

Earl D. Calder | Forensic Electrical Engineer, PE

3895 Vantech Drive, Bldg. D, Suite D, Memphis TN 38115
Filed Office: Fayetteville, AR

Office Phone: 901-375-4062
Cell: 479-774-3305
Earl.Calder@efiglobal.com

Professional Summary:

Mr. Calder is a licensed Electrical Engineer and has worked for over twenty years in the electrical engineering profession designing power distribution systems including medium voltage substations, switchgear, motor control centers, and feeds to individual building loads. During his career he has had the opportunity to manage and oversee the installation of numerous industrial electrical projects as well as test and trouble shoot any installation issues.

Mr. Calder's strong background in design, construction support, inspections and operations has provided him with a keen understanding of electrical systems and causes of potential failures. Investigations of a wide variety of industrial incidents have provided a solid knowledge of incident investigation procedures.

Licenses and Certifications:

Professional Engineer, Arkansas Board of Registration for PE & LS, Arkansas, 6302
Master Electrician, State of Arkansas Board of Electrical Examiners, Arkansas, M-2778

Project Experience:

Tokai Carbon, Ozark, AR

Design and Installation of 54 MVA Substation

Project to provide a 54 MVA, 23 kv feed and substation for two 23kv to DC transformers/rectifiers.

SGL Carbon, Ozark, AR

Design and installation of 9 DC furnaces and 240ka aluminum buss

Project to provide 9 high temperature electrical resistance DC furnaces and corresponding 200v, 240 ka buss system requiring focus on magnetic forces impacting the parallel DC bus installation.

SGL Carbon, Ozark, AR

Design and installation of multiple 1600a – 3200a, 480v switchgear, generator backups with transfer switches, and 480v/120v distribution panels

Project to provide power to all cooling systems, control systems, cranes, processing equipment, etc in 3 large manufacturing buildings.

SGL/Tokai Carbon, Ozark, AR
Fire Incident Investigations

Conducted multiple fire incident investigations within the facility to identify root causes and implement corrective actions to prevent reoccurrence.

Specialized Education:

2017 National Electrical Code Review/Exam, June 2020
Electrical Transmission & Distribution Safety/Exam, Dec 2018
Power Factor in Electrical Energy Management/Exam, Dec 2018
Lightning & Static Electricity Protection, Dec 2018
Controlling Electrical Hazards, Dec 2018
Electrical Distribution Systems, May 2016
2014 National Electrical Code Review/Exam, May 2015
Half Century Transformers, SD Myers 21 hrs, Dec 2013
2011 National Electrical Code Review/Exam, Dec 2012
Arkansas Engineering Law, Nov 2012

Professional Experience:

EFI Global, Inc, Forensic Electrical Engineer, 2021 - present
Tokai Carbon, Plant Manager, 2018 - 2020
SGL Carbon, Engineering/Maintenance/Production Manager, 2013 – 2017
SGL Carbon, Global Projects, 2004 – 2012
SGL Carbon, Engineering/Maintenance Manager, 1987 – 2003
Great Lakes Carbon, Process Engineer, 1980 - 1986

Education:

Bachelor of Science, Electrical Engineering, University of Arkansas, Fayetteville, AR, 1980