

Emergency Standby Power Systems

INTRODUCTION TO ARTICLE 700—EMERGENCY STANDBY POWER SYSTEMS

Emergency standby power systems are legally required, often as a condition of an operating permit for a given facility. The authority having jurisdiction makes the determination as to whether an emergency standby power system is necessary for a given facility and what it must entail. Sometimes, an emergency standby power system simply provides power for exit lighting and exit signs upon loss of main power or in the case of fire. Its purpose isn't to provide power for normal business operations, but rather to provide lighting and controls essential for human life.

This background information will help you understand that not all emergency actions to save human life fall under Article 700. The general goal is to keep the emergency operation as reliable as possible. In an emergency, it's difficult to administratively control loads. Thus, the emergency standby power system must be able to supply all emergency loads simultaneously. When the emergency power supply also supplies power for load shedding or other nonemergency loads, the emergency loads take priority over the other loads, and those other loads may be dropped to support the emergency loads.

As you study Article 700, keep in mind that emergency standby power systems are essentially lifelines for people. The entire article is based on keeping those lifelines from breaking.

PART I. GENERAL

700.1 Scope. Article 700 applies to the installation, operation, and maintenance of emergency standby power systems. These consist of circuits and equipment intended to supply illumination or power within 10 seconds [700.12] when the normal electrical supply is interrupted. Emergency power systems are those systems legally required and classed as emergency by a governmental agency having jurisdiction. These systems are intended to automatically supply illumination and/or power essential for safety to human life. **Figure 700-1**

FPN No. 3: Emergency power systems are generally installed 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 power systems may also provide power 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.

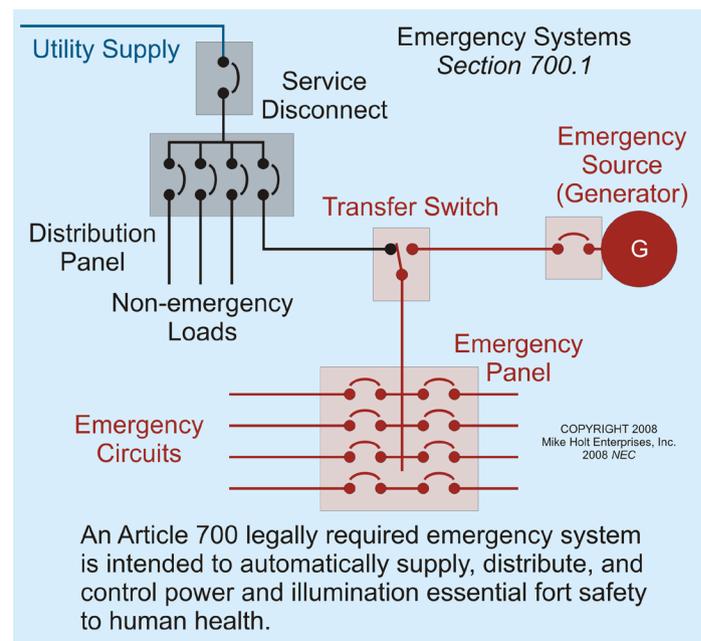


Figure 700-1

FPN No. 4: For specific locations where emergency lighting is required, see NFPA 101, *Life Safety Code*.