Date: Mon Jul 12 13:48:49 EDT 2021

Committee Statement

Committee Statement: The definition title has been revised to include the acronym as it is used elsewhere in the standard.

Response Message: FR-910-NFPA 99-2021

First Revision No. 941-NFPA 99-2021 [New Section after 3.3.122]

3.3.122 Nonessential Electrical Loads.

Those electrical loads of a health care facility that do not require multiple power sources. (ELS)

Submitter Information Verification

Committee: HEA-ELS

Submittal Date: Tue Jul 13 17:29:42 EDT 2021

Committee Statement

Committee Statement: The new definition clearly distinguishes nonessential loads from normal power sources.

Response Message: FR-941-NFPA 99-2021

Public Input No. 309-NFPA 99-2021 [New Section after 3.3.52]

First Revision No. 943-NFPA 99-2021 [Section No. 6.2.4]

6.2.4 Location of ~~Essential~~ Electrical System Components.

~~**A.6.2.4**~~

~~Facilities in which the normal source of power is supplied by two or more separate central station–fed services experience greater than normal electrical service reliability than those with only a single feed. Such a dual source of normal power consists of two or more electrical services fed from separate generator sets or a utility distribution network that has multiple power input sources and is arranged to provide mechanical and electrical separation so that a fault between the facility and the generating sources is not likely to cause an interruption of more than one of the facility service feeders.~~

6.2.4.1

~~Essential electrical~~ Electrical system components shall be located to minimize interruptions caused by natural forces common to the area (e.g., storms, floods, earthquakes, or hazards created by adjoining structures or activities).

6.2.4.2

Installations of electrical ~~services~~ sources shall be located to reduce possible interruption of ~~normal~~ electrical ~~services~~ systems resulting from ~~similar causes as well as~~ natural forces and to reduce possible disruption of ~~normal~~ electrical ~~service~~ systems due to internal wiring and equipment failures.

6.2.4.3

Feeders and associated raceways serving essential electrical system transfer equipment shall be located ~~to provide~~ such that physical separation is provided between each of the electrical system feeders ~~of the alternate source and from the feeders of the normal electrical source~~ to prevent possible simultaneous interruption.

Submitter Information Verification

Committee: HEA-ELS

Submittal Date: Tue Jul 13 17:42:31 EDT 2021

Committee Statement

Committee Statement: The revision clarifies this requirement and expands the scope to include nonessential components. This change improves the overall reliability of the electrical system.

Response Message: FR-943-NFPA 99-2021

Public Input No. 311-NFPA 99-2021 [Section No. 6.2.4]

First Revision No. 944-NFPA 99-2021 [Section No. 6.3.1 [Excluding any Sub-Sections]]

Each health care appliance requiring ~~electrical line power~~ electrical power for operation shall be ~~supported by~~ supplied by one or more power sources ~~that provide power adequate for each service~~ as required for the particular system .

Submitter Information Verification

Committee: HEA-ELS

Submittal Date: Tue Jul 13 17:54:43 EDT 2021

Committee Statement

Committee Statement: The revision clarifies the requirement and removes an undefined term.

Response Message: FR-944-NFPA 99-2021

Public Input No. 313-NFPA 99-2021 [Section No. 6.3.1 [Excluding any Sub-Sections]]

First Revision No. 920-NFPA 99-2021 [Section No. 6.3.2.1]

6.3.2.1*

Distribution system arrangements shall be designed to minimize interruptions to the electrical systems due to internal failures by the use of ~~adequately~~ equipment rated ~~equipment~~ for the application .

Submitter Information Verification

Committee: HEA-ELS

Submittal Date: Mon Jul 12 15:37:35 EDT 2021

Committee Statement

Committee Statement: This action removes the ambiguity of the current requirement and provides more enforceable text.

Response Message: FR-920-NFPA 99-2021

Public Input No. 86-NFPA 99-2021 [Section No. 6.3.2.1]

First Revision No. 909-NFPA 99-2021 [Section No. 6.3.2.3.7]

6.3.2.3.7

The use of an isolated power system (IPS) shall be permitted as a protective means capable of limiting ground-fault current without power interruption. ~~When installed, such a power system shall conform to the requirements of 6.3.2.9~~ .

6.3.2.3.7.1

When installed, ~~such a power system~~ the IPS shall conform to the requirements of 6.3.2.9.

Submitter Information Verification

Committee: HEA-ELS

Submittal Date: Mon Jul 12 13:43:25 EDT 2021

Committee Statement

Committee Statement: The requirement is revised to include the acronym for isolated power system. The acronym (IPS) is being added to the definition of isolated power system in Chapter 3.

Response Message: FR-909-NFPA 99-2021

Public Input No. 10-NFPA 99-2020 [Section No. 6.3.2.3.7]

First Revision No. 917-NFPA 99-2021 [Section No. 6.3.2.4.1]

6.3.2.4.1

Normal branch circuits serving a patient bed location shall be ~~fed~~ supplied from not more than one normal branch-circuit distribution panel.

Submitter Information Verification

Committee: HEA-ELS

Submittal Date: Mon Jul 12 15:19:27 EDT 2021

Committee Statement

Committee Statement: The text is revised to use common terminology used in electrical standards.

Response Message: FR-917-NFPA 99-2021

Public Input No. 76-NFPA 99-2020 [Section No. 6.3.2.4]

First Revision No. 918-NFPA 99-2021 [Section No. 6.3.2.4.2]

6.3.2.4.2

Branch circuits serving a patient bed location shall be permitted to be ~~fed~~ supplied from more than one critical branch-circuit distribution panel.

Submitter Information Verification

Committee: HEA-ELS

Submittal Date: Mon Jul 12 15:24:36 EDT 2021

Committee Statement

Committee Statement: The committee action revises the text to use common terminology used in electrical standards. This text was recommended by Public Input No. 76.

Response Message: FR-918-NFPA 99-2021

First Revision No. 919-NFPA 99-2021 [Section No. 6.3.2.4.4]

6.3.2.4.4

Overcurrent protective devices serving Category 1 and Category 2 spaces shall not be ~~permitted to be~~ located in public access spaces.

Submitter Information Verification

Committee: HEA-ELS
Submittal Date: Mon Jul 12 15:27:18 EDT 2021

Committee Statement

Committee Statement: The revision removes redundant text in a mandatory requirement.
Response Message: FR-919-NFPA 99-2021

First Revision No. 913-NFPA 99-2021 [Section No. 6.3.2.4.5]

6.3.2.4.5

~~Where used in locations such as in Category 1 spaces, isolated~~ Isolated power panels shall be permitted ~~in those locations~~ to be located in Category 1 spaces .

Submitter Information Verification

Committee: HEA-ELS

Submittal Date: Mon Jul 12 14:10:03 EDT 2021

Committee Statement

Committee Statement: Existing text revised for clarity with no technical changes. As presently written the language is confusing.

Response Message: FR-913-NFPA 99-2021 The revised text clarifies the intent of this permissive rule.

Public Input No. 14-NFPA 99-2020 [Section No. 6.3.2.4.5]

First Revision No. 911-NFPA 99-2021 [Section No. 6.3.2.4.6]

6.3.2.4.6

Low-voltage wiring shall comply with either of the following:

(1) Fixed systems of 30 V (dc or ac rms) or less shall be permitted to be ungrounded~~, provided that~~ if the insulation between each ungrounded conductor and the primary circuit, which is supplied from a conventionally grounded distribution system, is the same protection as required for the primary voltage.

(2) A grounded low-voltage system shall be permitted~~, provided that~~ if load currents are not carried ~~in the~~ on the equipment grounding conductors.

Submitter Information Verification

Committee: HEA-ELS

Submittal Date: Mon Jul 12 14:01:34 EDT 2021

Committee Statement

Committee Statement: The text is revised to include the term "equipment" and changing "in" to "on" is more accurate.

Response Message: FR-911-NFPA 99-2021

Public Input No. 11-NFPA 99-2020 [Section No. 6.3.2.4.6]

First Revision No. 938-NFPA 99-2021 [Section No. 6.3.2.5.1.1]

6.3.2.5.1.1 Equipment Grounding Circuitry Integrity.

~~Grounding circuits and conductors in patient care spaces~~ Equipment grounding and bonding conductors and patient care vicinity grounding and bonding conductors shall be installed ~~in~~ such ~~a way~~ that the continuity of ~~other parts of those circuits~~ the system cannot be interrupted nor the resistance raised above an acceptable level by the installation, removal, ~~and~~ or replacement of any installed device or end use equipment~~, including power receptacles~~ .

Submitter Information Verification

Committee: HEA-ELS

Submittal Date: Tue Jul 13 14:59:56 EDT 2021

Committee Statement

Committee Statement: The revision adds equipment grounding conductors to further clarify the requirement.

Response Message: FR-938-NFPA 99-2021

Public Input No. 93-NFPA 99-2021 [Section No. 6.3.2.5.1.1]

First Revision No. 912-NFPA 99-2021 [Section No. 6.3.2.5.1.3]

6.3.2.5.1.3 Separate Equipment Grounding Conductor.

When existing construction does not have a separate equipment grounding conductor, the continued use of the system shall be permitted~~, provided that~~ if it meets the performance requirements in 6.3.3.1.

Submitter Information Verification

Committee: HEA-ELS

Submittal Date: Mon Jul 12 14:04:52 EDT 2021

Committee Statement

Committee Statement: The requirement is revised to include the term "equipment".

Response Message: FR-912-NFPA 99-2021 The requirement is revised to include the term "equipment".

Public Input No. 12-NFPA 99-2020 [Section No. 6.3.2.5.1.3]

First Revision No. 924-NFPA 99-2021 [Section No. 6.3.2.8.5]

6.3.2.8.5 Personnel Protection.

~~If used, ground~~ Ground -fault circuit interrupters (GFCIs) shall be listed.

Submitter Information Verification

Committee: HEA-ELS

Submittal Date: Mon Jul 12 20:11:38 EDT 2021

Committee Statement

Committee Statement: The revision aligns with requirements in NFPA 70 for ground-fault circuit interrupters.

Response Message: FR-924-NFPA 99-2021

Public Input No. 15-NFPA 99-2020 [Section No. 6.3.2.8.5]

First Revision No. 947-NFPA 99-2021 [Section No. 6.7.1.1 [Excluding any Sub-Sections]]

~~Dual sources of normal power shall not constitute an alternate power source as described in this chapter~~ Essential electrical system loads shall be supplied by a minimum of two independent sources or sets of sources and sets of feeders designed to ensure sufficient reliability to provide effective facility operation consistent with the facility's emergency operations plan .

Submitter Information Verification

Committee: HEA-ELS

Submittal Date: Tue Jul 13 18:12:45 EDT 2021

Committee Statement

Committee Statement: This revision is necessary to facilitate microgrid implementation while maintaining redundant pathways and sources.

Response Message: FR-947-NFPA 99-2021

Public Input No. 318-NFPA 99-2021 [Section No. 6.7.1.1 [Excluding any Sub-Sections]]

First Revision No. 948-NFPA 99-2021 [Section No. 6.7.1.1.2]

6.7.1.1.2

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~~ two independent sources or sets of sources .

6.7.1.1.2.1

At least one source shall be on-site and sized to supply the entire essential electrical system.

6.7.1.1.2.2

The additional source(s) shall be permitted to be either on-site or off-site.

Submitter Information Verification

Committee: HEA-ELS

Submittal Date: Tue Jul 13 18:15:14 EDT 2021

Committee Statement

Committee Statement: This revision removes the term “normal” and clarifies that one source for the essential electrical system must be an on-site source.

Response Message: FR-948-NFPA 99-2021

Public Input No. 319-NFPA 99-2021 [Section No. 6.7.1.1.2]

First Revision No. 949-NFPA 99-2021 [Section No. 6.7.1.1.3]

~~6.7.1.1.3~~

~~Where the normal source of power consists of generating units on the premises, the alternate source shall be either another generating set or an external utility service.~~

Submitter Information Verification

Committee: HEA-ELS

Submittal Date: Tue Jul 13 18:19:11 EDT 2021

Committee Statement

Committee Statement: This revision removes a requirement that is with Section 6.7.1.1.2.

Response Message: FR-949-NFPA 99-2021

Public Input No. 320-NFPA 99-2021 [Section No. 6.7.1.1.3]

First Revision No. 945-NFPA 99-2021 [Section No. 6.7.1.2.1]

6.7.1.2.1* Power Source.

Type 1 and Type 2 essential electrical system power sources shall be classified as Type 10, Class X, Level 1 ~~generator sets per NFPA 110.~~ sources as defined in Table 6.11.1(a)

Submitter Information Verification

Committee: HEA-ELS

Submittal Date: Tue Jul 13 17:58:02 EDT 2021

Committee Statement

Committee Statement: The revision removes the reference to NFPA 110 that was inadvertently left in the requirement during the previous revision cycle.

Response Message: FR-945-NFPA 99-2021

Public Input No. 321-NFPA 99-2021 [Section No. 6.7.1.2.1]

Public Input No. 266-NFPA 99-2021 [Section No. 6.7.1.2.1]

Public Input No. 239-NFPA 99-2021 [Section No. 6.7.1.2.1]

First Revision No. 946-NFPA 99-2021 [Section No. 6.7.1.2.2.1]

6.7.1.2.2.1

The ~~alternate~~ power source supplying the essential electrical system shall be either reserved exclusively for such service or ~~normally~~ used for other purposes of peak demand control, internal voltage control, load relief for the external utility, cogeneration, or other approved uses.

Submitter Information Verification

Committee: HEA-ELS

Submittal Date: Tue Jul 13 18:03:19 EDT 2021

Committee Statement

Committee Statement: The revision eliminates the term “alternate” prior to power source.

Response Message: FR-946-NFPA 99-2021

Public Input No. 323-NFPA 99-2021 [Section No. 6.7.1.2.2.1]

First Revision No. 950-NFPA 99-2021 [Section No. 6.7.1.2.2.2]

6.7.1.2.2.2*

~~An essential electrical system(s) shall~~ Each independent source or sets of sources supplying the essential electrical system shall be designed to meet the maximum demand likely to be produced by the connected load and be consistent with the facility's emergency operations plan ~~with any single power source of the system out of service~~ .

Submitter Information Verification

Committee: HEA-ELS

Submittal Date: Tue Jul 13 18:21:55 EDT 2021

Committee Statement

Committee Statement: The revision clarifies that the essential system needs to have two or more sources in order to ensure adequate capacity if there is a failure of one or more of the sources.

Response Message: FR-950-NFPA 99-2021

Public Input No. 324-NFPA 99-2021 [Section No. 6.7.1.2.2.2]

First Revision No. 951-NFPA 99-2021 [Section No. 6.7.1.2.2.3(A)]

(A)

~~Optional loads~~ Sources supplying the essential electrical system shall be permitted to ~~be served by the essential electrical system generating equipment~~ supply optional loads .

Submitter Information Verification

Committee: HEA-ELS
Submittal Date: Tue Jul 13 18:24:59 EDT 2021

Committee Statement

Committee Statement: The term “essential electrical system generating equipment” is not defined.
Response Message: FR-951-NFPA 99-2021

Public Input No. 327-NFPA 99-2021 [Section No. 6.7.1.2.2.3(A)]

First Revision No. 952-NFPA 99-2021 [Section No. 6.7.1.2.2.3(C)]

~~(C)~~

~~Use of the generating equipment to serve optional loads shall not constitute "other purposes" as described in 6.7.1.2.2.1 and, therefore, shall not require multiple generator sets.~~

Submitter Information Verification

Committee: HEA-ELS

Submittal Date: Tue Jul 13 18:27:58 EDT 2021

Committee Statement

Committee Statement: This revision removes language that is not longer needed based on revisions to 6.7.1.2.2.

Response Message: FR-952-NFPA 99-2021

Public Input No. 328-NFPA 99-2021 [Section No. 6.7.1.2.2.3(C)]

First Revision No. 927-NFPA 99-2021 [New Section after 6.7.1.2.2.4]

6.7.1.2.2.5 Temporary Source of Power for Maintenance or Repair of the Alternate Source of Power.

(A)

If the essential electrical system relies on a single alternate source of power that will be disabled for maintenance or repair, it shall include a permanent switching means to connect a portable or temporary alternate source of power that is available for the duration of the maintenance or repair and that complies with the following requirements:

(1) The connection to the portable or temporary alternate source of power shall not require modification of the permanent system wiring.

(2) Transfer of power between the normal power source and the emergency power source shall be in accordance with 6.7.2.1.3 .

(3) The connection point for the portable or temporary alternate source shall be marked with the phase rotation and system bonding requirements.

(4) Mechanical or electrical interlocking shall prevent inadvertent interconnection of power sources.

(5) The switching means shall include a contact point that annunciates at a location remote from the generator or at another facility monitoring system to indicate that the permanent emergency source is disconnected from the emergency system.

(B)

Using manual switching to switch from the permanent source of power to the portable or temporary alternate source of power and using the switching means for connection of a load bank shall be permitted.

(C)

The permanent switching means to connect a portable or temporary alternate source of power for the duration of maintenance or repair shall not be required where any of the following conditions exists:

(1) All processes that rely on the essential electrical system source are capable of being disabled during maintenance or repair of the emergency source of power.

(2) The building or structure is unoccupied and fire protection systems are fully functional and do not require an alternate power source.

(3) Other temporary means can be substituted for the essential electrical system.

Submitter Information Verification

Committee: HEA-ELS

Submittal Date: Tue Jul 13 13:10:12 EDT 2021

Committee Statement

Committee Statement: The proposed revision is part of the output from the HEA-ELS Task Group formed to review the correlation issues related to the Life Safety Branch of the EES. The existing approach has the performance, maintenance, and testing requirements for this branch of the EES divided between NFPA 99 and Article 700 - Emergency Systems of the NEC.

This continues to create confusion for Code users and correlation issues for AHJ's. The Task Group recommendations are to consolidate all performance, maintenance, and testing requirements for the entire EES into NFPA 99 to correlate with the scope of that document. Installation requirements related to health care facilities will remain in the NEC. This consolidation is accomplished through a series of related public proposals that remove the existing reference to Art. 700 for the Life Safety Branch and adds any performance, maintenance, and testing requirements from Article 700 that are currently applicable to this branch.

From 700.3 (F) - Revised to apply to "essential electrical system" rather than "emergency system". Changed reference in (2) to 6.7.2.1.2 Automatic Transfer Switches which is the only currently acceptable means for switching between normal and alternate sources.

Response Message: FR-927-NFPA 99-2021

Public Input No. 223-NFPA 99-2021 [New Section after 6.7.1.2.2.4]

First Revision No. 953-NFPA 99-2021 [Section No. 6.7.1.2.4]

6.7.1.2.4* Capacity and Rating.

The ~~generator set(s) shall~~ essential electrical system source or sets of sources shall have the capacity and rating to meet the maximum demand likely to be produced by the connected load ~~of the essential electrical system(s)~~ and be consistent with the facility's emergency operations plan.

Submitter Information Verification

Committee: HEA-ELS

Submittal Date: Tue Jul 13 18:30:24 EDT 2021

Committee Statement

Committee Statement: The revision recognizes that there are sources other than generators that can be used to supply the essential electrical system.

Response Message: FR-953-NFPA 99-2021

Public Input No. 329-NFPA 99-2021 [Section No. 6.7.1.2.4]

First Revision No. 954-NFPA 99-2021 [Section No. 6.7.1.2.5]

6.7.1.2.5 Load Pickup.

The ~~energy converters~~ source or set of sources shall have the required capacity and response to pick up and carry the load within the time specified in ~~Table 4.1(b)~~ Table 6.11.1(b) ~~of~~ ~~NFPA 110~~ ~~after loss of primary power~~ upon failure of the other source or set of sources .

Submitter Information Verification

Committee: HEA-ELS

Submittal Date: Tue Jul 13 18:35:11 EDT 2021

Committee Statement

Committee Statement: The revision clarifies the requirement and removes an unnecessary reference to NFPA 110 as the table covering power restoration time is now contained in Chapter 6 of the Code.

Response Message: FR-954-NFPA 99-2021

Public Input No. 331-NFPA 99-2021 [Section No. 6.7.1.2.5]

First Revision No. 915-NFPA 99-2021 [Section No. 6.7.1.2.7.2(C)]

(C)

~~For Level 1 EPS, at a minimum, local~~ Local annunciation and either facility or network remote annunciation shall be provided for Level 1 EPS .

Submitter Information Verification

Committee: HEA-ELS
Submittal Date: Mon Jul 12 14:40:37 EDT 2021

Committee Statement

Committee Statement: The requirement is revised to remove superfluous text.
Response Message: FR-915-NFPA 99-2021

Public Input No. 17-NFPA 99-2020 [Section No. 6.7.1.2.7.2(C)]

First Revision No. 916-NFPA 99-2021 [Section No. 6.7.1.2.7.2(G)]

(G)

Individual alarm indication to annunciate any of the conditions listed in Table 6.7.1.3.8.2 shall have the following characteristics:

(1) ~~It shall be~~ Be battery powered~~.~~

(2) ~~It shall be~~ Be visually indicated~~.~~

(3) ~~It shall have additional~~ Have additional contacts or circuits for a common audible alarm that signals locally and remotely when any of the itemized conditions occurs~~.~~

(4) ~~It shall have a lamp test switch(es)~~ Have switches to test the operation of all ~~alarm lamps~~ visual alarm indicators ~~.~~

Submitter Information Verification

Committee: HEA-ELS

Submittal Date: Mon Jul 12 14:42:01 EDT 2021

Committee Statement

Committee Statement: The revision removes the redundancy created by using the term "shall" in the list items. The charging statement includes the necessary mandatory language. Additional changes are made for clarity and to recognize that LEDs are used for alarm indication in modern equipment.

Response Message: FR-916-NFPA 99-2021

Public Input No. 18-NFPA 99-2020 [Section No. 6.7.1.2.7.2(G)]

First Revision No. 939-NFPA 99-2021 [Section No. 6.7.1.4]

~~**6.7.1.4** Battery.~~

~~Battery systems shall meet all requirements of NFPA 111 .~~

Submitter Information Verification

Committee: HEA-ELS

Submittal Date: Tue Jul 13 16:46:13 EDT 2021

Committee Statement

Committee Statement: This revision removes this section to align with the changes made in the first revision to Section 6.7.1.2.1.

Response Message: FR-939-NFPA 99-2021

Public Input No. 240-NFPA 99-2021 [Section No. 6.7.1.4]

First Revision No. 940-NFPA 99-2021 [Section No. 6.7.1.5]

~~**6.7.1.5** Fuel Cell Systems.~~

~~**6.7.1.5.1**~~

~~Fuel cell systems shall be permitted to serve as the alternate power source for all or part of an essential electrical system.~~

~~**6.7.1.5.2**~~

~~Installation shall comply with NFPA 853 .~~

Submitter Information Verification

Committee: HEA-ELS

Submittal Date: Tue Jul 13 16:50:35 EDT 2021

Committee Statement

Committee Statement: This change aligns with first revision made to Section 6.7.2.1 that addresses all power sources.

Response Message: FR-940-NFPA 99-2021

Public Input No. 241-NFPA 99-2021 [Section No. 6.7.1.5]

First Revision No. 933-NFPA 99-2021 [New Section after 6.7.2.1.1]

6.7.2.1.2 Ground-Fault Protection of Equipment, Essential Electrical System.

6.7.2.1.2.1

Ground-fault protection of equipment with automatic disconnecting means shall not be required on alternate power supply sources, between alternate power supply sources and any essential electrical system transfer switch, or on the load side of any essential electrical system transfer switch.

6.7.2.1.2.2

Ground-fault indication without automatic disconnection shall be provided at any alternate power source.

Submitter Information Verification

Committee: HEA-ELS

Submittal Date: Tue Jul 13 13:41:58 EDT 2021

Committee Statement

Committee Statement: The proposed revision is part of the output from the HEA-ELS Task Group formed to review the correlation issues related to the Life Safety Branch of the EES. The existing approach has the performance, maintenance, and testing requirements for this branch of the EES divided between NFPA 99 and Article 700 - Emergency Systems of the NEC. This continues to create confusion for Code users and correlation issues for AHJ's. The Task Group recommendations are to consolidate all performance, maintenance, and testing requirements for the entire EES into NFPA 99 to correlate with the scope of that document. Installation requirements related to health care facilities will remain in the NEC. This consolidation is accomplished through a series of related public proposals that remove the existing reference to Art. 700 for the Life Safety Branch and adds any performance, maintenance, and testing requirements from Article 700 that are currently applicable to this branch.

From 700.31 and also to address the current issue where GFPE could be required on the alternate power supply and distribution feeders to the essential electrical system transfer switches. Currently, NFPA 99 does not include requirements or statements about GF requirements for the Essential Electrical System. Proper application of GF protection is imperative to the reliable performance of the EES under fault conditions. This PI attempts to clarify this for code users and AHJ's.

Overcurrent protective devices on the supply side of any EES transfer switch back to the alternate power supply are all Feeder overcurrent protective devices. Therefore, if any are 1000A or greater, 150v or greater to ground, GFPE is required.

Currently, users must refer to Art. 215 Feeders and Art. 517 Health Care Facilities of the NEC for guidance on GF requirements for the Essential Electrical System of the facility.

215.10 Feeders – requires GF for 1000Amp and greater, 150volt or greater to ground feeders. (There is an Exception if already provided on the supply side of the feeder.)

517.17 (B) Requires a second level of GFPE if required by 215.10. Additional levels of GFPE on the load side of an EES transfer switch.

Response Message: FR-933-NFPA 99-2021

Public Input No. 256-NFPA 99-2021 [New Section after 6.7.2.1.1]

First Revision No. 960-NFPA 99-2021 [Section No. 6.7.2.2.3.3]

6.7.2.2.3.3

~~Where a single transfer switch is used, as permitted in 6.7.2.2.3.2 , division into separate branches shall not be required.~~

(A)

Where a single transfer switch is used~~,~~ as permitted in 6.7.2.2.3.2, ~~division into separate branches shall not be required.~~ the following requirements shall apply:

(1) The single transfer switch shall include a bypass-isolation switch to facilitate maintenance of the transfer switch without jeopardizing continuity of power to the connected load.

(2) Division into separate branches shall not be required.

(B)

A bypass-isolation switch in accordance with 6.7.2.2.3.3(A) shall not be required where any of the following conditions exist:

(1) All processes that rely on the essential electrical system are capable of being disabled during maintenance or repair activities.

(2) The building or structure is unoccupied and fire protection systems are fully functional and do not require an alternate power source.

(3) Other temporary means are permitted to be substituted for the essential electrical system.

Submitter Information Verification

Committee: HEA-ELS

Submittal Date: Wed Jul 14 10:57:03 EDT 2021

Committee Statement

Committee Statement: The revision provides an important feature that allows for maintenance where a facility is served by a single transfer switch.

Response Message: FR-960-NFPA 99-2021

Public Input No. 260-NFPA 99-2021 [Section No. 6.7.2.2.3.3]

First Revision No. 937-NFPA 99-2021 [New Section after 6.7.3.3]

6.7.3.4 Generator Control Wiring.

Control conductors installed between the transfer switch and the emergency generator(s) shall be kept entirely independent of all other wiring.

6.7.3.4.1

The integrity of the generator remote start circuit shall be monitored for broken, disconnected, or shorted wires.

6.7.3.4.2

Loss of integrity shall start the generator(s).

Submitter Information Verification

Committee: HEA-ELS

Submittal Date: Tue Jul 13 14:32:02 EDT 2021

Committee Statement

Committee Statement: The revision is part of the output from the HEA-ELS Task Group formed to review the correlation issues related to the Life Safety Branch of the EES. The existing approach has the performance, maintenance, and testing requirements for this branch of the EES divided between NFPA 99 and Article 700 - Emergency Systems of the NEC. This continues to create confusion for Code users and correlation issues for AHJ's. The Task Group recommendations are to consolidate all performance, maintenance, and testing requirements for the entire EES into NFPA 99 to correlate with the scope of that document. Installation requirements related to health care facilities will remain in the NEC. This consolidation is accomplished through a series of related public proposals that remove the existing reference to Art. 700 for the Life Safety Branch and adds any performance, maintenance, and testing requirements from Article 700 that are currently applicable to this branch.

The term "transfer equipment" was changed to "transfer switch" for consistency within the section. Reference to 700.10(D)(2) which required 2-hour fire rating unless approved automatic fire protection method (sprinklers) which are already required.

Response Message: FR-937-NFPA 99-2021

Public Input No. 243-NFPA 99-2021 [New Section after 6.7.3.3]

First Revision No. 922-NFPA 99-2021 [Section No. 6.7.3.4]

6.7.3.5

Upon connection of the alternate power source, the loads comprising the life safety and critical branches shall be automatically re-energized. ~~The load comprising the equipment system shall be connected either automatically after a time delay, as described in 6.7.2.1.3.6 , or nonautomatically and in such a sequential manner as not to overload the generator.~~

6.7.3.5.1

The load comprising the equipment ~~system~~ branch shall be connected either automatically after a time delay, as described in 6.7.2.1.3.6, or nonautomatically and in ~~such~~ a sequential manner ~~as not to~~ that will not overload the generator.

Submitter Information Verification

Committee: HEA-ELS

Submittal Date: Mon Jul 12 16:08:56 EDT 2021

Committee Statement

Committee Statement: The requirement is revised to use a defined term.

Response Message: FR-922-NFPA 99-2021

Public Input No. 91-NFPA 99-2021 [Section No. 6.7.3.4]

First Revision No. 961-NFPA 99-2021 [New Section after 6.7.4.1.1]

6.7.4.1.1.6

When a transfer switch is bypassed to facilitate maintenance, one of the following conditions shall apply:

(1) The bypass switch automatically transfers the load between power sources upon loss of the connected power source.

(2) The bypass switch remains actively supervised by a qualified person who can manually initiate a transfer of the load between power sources.

6.7.4.1.1.7

Where bypass isolation switches are used, inadvertent parallel operation shall be avoided.

Submitter Information Verification

Committee: HEA-ELS

Submittal Date: Wed Jul 14 11:11:47 EDT 2021

Committee Statement

Committee Statement: The revision incorporates safety protocols when a transfer switch is in the bypass mode. The committee has revised the recommended text for added clarity.

Response Message: FR-961-NFPA 99-2021

Public Input No. 262-NFPA 99-2021 [New Section after 6.7.4.1.1]

First Revision No. 923-NFPA 99-2021 [Section No. 6.7.4.1.2.1]

~~6.7.4.1.2.1*~~ ~~Circuit Breakers.~~

~~Main and feeder circuit breakers shall be inspected annually and maintained in accordance with the manufacturer's instructions and industry standards.~~

~~A.6.7.4.1.2.1~~

~~Main and feeder circuit breakers should be periodically tested under simulated overload trip conditions to ensure reliability.~~

Submitter Information Verification

Committee: HEA-ELS

Submittal Date: Mon Jul 12 16:36:33 EDT 2021

Committee Statement

Committee Statement: Inspection, testing, and maintenance requirements in this section conflict with requirements in Section 6.9. Section 6.9 is intended to consolidate all inspection, testing, and maintenance requirements into a single location.

Response Message: FR-923-NFPA 99-2021

First Revision No. 935-NFPA 99-2021 [Section No. 6.7.5.1.2.1]

~~**6.7.5.1.2.1**~~

~~For the purposes of this code, the provisions for emergency systems in Article 700 of *NFPA 70* shall be applied only to the life safety branch.~~

Submitter Information Verification

Committee: HEA-ELS

Submittal Date: Tue Jul 13 13:59:32 EDT 2021

Committee Statement

Committee Statement: The revision is part of the output from the HEA-ELS Task Group formed to review the correlation issues related to the Life Safety Branch of the EES. The existing approach has the performance, maintenance, and testing requirements for this branch of the EES divided between NFPA 99 and Article 700 - Emergency Systems of the NEC. This continues to create confusion for Code users and correlation issues for AHJ's. The Task Group recommendations are to consolidate all performance, maintenance, and testing requirements for the entire EES into NFPA 99 to correlate with the scope of that document. Installation requirements related to health care facilities will remain in the NEC. This consolidation is accomplished through a series of related public proposals that remove the existing reference to Art. 700 for the Life Safety Branch and adds any performance, maintenance, and testing requirements from Article 700 that are currently applicable to this branch.

Response Message: FR-935-NFPA 99-2021

First Revision No. 934-NFPA 99-2021 [Section No. 6.7.5.1.2.2]

~~6.7.5.1.2.2~~

~~The following portions of Article 700 of *NFPA 70* shall be amended as follows:~~

~~700.4 shall not apply.~~

~~700.10(D)(1) shall not apply.~~

~~700.17 shall be replaced with the following: Branch circuits that supply emergency lighting shall be installed to provide service from a source complying with 700.12 when the normal supply for lighting is interrupted or where single circuits supply luminaires containing secondary batteries.~~

~~700.32 shall not apply.~~

Submitter Information Verification

Committee: HEA-ELS

Submittal Date: Tue Jul 13 13:56:16 EDT 2021

Committee Statement

Committee Statement: The revision is part of the output from the HEA-ELS Task Group formed to review the correlation issues related to the Life Safety Branch of the EES. The existing approach has the performance, maintenance, and testing requirements for this branch of the EES divided between NFPA 99 and Article 700 - Emergency Systems of the NEC. This continues to create confusion for Code users and correlation issues for AHJ's. The Task Group recommendations are to consolidate all performance, maintenance, and testing requirements for the entire EES into NFPA 99 to correlate with the scope of that document. Installation requirements related to health care facilities will remain in the NEC. This consolidation is accomplished through a series of related public proposals that remove the existing reference to Art. 700 for the Life Safety Branch and adds any performance, maintenance, and testing requirements from Article 700 that are currently applicable to this branch.

Response Message: FR-934-NFPA 99-2021

Public Input No. 220-NFPA 99-2021 [Section No. 6.7.5.1.2.2]

First Revision No. 928-NFPA 99-2021 [New Section after 6.7.5.1.2.7]

6.7.5.1.2.6 Branch Circuits for Life Safety Lighting.

Branch circuits supplying life safety lighting shall be served from a source in compliance with 6.7.1 when the normal supply for lighting is interrupted or where single circuits supply luminaires containing secondary batteries.

Submitter Information Verification

Committee: HEA-ELS

Submittal Date: Tue Jul 13 13:22:31 EDT 2021

Committee Statement

Committee Statement: The proposed revision is part of the output from the HEA-ELS Task Group formed to review the correlation issues related to the Life Safety Branch of the EES. The existing approach has the performance, maintenance, and testing requirements for this branch of the EES divided between NFPA 99 and Article 700 - Emergency Systems of the NEC. This continues to create confusion for Code users and correlation issues for AHJ's. The Task Group recommendations are to consolidate all performance, maintenance, and testing requirements for the entire EES into NFPA 99 to correlate with the scope of that document. Installation requirements related to health care facilities will remain in the NEC. This consolidation is accomplished through a series of related public proposals that remove the existing reference to Art. 700 for the Life Safety Branch and adds any performance, maintenance, and testing requirements from Article 700 that are currently applicable to this branch.

From 700.17 - Changed verbiage from “installed to provide service from” to “served from”. 700.12 Reference changed to 6.7.1 Sources.

The TC believe this may be redundant and unnecessary since it is under the EES which fully prescribes source requirements.

Response Message: FR-928-NFPA 99-2021

Public Input No. 244-NFPA 99-2021 [New Section after 6.7.5.1.2.7]

First Revision No. 929-NFPA 99-2021 [New Section after 6.7.5.1.2.7]

6.7.5.1.2.7 Life Safety Lighting Circuit Switches.

Life safety lighting circuit switches shall meet the following requirements:

(1) The switch(es) for the life safety lighting circuits shall be arranged so that only authorized persons have control of the life safety lighting switch(es) unless one of the following conditions are met:

(a) Where two or more single-throw switches are connected in parallel to control a single circuit, at least one of these switches is accessible only to authorized persons.

(b) Additional switches are included that act only to put life safety lights into operation, but not to disconnect them.

(2) Switches connected in series or 3- and 4-way switches shall not be used.

(3) All manual switches for controlling life safety lighting shall meet the following requirements:

(a) The manual switches shall be in locations convenient to authorized persons responsible for their actuation unless there are multiple switches provided.

(b) One of the switches shall be permitted to be located so that it can only energize, but not de-energize, the circuit.

Submitter Information Verification

Committee: HEA-ELS

Submittal Date: Tue Jul 13 13:27:39 EDT 2021

Committee Statement

Committee Statement: The proposed revision is part of the output from the HEA-ELS Task Group formed to review the correlation issues related to the Life Safety Branch of the EES. The existing approach has the performance, maintenance, and testing requirements for this branch of the EES divided between NFPA 99 and Article 700 - Emergency Systems of the NEC. This continues to create confusion for Code users and correlation issues for AHJ's. The Task Group recommendations are to consolidate all performance, maintenance, and testing requirements for the entire EES into NFPA 99 to correlate with the scope of that document. Installation requirements related to health care facilities will remain in the NEC. This consolidation is accomplished through a series of related public proposals that remove the existing reference to Art. 700 for the Life Safety Branch and adds any performance, maintenance, and testing requirements from Article 700 that are currently applicable to this branch.

From 700.20 and 700.21. Combined into a single section. Attempted to adapt to correct NFPA 99 style.

Response Message: FR-929-NFPA 99-2021

Public Input No. 246-NFPA 99-2021 [New Section after 6.7.5.1.2.7]

First Revision No. 930-NFPA 99-2021 [New Section after 6.7.5.1.2.7]

6.7.5.1.2.8 Life Safety Lighting Dimmer and Relay Systems.

A dimmer or relay system containing more than one dimmer or relay and listed for emergency use shall be permitted to be used as a control device for energizing life safety lighting circuits.

(A)

Upon failure of normal power, the dimmer or relay system shall be permitted to selectively energize only those branch circuits necessary to provide minimum required illumination using a control bypass function.

(B)

Where the dimmer or relay system is fed by an upstream transfer switch, normal power sensing for this function shall be permitted to be from a normal-only power source upstream of the transfer switch.

Submitter Information Verification

Committee: HEA-ELS

Submittal Date: Tue Jul 13 13:34:27 EDT 2021

Committee Statement

Committee Statement: The revision is part of the output from the HEA-ELS Task Group formed to review the correlation issues related to the Life Safety Branch of the EES. The existing approach has the performance, maintenance, and testing requirements for this branch of the EES divided between NFPA 99 and Article 700 - Emergency Systems of the NEC. This continues to create confusion for Code users and correlation issues for AHJ's. The Task Group recommendations are to consolidate all performance, maintenance, and testing requirements for the entire EES into NFPA 99 to correlate with the scope of that document. Installation requirements related to health care facilities will remain in the NEC. This consolidation is accomplished through a series of related public proposals that remove the existing reference to Art. 700 for the Life Safety Branch and adds any performance, maintenance, and testing requirements from Article 700 that are currently applicable to this branch.

From 700.23 - Changed “emergency lighting” to “life safety lighting”. Changed “listed for use in emergency systems” to “listed for emergency use”. Removed last sentence as it is installation related.

Response Message: FR-930-NFPA 99-2021

Public Input No. 249-NFPA 99-2021 [New Section after 6.7.5.1.2.7]

First Revision No. 931-NFPA 99-2021 [New Section after 6.7.5.1.2.7]

6.7.5.1.2.9 Directly Controlled Life Safety Luminaires.

Where life safety illumination is provided by a directly controlled life safety luminaire(s) that responds to an external control input, or loss thereof, to bypass normal control upon loss of normal power, the luminaire(s) and external bypass control(s) shall be individually listed for emergency use.

Submitter Information Verification

Committee: HEA-ELS

Submittal Date: Tue Jul 13 13:37:15 EDT 2021

Committee Statement

Committee Statement: The revision is part of the output from the HEA-ELS Task Group formed to review the correlation issues related to the Life Safety Branch of the EES. The existing approach has the performance, maintenance, and testing requirements for this branch of the EES divided between NFPA 99 and Article 700 - Emergency Systems of the NEC. This continues to create confusion for Code users and correlation issues for AHJ's. The Task Group recommendations are to consolidate all performance, maintenance, and testing requirements for the entire EES into NFPA 99 to correlate with the scope of that document. Installation requirements related to health care facilities will remain in the NEC. This consolidation is accomplished through a series of related public proposals that remove the existing reference to Art. 700 for the Life Safety Branch and adds any performance, maintenance, and testing requirements from Article 700 that are currently applicable to this branch.

From 700.24 - Changed “emergency” to “life safety”. Changed “listed for use in emergency systems” to “listed for emergency use”.

Response Message: FR-931-NFPA 99-2021

Public Input No. 251-NFPA 99-2021 [New Section after 6.7.5.1.2.7]

First Revision No. 932-NFPA 99-2021 [New Section after 6.7.5.1.2.7]

6.7.5.1.2.10 Life Safety Lighting Automatic Load Control Relay.

(A)

If a life safety lighting load is automatically energized upon loss of the normal supply, a listed automatic load control relay shall be permitted to energize the load.

(B)

The load control relay shall not be used as transfer equipment.

Submitter Information Verification

Committee: HEA-ELS

Submittal Date: Tue Jul 13 13:39:44 EDT 2021

Committee Statement

Committee Statement: The revision is part of the output from the HEA-ELS Task Group formed to review the correlation issues related to the Life Safety Branch of the EES. The existing approach has the performance, maintenance, and testing requirements for this branch of the EES divided between NFPA 99 and Article 700 - Emergency Systems of the NEC. This continues to create confusion for Code users and correlation issues for AHJ's. The Task Group recommendations are to consolidate all performance, maintenance, and testing requirements for the entire EES into NFPA 99 to correlate with the scope of that document. Installation requirements related to health care facilities will remain in the NEC. This consolidation is accomplished through a series of related public proposals that remove the existing reference to Art. 700 for the Life Safety Branch and adds any performance, maintenance, and testing requirements from Article 700 that are currently applicable to this branch.

From 700.26 - Changed "emergency" to "life safety".

Response Message: FR-932-NFPA 99-2021

Public Input No. 254-NFPA 99-2021 [New Section after 6.7.5.1.2.7]

First Revision No. 908-NFPA 99-2021 [Section No. 6.7.5.1.4.4]

6.7.5.1.4.4* 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 *(also see A.6.7.5.1.4.3)*:

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

(2)* Heating of general patient rooms during disruption of the normal source shall not be required under any of the following conditions:

(a) Outside design temperature is ~~lower~~ higher than −6.7°C (+20°F)

(b) Outside design temperature is lower than −6.7°C (+20°F), where a selected room(s) is provided for the needs of all confined patients [then only such room(s) need be heated]

(3) Elevator(s) selected to provide service to patient, surgical, obstetrical, and ground floors during interruption of normal power

(4) Supply, return, and exhaust ventilating systems for surgical and obstetrical delivery suites, ; intensive care, and coronary care spaces , ; nurseries, ; and emergency treatment spaces

(5) Hyperbaric facilities

(6) Hypobaric facilities

(7) Autoclaving equipment, which is permitted to be arranged for either automatic or manual connection to the alternate source

(8) Controls for equipment listed in 6.7.5.1.3

(9)* Other selected equipment

Submitter Information Verification

Committee: HEA-ELS

Submittal Date: Mon Jul 12 12:50:59 EDT 2021

Committee Statement

Committee Statement: The revision corrects "lower" to "higher in 2(a) and corrects an inadvertent omission in 3 that occurred during the 2018 revision cycle.

Response Message: FR-908-NFPA 99-2021

Public Input No. 158-NFPA 99-2021 [Section No. 6.7.5.1.4.4]

Public Input No. 7-NFPA 99-2020 [Section No. 6.7.5.1.4.4]

First Revision No. 936-NFPA 99-2021 [Sections 6.7.6.2.1.5(A), 6.7.6.2.1.5(B)]

~~(A)~~

~~For the purposes of this code, Article 700 of *NFPA 70* shall only be applied to the life safety branch.~~

~~(B)~~

~~The following portions of Article 700 of *NFPA 70* shall be amended as follows:~~

~~700.4 shall not apply.~~

~~700.10(D)(1) through (D)(3) shall not apply.~~

~~700.17 Branch circuits that supply emergency lighting shall be installed to provide service from a source complying with 700.12 when the normal supply for lighting is interrupted or where single circuits supply luminaires containing secondary batteries.~~

~~700.32 shall not apply.~~

Submitter Information Verification

Committee: HEA-ELS

Submittal Date: Tue Jul 13 14:03:00 EDT 2021

Committee Statement

Committee Statement: The revision is part of the output from the HEA-ELS Task Group formed to review the correlation issues related to the Life Safety Branch of the EES. The existing approach has the performance, maintenance, and testing requirements for this branch of the EES divided between NFPA 99 and Article 700 - Emergency Systems of the NEC. This continues to create confusion for Code users and correlation issues for AHJ's. The Task Group recommendations are to consolidate all performance, maintenance, and testing requirements for the entire EES into NFPA 99 to correlate with the scope of that document. Installation requirements related to health care facilities will remain in the NEC. This consolidation is accomplished through a series of related public proposals that remove the existing reference to Art. 700 for the Life Safety Branch and adds any performance, maintenance, and testing requirements from Article 700 that are currently applicable to this branch.

Response Message: FR-936-NFPA 99-2021

Public Input No. 222-NFPA 99-2021 [Sections 6.7.6.2.1.5(A), 6.7.6.2.1.5(B)]

First Revision No. 955-NFPA 99-2021 [New Section after 6.7.6.2.1.5(D)]

(C) Branch Circuits for Life Safety Lighting.

Branch circuits that supply life safety lighting shall be served from a source in accordance with 6.7.1 when the normal supply for lighting is interrupted or where single circuits supply luminaries containing secondary batteries.

Submitter Information Verification

Committee: HEA-ELS

Submittal Date: Wed Jul 14 10:08:36 EDT 2021

Committee Statement

Committee Statement: The revision is part of the output from the HEA-ELS Task Group formed to review the correlation issues related to the Life Safety Branch of the EES. The existing approach has the performance, maintenance, and testing requirements for this branch of the EES divided between NFPA 99 and Article 700 - Emergency Systems of the NEC. This continues to create confusion for Code users and correlation issues for AHJ's. The Task Group recommendations are to consolidate all performance, maintenance, and testing requirements for the entire EES into NFPA 99 to correlate with the scope of that document. Installation requirements related to health care facilities will remain in the NEC. This consolidation is accomplished through a series of related public proposals that remove the existing reference to Art. 700 for the Life Safety Branch and adds any performance, maintenance, and testing requirements from Article 700 that are currently applicable to this branch.

From 700.17 - Changed verbiage from “installed to provide service from” to “served from”. 700.12 Reference changed to 6.7.1 Sources.

Response Message: FR-955-NFPA 99-2021

Public Input No. 245-NFPA 99-2021 [New Section after 6.7.6.2.1.5(D)]

First Revision No. 956-NFPA 99-2021 [New Section after 6.7.6.2.1.5(D)]

(D) Life Safety Lighting Circuit Switches.

Life safety lighting circuit switches shall meet the following requirements:

(1) The switch(es) for the life safety lighting circuits shall be arranged so that only authorized persons have control of the life safety lighting switch(es) unless one of the following conditions are met:

(a) Where two or more single-throw switches are connected in parallel to control a single circuit, at least one of these switches is accessible only to authorized persons.

(b) Additional switches are included that act only to put life safety lights into operation, but not to disconnect them.

(2) Switches connected in series or 3- and 4-way switches shall not be used.

(3) All manual switches for controlling life safety lighting shall meet the following requirements:

(a) The manual switches shall be in locations convenient to authorized persons responsible for their actuation unless there are multiple switches provided.

(b) One of the switches shall be permitted to be located so that it can only energize, but not de-energize, the circuit.

Submitter Information Verification

Committee: HEA-ELS

Submittal Date: Wed Jul 14 10:10:55 EDT 2021

Committee Statement

Committee Statement: The revision is part of the output from the HEA-ELS Task Group formed to review the correlation issues related to the Life Safety Branch of the EES. The existing approach has the performance, maintenance, and testing requirements for this branch of the EES divided between NFPA 99 and Article 700 - Emergency Systems of the NEC. This continues to create confusion for Code users and correlation issues for AHJ's. The Task Group recommendations are to consolidate all performance, maintenance, and testing requirements for the entire EES into NFPA 99 to correlate with the scope of that document. Installation requirements related to health care facilities will remain in the NEC. This consolidation is accomplished through a series of related public proposals that remove the existing reference to Art. 700 for the Life Safety Branch and adds any performance, maintenance, and testing requirements from Article 700 that are currently applicable to this branch.

Response Message: FR-956-NFPA 99-2021

Public Input No. 247-NFPA 99-2021 [New Section after 6.7.6.2.1.5(D)]

First Revision No. 957-NFPA 99-2021 [New Section after 6.7.6.2.1.5(D)]

(E) Life Safety Lighting Dimmer and Relay Systems.

A dimmer or relay system containing more than one dimmer or relay and listed for emergency use shall be permitted to be used as a control device for energizing life safety lighting circuits. Upon failure of normal power, the dimmer or relay system shall be permitted to selectively energize only those branch circuits necessary to provide minimum required illumination using a control bypass function. Where the dimmer or relay system is fed by an upstream transfer switch, normal power sensing for this function shall be permitted to be from a normal-only power source upstream of the transfer switch.

Submitter Information Verification

Committee: HEA-ELS

Submittal Date: Wed Jul 14 10:13:19 EDT 2021

Committee Statement

Committee Statement: The revision is part of the output from the HEA-ELS Task Group formed to review the correlation issues related to the Life Safety Branch of the EES. The existing approach has the performance, maintenance, and testing requirements for this branch of the EES divided between NFPA 99 and Article 700 - Emergency Systems of the NEC. This continues to create confusion for Code users and correlation issues for AHJ's. The Task Group recommendations are to consolidate all performance, maintenance, and testing requirements for the entire EES into NFPA 99 to correlate with the scope of that document. Installation requirements related to health care facilities will remain in the NEC. This consolidation is accomplished through a series of related public proposals that remove the existing reference to Art. 700 for the Life Safety Branch and adds any performance, maintenance, and testing requirements from Article 700 that are currently applicable to this branch.

From 700.23 - Changed “emergency lighting” to “life safety lighting”. Changed “listed for use in emergency systems” to “listed for emergency use”. Removed last sentence as it is installation related.

Response Message: FR-957-NFPA 99-2021

Public Input No. 250-NFPA 99-2021 [New Section after 6.7.6.2.1.5(D)]

Public Input No. 252-NFPA 99-2021 [New Section after 6.7.6.2.1.5(D)]

First Revision No. 958-NFPA 99-2021 [New Section after 6.7.6.2.1.5(D)]

(F) Life Safety Lighting Automatic Load Control Relay.

If a life safety lighting load is automatically energized upon loss of the normal supply, a listed automatic load control relay shall be permitted to energize the load. The load control relay shall not be used as transfer equipment.

Submitter Information Verification

Committee: HEA-ELS

Submittal Date: Wed Jul 14 10:18:55 EDT 2021

Committee Statement

Committee Statement: The revision is part of the output from the HEA-ELS Task Group formed to review the correlation issues related to the Life Safety Branch of the EES. The existing approach has the performance, maintenance, and testing requirements for this branch of the EES divided between NFPA 99 and Article 700 - Emergency Systems of the NEC. This continues to create confusion for Code users and correlation issues for AHJ's. The Task Group recommendations are to consolidate all performance, maintenance, and testing requirements for the entire EES into NFPA 99 to correlate with the scope of that document. Installation requirements related to health care facilities will remain in the NEC. This consolidation is accomplished through a series of related public proposals that remove the existing reference to Art. 700 for the Life Safety Branch and adds any performance, maintenance, and testing requirements from Article 700 that are currently applicable to this branch.

From 700.26 - Changed "emergency" to "life safety".

Response Message: FR-958-NFPA 99-2021

Public Input No. 255-NFPA 99-2021 [New Section after 6.7.6.2.1.5(D)]

First Revision No. 926-NFPA 99-2021 [Section No. 6.10.2.2]

6.10.2.2

Any combination of generation, storage, or transformation assets shall be permitted to serve as the ~~essential power source (~~ EPS~~)~~ for all or a portion of health care microgrids.

6.10.2.2.1

The combination of sources shall provide performance equivalent to that of the requirements of 6.7.1.2.1 .

Submitter Information Verification

Committee: HEA-ELS

Submittal Date: Tue Jul 13 12:45:07 EDT 2021

Committee Statement

Committee Statement: This revision aligns the health care microgrid performance with those of any other EPS source type.

Response Message: FR-926-NFPA 99-2021

Public Input No. 248-NFPA 99-2021 [Section No. 6.10.2.2]