

Stay Safe – Stay External



Between five and ten times a day, an arc flash explosion occurs in electric equipment somewhere in the United States that sends a victim to a special burn center. These statistics were compiled by CapSchell, Inc., a research and consulting firm specializing in preventing workplace injuries and deaths.



◆ INTEGRATION OF SURGE PROTECTION INTO SWITCHGEAR AND PANELBOARDS OVER 240 VOLTS PUTS YOU AT RISK

OSHA, NFPA/NEC and IEEE all have addressed this issue with clear personnel protection recommendations, but some say this protection gear itself can cause safety issues by losing the sensitivity to handle small hand tools.

IEEE Emerald Book warns against the dangers of integrated TVSS (IEEE 1100 section 8.4.2.5) because it can cause severe collateral damage that can damage an insulation system and cause Arc Flash event.

This means that anytime a surge protection module, test board, alarm sensors or even a surge counter battery has to be replaced inside live equipment of an integrated Transient Voltage Surge Suppression (TVSS) device, it puts your people at risk unnecessarily.

A good surge protection device (SPD) is designed to save your equipment at all cost, even at the risk of its own survival. Repairing and replacing surge protection in live switchgear puts field engineers at real risk to Arc Flash.



Industry standards that concern the prevention of arc flash incidents

- OSHA 29 Code of Federal Regulations (CFR) Part 1910 Subpart S
- NFPA 70-2002 National Electrical Code
- NFPA 70E-2000 Standard for Electrical Safety Requirements for Employee Workplaces
- IEEE Standard 1584-2002 Guide for Performing Arc Flash Hazard Calculations