GE Energy

# Arc-Flash Hazard Study Service

- Improved employee safety against electrical arcs
- Calculates incident energy levels and IEEE-based flash protection boundary
- Addresses arc-flash issues within NFPA 70E
- Provides required field marking through detailed warning labels

## GE Energy Arc-Flash Hazard Services

GE's comprehensive arc-flash hazard study, designed to assist in addressing the recommendations of the National Fire Protection Association's (NFPA) Standard 70E, helps ensure employee safety against dangers associated with the release of energy caused by an electrical arc. In addition to risking employee safety, 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.

You can help mitigate this risk with a comprehensive arc-flash hazard study by GE Energy.

## Overview

With over 100 years of experience in analyzing power systems, GE has plant knowledge that supports the detection of arc-flash hazards throughout your systems. GE employs only proven data collection methods, detailed calculations and thorough software based analysis to identify the calculated incident energy and NFPA-based PPE for each potential hazard.

Excessive PPE can itself be a safety hazard. To help calculate the precise NFPA-based PPE category, GE recommends concurrently conducting short circuit and protective device coordination studies. This approach enables a more comprehensive analysis than using the existing protective device settings and short circuit data. Using a single source experienced in performing all three studies helps to ensure consistency in results, identify compound hazards and limit duplication.

**"There is nothing more important than our customers."**

## Industry Standard Practices

- Electric Arc Hazard Exposure (OSHA 29 CFR 1910.269)
- Flash and Shock Hazard Analysis (NFPA 70E-2009, 110.8(B)(1))
- Personal Protective Clothing and Equipment for Arc-Flash Hazards (NFPA 70E-2009, 130.3(B); Table 130.7(C)(11))
- Prescribed Equations for Incident Energy and Arc-Flash Boundary Calculations (IEEE Std. 1584-2002: and 1584a-2004)
- Field Marking of Arc-Flash Hazards [NFPA 70-2008, 110.16; NFPA 70E-2009, 130.3(C)]
- Work Permits to Work on Energized Parts (NFPA 70E-2009, 110.8(B)(2)

imagination at work




OVERVIEW

## Who We Are:

- Bell Labs heritage of innovation in power electronics
- Global provider of hardware, software, and services that deliver high-efficiency power conversion solutions to OEM customers, telecom service providers, and large enterprises
- 2300+ employees with in-depth technical expertise in 25+ locations worldwide
- 200+ North America Services experts with experience spanning 30+ years

## What We Do:

- Energy Systems solutions for telecommunications, wireless, and cable broadband service providers leveraging turnkey project management, engineering, installation, and maintenance services experience
- AC-DC OEM embedded power supplies for datacom, telecom, medical, and industrial applications leveraging personalized service and support
- DC-DC OEM embedded power conversion solutions designed for the most demanding board mounted power applications in communications, computing, storage, industrial, and medical markets leveraging patented Tunable Loop™ technology
- Global manufacturing base provides world-class quality and delivery at competitive prices

## Why We Are Different:

- Services for complex site engineering and deployment programs; to full operations and lifecycle management
- Industry's best customer experience built on a foundation of world-class operations
- End-to-end Total Efficiency™ architecture that dramatically reduces utility and cooling costs
- Technology designed for decades of reliable use in extreme environmental conditions
- Standards-based, open-architecture solutions to address diverse needs, accelerate ROI, and lower TCO
- Our thought leadership and attention to detail ensures
- Proven quality and peace of mind
- Longevity of deployed power plant
- System recoverability and future growth flexibility
- Safety and reliability with "Do it once, do it right, do it now, on-time, within budget" culture

# Contact Us

For more information, call us toll free at **+1 877 546 3243**, or +1 972 244 9288 and visit us on the web at **www.ge.com/powerelectronics**