
RELIABLE POWER SUPPLY FOR ELECTRIC FIRE PUMPS

IR E-3

References:

2007 and 2010 California Electrical Code, Articles 230 and 695
2003 and 2007 Edition of NFPA 20, Standard for the Installation of Stationary Pumps for
Fire Protection Section 5.20

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Discipline: Fire and Life Safty

This Interpretation of Regulations (IR) is intended for use by the Division of the State Architect (DSA) staff, and as a resource for design professionals, to promote more uniform statewide criteria for plan review and construction inspection of projects within the jurisdiction of DSA which includes State of California public elementary and secondary schools (grade K-12), community colleges and state-owned or state-leased essential services buildings. This IR indicates an acceptable method for achieving compliance with applicable codes and regulations, although other methods proposed by design professionals may be considered by DSA.

This IR is reviewed on a regular basis and is subject to revision at any time. Please check the DSA web site for currently effective IRs. Only IRs listed in the document at <http://www.dgs.ca.gov/dsa/Resources/IRManual.aspx> at the time of plan submittal to DSA are considered applicable.

Purpose: This Interpretation of Regulations (IR) clarifies code requirements, based on the California Electric Code and NFPA 20 Section 5.20 as to what will be acceptable as a “reliable power supply” to an electric fire pump.

General: The 2007 and 2010 California Electric Code, Article 695, Section 695.3, states, “Power Source(s) for Electric Motor-Driven Fire Pumps shall have a reliable source of power.”

Interpretation:

- 1. Reliable Power Supply:** Various public utilities commissions oversee electric companies. Municipal boards are authorized to acquire, construct, operate and maintain, and to take all necessary action, in order to provide an adequate, dependable, supply of bulk electric power and energy within its jurisdiction. A fire pump may be permitted to be supplied by a separate service from a reliable municipal provider or a combination of power supply and back-up supply produced on-site or as described in California Electrical Code Article 695.
- 2. Power Supply will include:** Power source from a reliable municipal electric supply company which has been connected per Article 230 of the California Electrical Code or on-site produced electricity with a back-up power supply installed and connected in accordance with the provisions of Section 695.
- 3. Connection to Power Supply:** The connection shall be located and arranged so as to minimize the possibility of damage by fire from within the premises and from exterior hazards. An electrical tap shall be ahead of the means to disconnect service, and shall comply with Section 230.82(5) of the California Electrical Code. The service equipment shall comply with the labeling requirements in Section 230.2 and the location requirements in 230.72(B) and NFPA 20: 9.2.2.