

# IEI ELECTRICAL AND DESIGN ENGINEERING



Power system design is critical to our everyday lives. We come to rely on dependable power delivery day in and day out. Dependable power delivery is a complex process that requires careful design and coordination. We use state of the art software to model the power system and years of experience to apply it.

## SERVICES

### IEI LABS

Using state of the art software and hardware we have the ability to simulate and test our designs.

We have provided many of these tools and calculators available on our website.

Please visit:

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

### POWER SYSTEM DESIGN

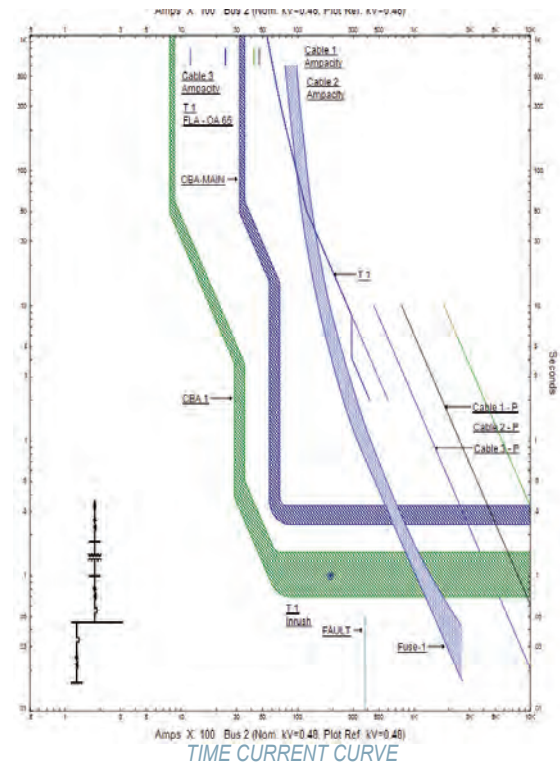
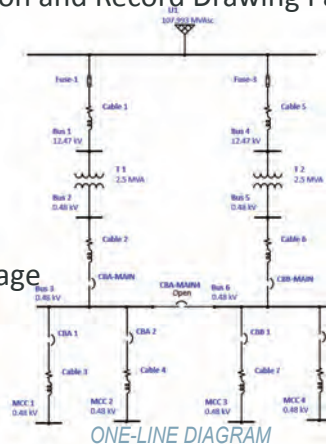
- Arc Flash Hazard Analysis
- Short Circuit Analysis
- Grounding Design
- Fault and Failure Analysis
- Tie-Breaker
- Protective Device Coordination
- Power Flow
- Fault Current, Coordination, Investigation
- Load Shed
- System Modeling and Analysis
- Full Installation and Record Drawing Package

### POWER SYSTEM EQUIPMENT

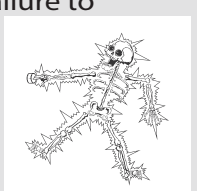
- Switchgear
- Transformers
- Motor Control Center (MCC)

### POWER SYSTEM DISTRIBUTION

- Distribution Panel Layout
- Building Wiring and Layout
- Building Lighting Study and Layout
- Full Installation and Record Drawing Package



**ARC FLASH HAZARD ANALYSIS** is a study of a power system or component to determine the amount of incident energy available at that device. This analysis results in a label that is affixed to the device that directs a qualified operator in the amount of PPE required to operate that device. The requirement to perform an arc flash analysis is regulated by OSHA and the NFPA70E. Failure to comply can result in possible penalties and worst case scenario death. There are several ways to comply with arc flash analysis. Most involve compiling a detailed one-line diagram and calculating the available fault current. The tables are listed in the NFPA 70E using data from the IEEE.



### MARKETS SERVED

- Utilities (Electric, Water, Wastewater, Gas, Generation)
- Oil Refinery and Truck Rack Terminals
- Military
- Commercial
- University Generation and Distribution Systems
- Mining

FOR MORE INFORMATION  
VISIT OUR WEBSITE AT:  
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