Surge Protection and the NEC

Surge Protective Devices & Emergency Systems Loads Art. §620

- 620.51 (E) Surge protection required where emergency disconnect supplying emergency load systems
- 620.51(C)(1)&(2) Elevators with and without Generator Field Controls
- 620.51(C)(3) Escalators and Moving Walkways
- 620.51(C)(4) Platform Lifts & Chariway Stair Lifts

Surge Protective Devices & Critical Operating Data Systems Art. §645

- 645.2 Information Technology Equipment-Definitions (Critical Data Systems)
  Surge protection required for IT equipment that provides continuous operation for “reasons of public safety, emergency management, national security, or business continuity.”
- 645.18 Surge Protection for Critical Operations Data Systems
  All “critical operations data systems” require surge protection

Surge Protective Devices & Fire Pump Controllers Art. §695

- 695.15 Fire pump controllers - listed surge protector required.

Surge Protective Devices & Emergency Systems Art. §700

- 700.2 Definitions - Emergency Systems - Those legally required and classed as emergency by municipal, state, federal, or other codes, or by a government agency having jurisdiction. • Illumination • Power • Or Both

- 700.8 “A listed SPD shall be installed in or on all emergency systems switchboards and panelboards.”

- Automatic Transfer Switches
- Smoke Alarms/Detectors
- Fire Alarm Systems
- Public Egress/Evacuation Sites
- Emergency Warning Systems
- UPS Systems
- Egress Illumination
- Remote Operated Doors
- Emergency Communications Systems
- Fuel Cell Power Systems
- High-rise Elevators

708.2 Critical Operations Power Systems - Surge protection is required for the power systems of facilities that require “continuous operation” for purposes of protecting “public safety, emergency management, national security or business continuity.”

708.20(D) “Surge protection devices shall be provided at all facility distribution voltage levels.”