



EPS™

ENGINEERING SERVICES FOR **ARC FLASH SAFETY**



Experience You Can Trust

Our professional engineers are career experts in arc flash studies and are members of the NPFA and IEEE 1584 committees. Arc flash studies are our core business and we have completed thousands of arc flash studies since the late 1990's.

Here When You Need It Most

With a staff of on call service professionals that know your equipment, we're ready to help when it really counts. Our factory trained and NETA certified technicians are able to respond quickly and get your critical power equipment back online safely and efficiently.

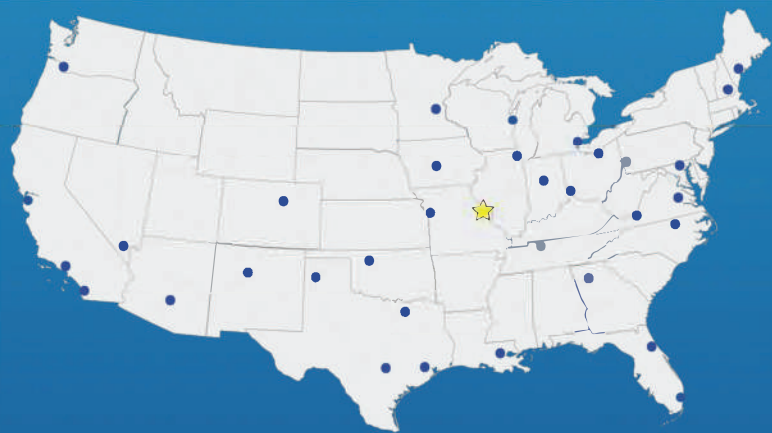
One Source

Working with EPS gives you access to a team of experienced industry experts. EPS provides a total service solution with a single point of contact for coordination and scheduling. Whether you are performing regular maintenance, emergency outages, or expanding your facility, we've got you covered. And as a NETA certified, independent testing and engineering services company, you'll get qualified personnel and unbiased test results and recommendations, regardless of the manufacturer of your electrical equipment.

 1.800.296.6770

www.EPSII.com

Setting The Standard Of Excellence In The Power Industry



National Coverage

With offices conveniently located throughout the U.S. EPS is uniquely positioned to staff your project, regardless of location. We are one of the largest independently owned electrical service companies in the country, capable of handling even the largest and most complex emergencies, maintenance outages, and construction projects.

Engineering services registered in the following states: AL, AR, AZ, CA, CO, CT, DE, FL, GA, HI, IA, ID, IL, KS, KY, LA, MA, MD, ME, MI, MN, MO, MS, ND, NE, NH, NJ, NM, NV, OH, OK, OR, PA, SC, SD, TN, TX, UT, VA, VT, WA, WI, WV, WY

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A Checklist for Arc Flash Studies

- Has a recent (less than five years) arc flash study been performed for this site?
- Are you ever replacing blown fuses?
- How often do you reset circuit breakers?
- Are you confident that your relays are set properly?
- Is everyone who operates / maintains energized electrical equipment properly trained?
- Have they completed electrical safety training?
- Does your staff have the proper Personal Protective Equipment (PPE) to protect them from both shock and arc flash hazards?
- Do you have an up to date and accurate one-line diagram?
- Is your equipment labeled correctly?
- Do you have a written safety procedure and do you use energized work permits?


Compliance with Standards

Several US industry standards cover the prevention and calculation of energies resulting from arc flash incidents:

- OSHA 29 CFR 1910 Subparts R & S
- OSHA 1926 Subpart V Appendix E - Protection From Flames and Electric Arcs
- NFPA 70-2017 National Electric Code
- NFPA 70E-2018 Standard for Electrical Safety in the Workplace
- IEEE 1584-2018 Guide to Performing Arc Flash Hazard Calculations
- IEEE C2-2017 National Electric Safety Code

Steps in the Process

1. Data collection will begin either on site by EPS or through RFI's, along with one-line diagrams
2. EPS will schedule kick-off meeting prior to arc flash study
3. A preliminary report will be sent for review and approval
4. A final report will be stamped by the engineer of record
5. Fuse, breaker and relay changes will be made based on recommendations of the analysis
6. Arc flash labels will be printed and installed
7. EPS will develop and perform site specific arc flash hazard training

 **WARNING**

Arc Flash and Shock Hazard Appropriate PPE Required

4.17 cal/cm² Incident Energy at 1 ft 6 in

| | | |
|-----------|---------------------|-----------------------|
| 3 ft 3 in | Arc Flash Boundary | |
| 480 VAC | Shock Risk | Glove Class 00 |
| 3 ft 6 in | Limited Approach | |
| 1 ft | Restricted Approach | |

REFER TO NFPA 70E FOR SPECIFIC PPE REQUIREMENTS

EPS Job #: KAN19033 Rev 1
Equip ID: **MSB-C1**

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Toll Free: 800-296-6770