



Power Protection Products, Inc.

Power Protection and the 2026 NEC



Learn about the new Code Reference
related to Surge Protection

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Industrial Applications

2026 NEC

Legally Required Standby Systems

701.8

"Legally required standby systems shall have a listed surge protective device (SPD) installed upstream of the system disconnecting means."



Industry impact: Similar to emergency systems, surge protection is now mandatory for legally required standby systems to ensure reliability during critical operations.

409.70

"Safety circuits for personnel protection that are subject to damage from surge events shall have surge protection installed within or immediately adjacent to the control panel."



Industry impact: Critical safety circuits in industrial and commercial environments now require surge protection, improving worker safety and reducing downtime caused by surge-related failures in emergency or safety systems.

The best defense to protect workers and maintenance personnel against dangerous power surges is to implement SPDs. The NEC increases the need for personnel protection by including SPDs to critical safety circuits.

645.18

"Surge protection shall be provided for Critical Operations Data Systems."



Industry impact: Facilities housing critical data system (e.g., financial institutions, government operations) must implement surge protection to maintain continuity and prevent catastrophic data loss during surge events.

Critical Operation Data Systems is defined by the NEC as "Information technology equipment systems that require continuous operation for reasons of public safety, emergency management, national security or business continuity."

670.6

"Industrial machinery with safety interlock circuits shall have surge protection installed."



Industry impact: Industrial machinery safety circuits now require surge protection, reducing risks of unexpected shutdowns and improving compliance with safety standards in manufacturing environments.

The concern is failure of safety interlocks on machinery, causing safety risk to operators who may not be aware of disabled safety mechanisms.

2026 NEC

Elevator Systems

620.51(B)

"Surge protection shall be provided as an integral part of the disconnecting means or installed immediately adjacent to it for elevator systems."



Industry impact: This requirement expanded beyond elevator systems to include legally required standby systems or critical operation power systems, ensuring elevator reliability and safety during surge events.

708.20

"Surge protection devices shall be provided at all facility voltage distribution levels for Critical Operation Power Systems (COPS)."



Industry impact: Surge protection for COPS ensures uninterrupted power for essential services during emergencies, supporting national security, public safety and disaster recovery operations.

COPS systems include but are not limited to power systems, HVAC, fire alarms, security, communications and signaling for designated critical operations areas. Surge protection ensures that these systems will operate in an emergency situation.

Emergency Applications

700.8

"A listed SPD shall be installed in or on all emergency systems switchboards and panelboards."



Industry impact: Emergency power systems require listed SPDs, guaranteeing continuity of critical loads during surge events and improving resilience for hospitals, data centers and emergency facilities.

Per NEC definition, emergency power systems are legal required to automatically supply power to designated loads upon loss of normal power. This requirement helps to ensure emergency electrical-distribution systems continue to deliver reliable power to vital life-safety loads in the event of damaging surges.

695.15

"A listed surge protection device shall be installed in or on the fire pump controller."



Industry impact: Fire pump controllers must include surge protection, ensuring reliable operation of fire suppression systems during emergencies and minimizing liability for building owners.

A new NEC provision requires a listed SPD to be installed in or on the fire pump controller to provide the necessary protection. A study commissioned by the Fire Protection Research Foundation found that 12% of the fire pumps surveyed had damage due to surges.

620.51 (E)

"Where any of the disconnecting means in 620.51 has been designated as supplying an emergency system load, surge protection shall be provided."



Industry impact: Elevator systems must include surge protection at disconnecting means, ensuring operational reliability during emergencies and preventing costly failures in life-safety equipment.

This article was added to address emergency system loads such as elevators, escalators, moving sidewalks, chairlifts and associated equipment.

2026 NEC

Surge Protection for Feeder Circuits

215.18(A) and 230.67(A)

"Feeder surge protection requirement have been expanded to include areas with similar risk to a bedroom"



Industry impact: Applies to exclusive-use areas such as sleeping quarters in hotels, dormitories, nursing homes, assisted-living facilities and similar locations.

230.67

"A Type 1 or Type 2 surge protection device (SPD) is required to be installed on dwelling unit services. The SPD may be integral to or adjacent to the electrical service. Additionally, an SPD will be required when an existing service is replaced."



Industry impact: Mandatory installation of Type 1 or Type 2 SPDs in dwelling units ensures enhanced protection for residential electrical systems, reducing risks or equipment damage and fire hazards during surge events.

SPDs shall be provided with all services supplying the following: dwelling/ dormitory units; hotel/motel guest rooms and suites; areas of nursing homes and limited-care facilities used exclusively as patient sleeping rooms.

694.7 (D)

"A surge protection device shall be installed between a wind electric systems and any loads served by the premises electrical systems."



Industry impact: Surge protection is required between wind turbine circuits and disconnects, safeguarding renewable energy infrastructure from surge damage and ensuring grid stability.

The surge device can be on the circuit serving the wind electric systems or on the load side of the service disconnect.



Power Protection Products, Inc.

As businesses become more complex, they increase their investment in micro-electronics, ultra high-speed processors and automation. To protect these investments, Surge Protection Devices (SPDs) have taken center stage as an invaluable asset, keeping equipment and systems up while reducing downtime, maintenance and repair costs.

P3 offer products that lead the worldwide surge suppression industry with new, innovative SPDs, responsive customer service and the most comprehensive system-wide protection plan available. From service entrance to individual load circuits, we can provide integrated suppression for all electronic and electrical equipment and systems. Through strategic placement of SPDs within the power system, coordinated protection is put into place to effectively close all the paths that damaging transients may take to mission-critical equipment.

P3 is the industry's trusted and respected advisor for critical power, cooling and energy solutions.

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