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TECHNICAL BULLETIN

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Source Document: 19 NYCRR PART 1221 – Building Construction

19 NYCRR PART 1225 - Fire Prevention²

Topic: Power Sources for Electric-driven Fire Pumps

This document is to clarify the requirements for some electric motor-driven fire pumps to have a reliable source of power per the 2015 International Fire Code (2015 IFC), the 2015 International Building Code (2015 IBC), and NFPA 20.³

Some installations of electric-driven fire pumps may be required to have a backup generator or other standby power supply. Section 913.1 of the 2015 IBC and the 2015 IFC require that the fire pumps "be installed in accordance with this section and NFPA 20." Further, Section 913.2 of both codes requires that:

the fire pump, driver and controller shall be protected in accordance with NFPA 20 against possible interruption of service through damage caused by explosion, fire, flood, earthquake, rodents, insects, windstorm, freezing, vandalism and other adverse conditions.

Chapter 9 of NFPA 20 titled "Electric Drive for Pumps" addresses "the minimum performance and testing requirements of the sources and transmission of electrical power to motors driving fire pumps." Section 9.2.1 requires that "an electric motor-driven fire pump shall be provided with a normal source of power as a continually available source." Section 9.2.2 lists the types of continuous power sources that are acceptable under the Code.

Section 9.3.1 of NFPA 20 requires that the electric motor-driven fire pump be provided with "at least one alternate source of power... where the height of the structure is beyond the pumping capacity of the fire department apparatus." According to Section 9.3.4, "the alternate source of power shall be supplied from one of the following sources:

- (1) A generator installed in accordance with Section 9.6 [of NFPA 20]
- (2) One of the sources identified in 9.2.2(1), 9.2.2(2), 9.2.2(3), or 9.2.2(5) where the power is provided independent of the normal source of power." The sources referenced are as follows:
 - (1) Service connection dedicated to the fire pump installation
 - (2) On-site power production facility connection dedicated to the fire pump installation
 - (3) Dedicated feeder connection derived directly from the dedicated service to the fire pump installation
 - (5) Dedicated transformer connection directly from the service meeting the requirements of Article 695 of NFPA 70, National Electrical Code.

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¹ The "Code Effective Date" for this Technical Bulletin is October 31, 2017, which is the effective date of the current version of the New York State Uniform Fire Prevention and Building Code (the Uniform Code).

² The 2015 International Building Code (2015 IBC) is a publication incorporated by reference in 19 NYCRR Part 1221, the 2015 International Fire Code (2015 IFC) is a publication incorporated by reference in 19 NYCRR Part 1225.

The 2017 Uniform Code Supplement is a publication incorporated by reference in 19 NYCRR Parts 1219 through 1228. The 2015 IBC and IFC as amended by the 2017 Uniform Code Supplement are all part of the Uniform Code.

³ The 2013 edition of NFPA 20, titled "Standard for the Installation of Stationary Pumps for Fire Protection" is incorporated by reference in Chapter 10 of the 2017 Uniform Code Supplement and is part of the Uniform Code.