Is Your Data Center Properly Protected from Electrical Hazards and System Outages?

Circuit breakers are designed to protect you from electrical disasters. But how do you know your protective devices are rated and set properly for your data center today? Outdated devices and improper settings can result in nuisance trips, failure to adequately protect vital IT systems from electrical damage, and isolated faults turning into system-wide outages. Liebert's short circuit and coordination studies can help you manage the increasing complexities of maintaining a safe and reliable electrical distribution system for your mission-critical data center.

What Takes Place During This Study:

- ***Data Collection*** *— During a field visit, we collect and tabulate information on all components. Additional data are obtained from the electric utility or manufacturers, or calculated from field measurements.*
- ***One-Line Diagram*** *— We create a power system diagram that shows how all components are electrically connected; or, if one already exists, we review it and provide an updated version if necessary. Additional data, such as cable impedances, are obtained from the diagram.*
- ***Computer Analysis*** *— Using sophisticated engineering software, the system is analyzed and short circuit currents are calculated at all appropriate points.*
- ***Tabulated Results*** *— The output of the engineering analysis is compared with the ratings of equipment in the system. If the calculated short-circuit current at any point exceeds the short-circuit rating of the equipment installed at that point, the location is flagged "inadequately protected."*
- ***Final Report*** *— At the conclusion of the study, we provide you a detailed report that describes the study's scope, all assumptions, the origin of the data, the methods used for calculating currents and the tabulated results and tables of settings for the recommended case coordination. The report also has recommendations for new settings or equipment upgrades to allow for adequate coordination.*

The Benefits You Gain:

- *Improved worker safety.*
- *Increased system availability.*
- *Reduced unplanned downtime.*
- *Elimination of nuisance trips.*
- *Identification of under-protected equipment and recommendations for corrective actions.*
- *Compliance with NFPA and OSHA requirements.*

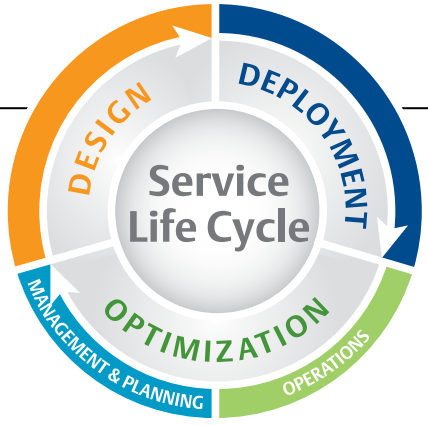
SHORT CIRCUIT AND COORDINATION STUDIES

THE LIEBERT SERVICES DIFFERENCE FOR SHORT CIRCUIT AND COORDINATION STUDIES

Rely on the Most Qualified Engineers and Field Technicians for Short Circuit and Coordination Studies

Short Circuit and Coordination Studies are conducted by professional engineers with the support of field technicians from Emerson Network Power's Electrical Reliability Services (ERS) group. Located throughout the United States, ERS technicians are certified by the InterNational Electrical Testing Association (NETA), ensuring ongoing education and adherence to strict standards in safety and electrical testing knowledge.

- ***Expertise*** *— We are industry leaders in electrical testing, maintenance and engineering services. With more than 40 years in electrical testing experience and state-of-the art tools, we deliver accurate analysis of your system to ensure the safe, efficient operation of your facility.*
- ***Resources*** *— ERS provides a nationwide network of NETA-certified field technicians with more than 350 engineers, PEs, and field technicians in more than 30 service centers.*
- ***Comprehensive Reports*** *— You'll receive a full-featured report containing:*
  - *A summary of scenarios evaluated.*
  - *Tabulation of equipment short circuit ratings vs. available fault duties.*
  - *Time/current curves demonstrating the coordination of protective devices.*
  - *Detailed descriptions of problems found.*
  - *Recommendations for corrective actions.*



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