

## **BT Bulletin - Alternate Power for Fire Pumps**

The following information is intended to outline the NBCC 2010 requirements for Fire Pumps, and provide explanatory information found in "Handbook for Stationary Pumps – NFPA 20", 2007 Edition.

### **NBCC 2010 – B-3.2.5.18. Fire Pumps**

If a fire pump is installed, it shall be installed in accordance with the requirements of NFPA 20, "Installation of Stationary Pumps for Fire Protection." (See Appendix A)

**NBCC 2010 – A-3.2.5.18.(1). Fire Pumps.** In order to ensure an adequate water supply, it may be necessary to install a fire pump for a building that has either a standpipe system or an automatic sprinkler system installed.

### **NFPA 20 – Chapter 9, Electric Drive for Pumps:**

NFPA-20; 9.3 Alternate Power is required when,

1. The building is higher than the pumping capacity of the fire department apparatus, or
2. Power is considered *unreliable*. Normal power would be considered unreliable if any of the following are true:
  - a. If there has been any intentional shutdowns for more than 4 hours in the past year,
  - b. If there have been unintentional power outages due to switch failures or animals (power outages due to natural disaster or grid maintenance do not make the power supply unreliable),
  - c. If the power is supplied to the facility by overhead lines nearby that the fire department would automatically shut off in case of fire-fighting situation, or
  - d. If disconnects or overcurrent protection devices are installed on the normal service (ok if they are installed in the fire pump controller only).

If the pumps are a back-up engine driven pump, or a back-up turbine driven pump, then there is no requirement for alternate power.