GE Energy

Reducing Arc-Flash for Variable Speed Drives

Comprehensive Arc-Flash Reduction Strategy
GE can provide a complete and relatively low cost solution to help improve employee safety, equipment protection, regulatory compliance, and system reliability. Elements of GE’s solution include:

• **Arc-flash hazard studies.** Calculates current NFPA-based levels, communicates personal protective equipment (PPE) requirements, and defines safe approach distances in a given environment.

• **Mitigation strategies.**Customizes solutions to fit customer needs while reducing hazards to NFPA 70E Hazard/Risk Category 2*.

• **State-of-the-art products.** Designed to easily retrofit existing customer equipment and provide the highest levels of protection and reliability.

• **Installation and commissioning.** Over 100 years of field engineering experience, OEM product knowledge, and access to product information enables us to provide prompt, comprehensive service.

Industry Challenge
Current economic conditions and our present regulatory environment demand system performance while protecting maintenance personnel against arc-flash hazards. Performing system maintenance in restrictive PPE is not always practical and the investments required to upgrade legacy drives can be prohibitive. In addition to risking the safety of employees and equipment, failure to address NFPA 70E can lead to significant financial loss through extended litigation, increased insurance costs and regulatory fines. OSHA has cited several companies under the General Duty Clause.

Benefits
• Reduced potential for injuries and fatalities
• Reduced business disruptions due to lost-time accidents
• Compliance with NFPA 70E Arc-Flash Regulations
• Maintenance and troubleshooting with drive-doors open
• Ability to maintain mission-critical loads
• Prevent catastrophic damage to equipment
Program Features
A complete turnkey solution for all GE variable speed drives:

- Comprehensive arc-flash studies
- Software modeling
- Selection of optimum components
- System design and engineering
- Hardware supplied
- Retrofit kits
- Communication and warning systems
- Reduced energy modes for maintenance operations
- Supply of labor and technicians
- Project management
- Installation, start-up, and commissioning

GE Energy has an extensive family of state-of-the-art protective relays and circuit breakers that are easily configurable for most customer systems. Many options are available for every budget and operational contingency.

Local Presence Backed by the Power of GE
With over 1,300 service engineers and technicians globally, GE has the resources and capabilities to provide you with the knowledge and experience to maximize your drive system performance.

Shock Protection Boundaries

For more information, contact your local GE Energy office, call 1-888-GE4-SERV or 540-378-3280, or visit www.ge-energy.com/industrial