Special Conditions

ARTICLE 700

Emergency Systems

Part I. General

A 700.1 Scope. This article applies to the electrical safety of the installation, operation, and maintenance of emergency systems consisting of circuits and equipment intended to supply, distribute, and control electricity for illumination, power, or both, to required facilities when the normal electrical supply or system is interrupted.

Informational Note No. 1: Emergency systems are generally installed in places of assembly where artificial illumination is required for safe exiting and for panic control in buildings subject to occupancy by large numbers of persons, such as hotels, theaters, sports arenas, health care facilities, and similar institutions. Emergency systems may also provide power for such functions as ventilation where essential to maintain life, fire detection and alarm systems, elevators, fire pumps, public safety communications systems, industrial processes where current interruption would produce serious life safety or health hazards, and similar functions.

Informational Note No. 2: See Article 517, Health Care Facilities, for further information regarding wiring and installation of emergency systems in health care facilities.

Informational Note No. 3: See NFPA 99-2018, *Health Care Facilities Code*, for further information regarding performance and maintenance of emergency systems in health care facilities.

Informational Note No. 4: See NFPA 101-2018, Life Safety Code, for specification of locations where emergency lighting is considered essential to life safety.

Informational Note No. 5: See NFPA 110-2019, Standard for Emergency and Standby Power Systems, and NFPA 111-2019, Standard on Stored Electrical Energy Emergency and Standby Power Systems, for further information regarding performance of emergency and standby power systems. Emergency systems are considered Level 1 systems when applying NFPA 110.

Emergency systems are designed and installed to maintain a specific level of illumination for means of egress and to provide power for fire alarm systems, fire pumps, automatic doors, and similar equipment if the normal power supply fails.

Article 700 applies to the installation of emergency systems that are essential for safety to human life and are legally required by municipal, state, federal, or other codes or by a governmental agency having jurisdiction. Article 700 does not mandate whether emergency systems are required or where emergency or exit lights should be located. These determinations rely on NFPA 101®, Life Safety Code®, or the adopted building code. The systems covered by Article 700 are generally viewed as what is necessary for an orderly and safe evacuation from a building or other occupancy type that is required by the applicable codes to be provided with emergency power.

The approach of Article 708 differs in that it provides requirements for power facilities that must be kept continuously operational throughout the duration of an emergency. Critical operations power systems (COPS) are generally installed in vital infrastructure facilities — those that, if destroyed or incapacitated, would disrupt national security, the economy, public health, or safety — and in areas where enhanced electrical infrastructure for continuity of operation has been deemed necessary by governmental authority.

N 700.2 Reconditioned Equipment. Reconditioned transfer switches shall not be permitted.

700.3 Tests and Maintenance.

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

Informational Note: See NECA 90, Standard for Commissioning Building Electrical Systems.

- (B) Tested Periodically. Systems shall be tested periodically on a schedule approved by the authority having jurisdiction to ensure the systems are maintained in proper operating condition.
- (C) Maintenance. Emergency system equipment shall be maintained in accordance with manufacturer instructions and industry standards.