Arc Flash Risk Assessment



An Arc Flash is an explosive release of energy within energized electrical components. The National Fire Protection Association NFPA 70E <u>Standard for Electrical Safety in the Workplace</u> defines the requirements for an Arc Flash Risk Assessment, use of personal protection equipment, and electrical safety training. An Arc Flash Risk Assessment and overall electrical safety program is not just a one-time project, it must be sustainable.

Phase 1 - Arc Flash Data Collection

The Electrician, Inc's unique approach to data collection saves you money.

Data collection is a critical step to ensuring an accurate arc flash hazard analysis. When working with TEI, the data collection process is bundled with a condition of maintenance assessment as required by NFPA 70E standards. The team is led by a Master Electrician to ensure a quality and precise result. All steps are completed according to NFPA 70E standards, and while equipment is energized. Data collection without a condition of maintenance assessment leaves many 70E requirements unaddressed, and increases the risks to employees.

Phase 2 - Arc Flash Engineering Study

The Electrician, Inc completes the engineering study, compiles all necessary documentation, creates labels, and applies them to equipment.

Working with TEI on your arc flash engineering study means that you have a partner for every step of the process – from project commitment to the application of equipment labels, and beyond. TEI staff members hold the Certified Electrical Safety Compliance Professional (CESCP) credential from the NFPA, and are qualified to help develop your electrical safety plan. TEI understands NPFA 70E guidelines, and stays up-to-date on the latest NFPA 70E standards.

The engineering study is designed to analyze your electrical system, and assess the level of risk of an arc flash. It will also help determine what level of PPE is needed for each piece of equipment. When the study is complete, you will receive an electrical one-line diagram and a thorough report documenting the risks within your electrical system. TEI will create labels made from a material specifically chosen for its durability with high temperatures, outdoor elements, and other harsh environments. Those labels will then be applied to the appropriate pieces of equipment so that your qualified employees understand the risks and what PPE to wear when performing work. Our labels come with a lifetime guarantee.



Phase 3 - Arc Flash Training

The Electrician, Inc offers training to help you meet NFPA 70E requirements.

Under NFPA 70E, employers are required to complete several steps – including:

- Perform an arc flash hazard assessment to identify risks in their electrical system.
- Mitigate those systemic risks
- Document the steps taken to mitigate risks
- Label equipment to alert workers to safety risks, and explain the proper level of PPE to wear
- And train their employees on electrical hazards and safe work procedures

TEI can be your partner for the completion of each of these items. If you aren't sure where to start, the team at TEI can help you determine the best place to begin. You have options for how to start a program, but doing nothing is not an option.

Please see the training brochure for more information.

Phase 4 - Arc Flash Program Sustainability

The Electrician, Inc help you with your sustainability requirements.

Once the arc flash baseline project is complete the following are examples of "updates"

- Changes and updates in the electrical system new devices that will need arc flash labels.
- New employees will need NFPA 70E required electrical safety training.
- Guidance on other 70E standards such as contractor orientation, PPE selection, collaboration on your site's electrical safety plan.
- Changes in 70E standards when the NFPA standards are updated, you will be supported by TEI as we implement the new standards into our services and work with you to stay current and in compliance.

The Electrician, Inc can also install Arc Flash Mitigation Equipment.

Whether you are looking for Arc Flash Resistant Switchgear, Relays or Fuses, TEI can work with you regarding the equipment that is right for your business.

