



## **Preconstruction Electrical Information New/Remodeled Commercial/Multi-family Building**

### **All requirements where applicable**

1. Full set of electrical plans including:
  - a. Riser/single line diagram of Electrical distribution system with wire/conduit - sizes/schedules.
  - b. Print containing electrical room(s), Service/panelboard layout, room dimensions, and egress door(s).
  - c. Luminaire, Equipment, and Motor Schedules (including listing agency information)
  - d. Panel Schedules.
  - e. Load calculations, Article 220, NEC
2. Available Fault Current calculation at service(s) equipment. The Available Fault Current label must be applied prior to DSI submitting an electrical service approval to Xcel Energy. [Art. 110.24(A), NEC]
3. Documents from Selective Coordination Study performed by a Licensed Professional Engineer (*where required*) (NEC 620.62, 700.32, 701.32). Overcurrent devices must be coordinated to the definition of Coordination (Selective) as defined in Article 100 of the current NEC.
4. Fire Pump (*where installed*):
  - a. Ensure all information on electrical plans including wiring methods, routing of conductors, and fire pump size. Other information that may be helpful in design:
    - i. A fire pump tap made in service equipment must be tapped in an isolated section ahead of the service disconnect(s) section.
    - ii. If installing an additional fire pump feeder disconnect switch (rated at locked rotor), it cannot be located in the service switchgear line-up. It must be physically remote from the switchgear. [Article 695.4(B) (3) (a) (3&4), NEC]
    - iii. Ensure Voltage Drop requirement in Article 695.7 of the current NEC are met. Especially on long conductor lengths from generator (where required).
    - iv. Ensure fire pump controller is equipped with a listed surge protective device.
5. Fire Alarm:
  - a. Level of Survivability per NFPA 72 Section 12.4, and 24.3.5 must be determined prior to installation. Document stating wiring methods for survivability per NEC 760.179(G). (*where required*)