

**Job title:** Electrical Engineer  
**Department:** Engineering  
**Reports to:** Chief Technology Officer  
**Status:** Salaried  
**Date:** 6/12/2013  
**Created By:** Bear Kaufmann

## Summary

The Electrical Engineer supports all engineering activities related to the design and fabrication of ALL Power Lab products. The Electrical Engineer coordinates and engages in the development of new and existing products from concept, completion, and installation on site.

## Duties and Tasks

- Electrical and electronic system development, analysis, and documentation
- New component requirements specification and sourcing
- Manage designs to meet cost, quality, and reliability targets
- Management of engineering documentation in Arena BOMcontrol
- Support the development of vendor relationships
- Develop testing and quality protocols for prototypes and manufactured assemblies
- Develop and manage products through Alpha, Beta, and Commercialization stages

## Qualifications

- BS or MS in Electrical Engineering
- Knowledge of electrical power generation systems, electronics, design for harsh industrial/automotive type environments, control systems
- Creation and interpretation of electrical schematics
- Expert proficiency with Eagle is preferred, or other schematic capture and design tool
- Knowledge of BOM management tools (Arena BOMcontrol preferred)
- Knowledge of product design and engineering for low and high-volume manufacturing, including harnesses, PCBs, actuator and motor systems, power distribution, reliability
- Knowledge of regulations and standards - CE, UL, NEMA, US and international electrical codes, safety
- Schematic design and modelling including schematics, components, and drawings, including Bill of Materials
- Excellent understanding of product design
- Working knowledge of Lean Manufacturing
- Experience in the fields of Power Generation, Control Systems, Process Engineering, Manufacturing Engineering, and Reliability Engineering.
- Superior communication and collaboration skills - working with others to balance project and product cost, time, and resources
- Knowledge of office applications: word processing and spreadsheets
- Must have excellent written and spoken communication skills
- Excellent self-management skills
- Strong academic credentials

