

## *Jaker Engineering, PC*

Jaker Engineering, PC's key personnel have many years of experience as consultants in the engineering and analysis of electrical and mechanical systems for industrial facilities.

Jaker Engineering, PC is experienced with facilities and operations, including integration and evaluation of electrical power distribution systems for industrial operations and facilities.

Jaker Engineering, PC also works *with some of the largest energy companies in the US* to develop onsite power generation projects. Jaker's team quickly and accurately evaluates your operational requirements for energy.

Jaker Engineering, PC is a professional firm with a team that prides itself in identifying all of the applicable technological, operational and economic issues for our clients to provide the best solutions for their enterprise.

### **JAKER ENGINEERING, P.C.**

209 N. Main Street, Suite 7  
Horseheads, NY 14845  
Phone: (607) 739-8003 Fax: (607) 739-8347  
solutions@jakerengineering.com

[www.jakerengineering.com](http://www.jakerengineering.com)

## *JAKER ENGINEERING, PC*

# Arc Flash

Danger Goes Beyond the Initial Shock Hazard



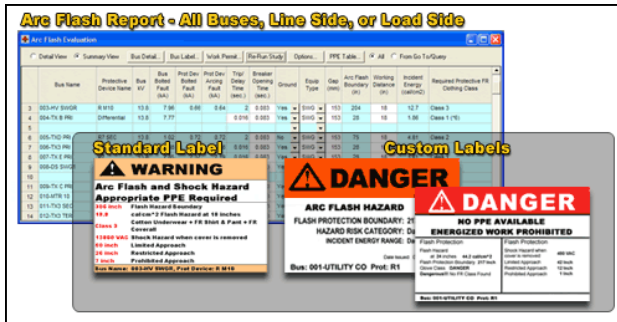
## OSHA is getting Serious about Arc Flash

Employees that work on, or near, energized electrical equipment are exposed to faults with enough energy to burn and start deadly fires.

*JAKER is ...  
Joining Alternative Kinetic Energy Resources*

## The Problem

Arc Flash is a danger to everyone at an operating facility. The temperature of an electrical arc can exceed 5000°F. An enormous amount of energy explodes outward from the fault point, spreading hot gases and melting metal. Fires can be started by an Arc Flash incident, creating the added possibility of severe personnel exposure and even death.



## The Regulation

The Code of Federal Regulations, 29 CFR, PART 1910 and NFPA 70E, as identified by OSHA, require evaluation of the "flash protection boundary" for all electric equipment. When inside this boundary all workers must be outfitted with the proper Personal Protective Equipment (PPE) protection.

## The Solution

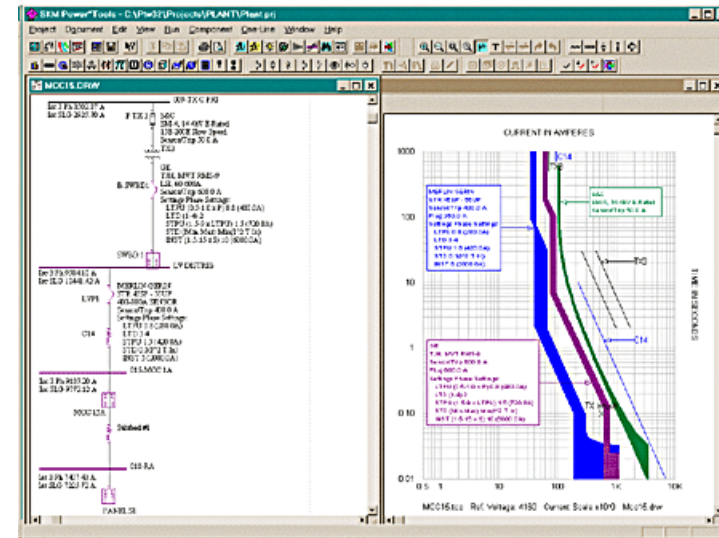
Jaker Engineering, PC uses SKM Power Tools™ Arc Flash Evaluation software to perform Arc Flash analysis and create the required equipment labeling for compliance with NFPA 70E. Arc Flash Evaluation calculates the incident energy, Arc Flash boundary & level of PPE clothing for each accessible location in a power system. This provides a safer working environment when working around energized equipment.

## Our Services

Jaker Engineering analyzes Short Circuit Current values, Over-Current Device coordination and performs Arc Flash evaluation to comply with 29 CFR PART 1910, Subpart S and NFPA 70E, as required and referenced by OSHA.

Arc Flash Evaluation Includes:

- Creation of One Line Diagrams,
- Calculation of Arc Flash Energy,
- Generation of Warning Labels and Work Permits.



## Related Services

- Electrical Distribution System design and analysis,
- Lockout/ Tagout Programs and Procedures,
- Fire/ Hazard and Risk Analysis for Operations.

This means that Jaker Engineering, PC provides complete analysis, risk assessment and solutions for your business to protect both your work force and working environment.