Electrical equipment maintenance more important than ever

Where continuity of electrical power is critical, most industry people accept that an electrical equipment maintenance program is a key element in attaining high reliability. So it is common for our customers who are responsible for electric al systems, which have a high cost associated with unexpected outages, to implement electrical maintenance programs.

What about maintenance for all the other electrical systems? Proper ongoing maintenance is essential for most electrical equipment for safety reasons. The National Electrical Code, which primarily addresses installation requirements, states in 90.1(B) “Compliance therewith and proper maintenance results in an installation that is essentially free from hazard…” This is interpreted to mean that if equipment is installed properly, it still may not be safe unless maintained per the manufacturer’s instructions or industry consensus standards during the system life-cycle. NEC Article 708 Critical Operations Power Systems requires a documented preventive maintenance program in 708.6(C). In the new 2017 NEC, 700.3(C) states “Emergency system equipment shall be maintained in accordance with manufacturer instructions and industry standards.” The 2015 NFPA 99 Health Care Facilities Code requires maintenance for Type 1 essential electrical systems in 6.4.4. In addition, NFPA 99 requires Type 1 essential electrical systems to comply with maintenance requirements in NFPA 110 Standard for Emergency and Standby Power Systems, Chapter 8.

NFPA 70E Standard for Electrical Safety in the Workplace is the leading industry consensus standard for safe work practices. Many contractors and users are concerned about how to assess the “condition of maintenance” of electrical equipment prior to a worker interfacing with equipment that is not in an electrically safe work condition. The 2015 NFPA 70E increased the maintenance requirements. In 90.2 “safety-related maintenance requirements” was added to the scope of NFPA 70E. Now the Electrical Safety Program in 110.1(B) Maintenance states “The electrical safety program shall include elements that consider condition of maintenance of electrical equipment and systems.”

Chapter 2, Safety-Related Maintenance Requirements has comprehensive maintenance requirements which are the equipment owner’s responsibility. These requirements are for the purpose of safety for employees performing electrical work.

Our Electrical Engineering Services and System team is well qualified to complement our equipment sales with maintenance services to provide higher reliability, safer equipment installations, and safer work practices.

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