

PRINCIPAL ELECTRICAL ENGINEER

Education and Certification: College Degree and/or Professional Registration (P.E.)

Travel: Foreign and Domestic

Computer Literacy: Skilled in multiple computer programs including Microsoft Project, AutoCAD and intermediate level skills with all Microsoft Office programs, at a minimum.

Candidate must be capable of performing the following tasks:

- plan and design power systems and equipment for generators
- supervise development of construction plans and specifications
- assist with the development and writing of contracts
- supervise operating, design, construction and maintenance staff
- design and produce drawings of electrical systems, control systems, connection diagrams and one-lines using computer-assisted design (CAD)
- make decisions on the type and arrangement of circuits, transformers, circuit breakers, distribution lines and equipment based on calculations and electrical standards
- provide input to improve products and deliverables including electric motors, parts and equipment
- prepare and interpret specifications, drawings, codes and standards for the use of the electrical power equipment required
- determine and document the design, specification, drawing schedules, delivery and installation schedules for required electrical parts, switchgear, cables, fittings, etc.
- organize and manage staff and materials in the construction of electrical systems, machines, appliances and equipment
- ensure that completed works are tested, meet specifications, drawings and safety requirements and meet all applicable codes and standards
- design, install, test and troubleshoot various control, signaling and monitoring systems and devices including, but not limited to, Supervisory Control and Data Acquisition Systems (SCADA), RS232 and Modbus remote monitoring systems
- design required telecommunications and control equipment and networks
- contribute and adhere to all applicable safety codes and requirements for the operation of the system
- direct and coordinate operation, maintenance and repair of the equipment and systems in field installations as required

Position Requirements: Researches, develops, designs and tests electrical equipment, components and systems applying electrical engineering principles and techniques. Designs electrical systems and components for domestic and international commercial and industrial applications, including primary and secondary electrical power distribution systems that provide uninterrupted and generator backup power. Directs personnel in the design, fabrication and testing of system mockups and determines methods, procedures and conditions for testing mockups as well as the actual system installations. Develops applications of controls, instruments and systems for new domestic and international commercial and industrial uses. Directs activities to ensure that manufacturing, construction, installation, operational testing and commissioning conform to the functional specifications and customer requirements.

Must have a thorough working knowledge of international and national electrical codes and standards, power requirements including medium and high voltage distribution systems, power generators (backup and prime) and associated equipment and controls. Must know the various methods of providing uninterrupted electrical power and the ability to design, specify, test, install and commission power systems utilizing components available at the location of the project. Must be able to design and specify equipment in both US and metric formats.

Must have excellent communication and leadership skills, be familiar with workflow processes, redlines and drawing production and be capable of working independently. Must have supervisory experience, trouble shooting experience, commissioning and testing experience and be proactive with the ability to take the lead in challenging situations. Must successfully complete a background check and drug screening prior to employment.

Candidates Should Email their resume to sanchezva@zhi.com with the subject line San Antonio EE