

ELECTRICAL SAFETY COMPLIANCE

Safety and Compliance Services



BENEFITS

Safeguard Your Workforce and Your Business

Expanding and changing regulatory requirements around health and safety make ensuring uncompromising compliance difficult to manage, especially with limited in-house expertise. Yet, the increasing costs and consequences associated with workplace incidents have brought risk management into sharp focus.

Failing to comply with established regulatory requirements doesn't just increase your exposure to costly penalties and fines. It puts your people, equipment, and business at risk.

Staying abreast of regulatory changes and understanding what the requirements mean for your business is a big task. In fact, the responsibility for compliance in many facilities is often dispersed among different departments, sites, and geographic regions, which can lead to dangerous oversights.

Allowing an external expert to manage your compliance program gives you one point of contact that can get it done right, delivering benefits beyond just your safety organization.

Benefits

- Achieve and maintain regulatory compliance
- Mitigate business liabilities and other risks
- Minimize burden of occupational injuries
- Improve budget forecasting
- Improve culture and image



Improve workplace safety and achieve compliance with programs and services managed by electrical infrastructure experts

Workplace safety has emerged as a board meeting topic as many critical facility owners are realizing the depth of consequences they face when there are gaps in their electrical safety compliance program.

Not only are employees put in jeopardy, but an unsafe workplace can directly impact the bottom line. Businesses spend billions of dollars a year on workplace injuries and illnesses, including fines, penalties, legal fees, and more. These expenditures come straight out of company profit.

Keeping pace with changing regulatory requirements is certainly a challenge considering the increasing number and complexity of requirements across multiple regulatory agencies. This shifting environment requires new strategies for ensuring compliance.

Partnering with the electrical infrastructure experts of Vertiv's Electrical Reliability Services, who stay abreast of regulatory changes, reduces your burden. For the greatest benefit, our team will work to integrate electrical safety compliance practices and processes into the fabric of your organization.

We will create a concise compliance plan for your entire electrical system that includes such things as permit information, safety checklists, standard operating procedures, lockout tagout plans, and emergency protocols. We'll also ensure ongoing compliance with requirements from the Occupational Safety and Health Administration (OSHA), National Fire Protection Association (NFPA), and more.

Our electrical safety compliance program has three tier levels that include the following services:

- Compliance program management
- Electrical safety assessments
- Arc flash services
- Design and mitigation
- Maintenance services
- Training
- Policy and procedures
- Measurement and control
- Documentation

Tiered Services to Address Top Compliance Issues and Challenges

Your business is unique. The size of your workforce and the skill level of your employees fluctuates as will the level of support you need when pursuing electrical safety compliance. That's why we give you options. Whether you simply need on-call project support or prefer comprehensive project ownership, we are here to help.



PARTNER
Tier 1

Our comprehensive subscription-based partner program allows you to fully outsource your compliance program to the experts at Vertiv's Electrical Reliability Services. As an extension of your team, we'll oversee your program to ensure your ongoing electrical safety compliance and keep you informed every step of the way.



ALLY
Tier 2

When your limited staff needs assistance managing the unrelenting requirements of compliance, we are ready to help. Our team of experts can help you navigate NFPA and other applicable standards and identify areas of risk or non-compliance. We can also help you develop a one- to five-year plan for achieving compliance and provide services and support on a subscription or project basis.



RESOURCE
Tier 3

Your team manages the day-to-day requirements for compliance, but occasionally you may need some help. Our safety and compliance experts can augment your team. From performing assessments, arc flash studies, maintenance, and monitoring to developing policy, procedures, and documentation, we can work with your team to fill the gaps and ensure your compliance.

Compliance Program Management

Ensuring electrical safety compliance across your business is difficult. The work needed often takes different types of expertise requiring managers to tap multiple internal departments and resources that are typically already overtaxed.

When you need assistance managing the unrelenting requirements of compliance, we are ready to help. Our team of experts has diverse skill sets that cover the full gamut of electrical safety compliance from performing assessments, arc flash services, maintenance, and monitoring to developing policy, procedures, and proper documentation. Relying on us to manage your compliance gives you flexibility to reallocate your internal resources and streamline the entire compliance process.

Electrical Safety Assessments

Our electrical safety compliance program starts with an assessment. Completing comprehensive, on-site inventories of assets, a design and methods review, and interviews with key personnel allows our team to identify areas of risk or non-compliance and then assign a red, green, or yellow status.

This assessment also allows us to formulate a one- to five-year plan for achieving compliance with the latest edition of NFPA 70E: Standard for Electrical Safety in the Workplace. Emphasis is placed on the requirements, which cover employee workplace safety practices, work conditions, electrical hazards, and maintenance for safety.

Arc Flash Services

Electrical hazards, specifically shock, arc flash and arc blast, can result in serious injury or death to personnel working on or near electrical equipment. It's imperative that you mitigate these hazards to ensure workplace safety and meet regulatory requirements. However, doing so can be difficult to accomplish in-house without the assistance of resources familiar with industry standards and recommended practices.

As part of our compliance program, our team has the knowledge and expertise to help develop and implement an arc flash program that is compliant with all applicable standards.



Our arc flash compliance solutions include:

- Arc flash study
- Risk assessment
- Hazard labeling plan
- Single-line diagrams
- Short circuit and coordination studies
- Arc flash training
- Personal protective equipment (PPE) plan

Design and Mitigation

Information gathered and documented during the risk assessment allows our engineers to determine the best approach for eliminating arc flash and other risks whenever possible. If total elimination isn't possible, our team will proceed through the hierarchy of controls defined in NFPA 70E when proposing risk mitigation. The potential strategies include reducing available energy and worker exposure

through design and engineering changes. This includes the use of faster-acting overcurrent protective devices or specialized relaying; optimizing breaker and relay settings to lower incident energy levels; implementing additional administrative controls like labels, signage, and warnings; and use of PPE.

Maintenance Services

Maintaining electrical equipment in critical facilities is fundamental for ensuring safe operation and system reliability. Such maintenance is not only recommended, it's required.

NFPA 70E stipulates that facility managers must conduct maintenance on electrical equipment — and not just overcurrent protective devices — in accordance with manufacturers' instructions or industry consensus standards. Additionally, these maintenance activities must be documented.

Our compliance services for maintenance include:

- Maintenance procedures and specifications
- Frequency guidelines
- Compliance gap analysis
- Maintenance record review
- Preventive and predictive maintenance programs

Our engineers start by evaluating your existing maintenance program through an audit of maintenance data and records. We'll then provide a gap analysis and create a master plan with maintenance schedules. Our team can also perform ongoing predictive maintenance programs including online infrared (IR) and partial discharge (PD) testing. These two technologies identify the leading causes of electrical equipment failure including heat generating connections and deterioration of insulation.

If required, our NETA-certified technicians can perform comprehensive preventive maintenance services that support all industry consensus standards. These services address critical electrical equipment including transformers, substations, switchgear, circuit breakers, cables and more. Having maintenance performed by a service team that has a deep understanding of your infrastructure's performance and your business goals and objectives enables scalable and ongoing compliance solutions.

Training

Our team of regulatory and technical experts will ensure your compliance through comprehensive training programs that address electrical reliability and safety. We'll start by auditing your existing training program and performing a gap analysis that results in recommendations for change.

Our trainers, who deliver hundreds of training courses annually, will provide safety, skills, and equipment training courses that are available on or off site. We will also deliver the training your team needs to be considered a qualified electrical worker per NFPA 70E.

One area of focus requested by many organizations is arc flash training. Our training program provides workers with the knowledge and understanding of the existence, nature, and causes of electrical hazards, and methods for preventing them. This training is the key to overcoming inadequate worker knowledge that often leads to electrical accidents.

As part of our comprehensive training services, our experts can also review your training records and documentation to ensure compliance. And if necessary, we can develop a new training plan that addresses all applicable codes and standards for your facility.

Policy and Procedures

As buildings, sites, equipment, and people change, so too must an electrical safety compliance program. Our team helps you develop new policies, procedures, and rules of engagement, or reviews your existing ones, to ensure there is an ongoing process to maintain compliance.

These services include establishing a platform for continued management of environmental health and safety (EHS) initiatives. We also ease your burden of tracking codes and standards by regularly providing updates about ongoing changes to keep you informed and in compliance.

Measurement and Control

Developing a roadmap for how you will achieve electrical safety compliance is an essential component of our program. But our team not only wants you to meet regulatory requirements once, we will work to ensure electrical safety is incorporated into your ongoing processes and procedures.

As the program administrator, we perform periodic audits to verify and document that your operations are aligned with the overall plan and ensure that you maintain compliance even as requirements change.

Documentation

Documentation is an essential element of nearly all aspects of electrical safety compliance. It is required during hazard mitigation, maintenance, and employee training and audits.

Not only will our team develop or update your manuals and your required single-line diagram, we will ensure you have all the documentation needed to support an external audit. Additionally, we will keep this documentation up-to-date and have it ready for your employees to enable communication and troubleshooting. Proper documentation helps keep everyone aligned in pursuit of electrical safety compliance.

Summary

Electrical safety compliance is literally a matter of life and death as electrocution is a leading cause of workplace deaths in America.

Protecting the employees that work in your critical facility must be a top priority. However, the need for electrical safety compliance should go beyond just the concern for your workers' well-being.

Not having a carefully managed program can have severe consequences for facility owners. Gaps in your program can lead to incidents that cause injury or death, business disruption, equipment damage, legal liability, regulatory fines, and more.

Getting help from an experienced team that stays up-to-date on changing regulatory requirements lightens your burden. It helps overcome the safety oversights that can happen when the responsibility for compliance is dispersed among your organization.

Compliance isn't a project with a start and finish. It is an endless responsibility, but not one you must tackle alone. Having your program managed by external experts gives you the dedicated personnel needed to ensure ongoing electrical safety compliance and realize benefits throughout your business.

Plug into Our Expertise

To learn more about this service and other Vertiv solutions, please contact your local sales representative office for Vertiv's Electrical Reliability Services or visit [VertivCo.com](https://www.VertivCo.com). In the United States, call 1-877-468-6384.