

**Job ID:** **RK112410A**  
**Job Title:** Electrical Substation Protection Control Engineer  
**Degree Requirements:** Bachelor's Degree Electrical Engineering  
**Years of Experience:** 5 - 7  
**Type of Position:** Direct Hire  
**Location:** Chicagoland Area  
**Salary Range:** \$75K - \$105K  
**Travel Required:** 15% - 25% including international travel

**IMMEDIATE NEED** for an Electrical Substation Protection Control Engineer who has a bachelor's degree in Electrical Engineering and a minimum of 5 years work experience in system protection, relay selection, etc. and 1 year experience in protective layering coordination practices. The preferred location for this position is in the Chicagoland area but the St. Louis, MO will be considered.

The **MUST HAVE** items for this position are:

- Bachelor's degree in Electrical Engineering
- 5 years experience in system protection, relay selection, settings development, operational analysis, communication systems & maintenance practices for transmission, distribution, & generation protection applications
- 1 year experience in protective relaying coordination & practices with a demonstrated understanding of circuit breakers, fuses, circuit switchers, transformers, shunt devices, & other methods & devices used to control power flow, detection & isolation of system faults
- Be able to travel including international to meetings & on-site commissioning tests for customer installations
- Professional Engineer License ( PE )
- Knowledge of Institute of Electrical and Electronic Engineers ( IEEE ), International Electro-technical Commission ( IEC ), & CSA standards
- SCADA or Substation Physical design experience
- P&C field testing, commissioning, and troubleshooting experience
- Excellent customer facing presence
- Six Sigma Green Belt Certification
- Experience with UCA, GOOSE messaging, IEC 61850, and logic development in protection IED's
- Experience with power line carrier and transmission line protection schemes
- Experience in surge and motor starting studies & applications

**PLUSSES** in this position are:

- Master of Science Degree in Electrical Engineering ( MSEE ) in Power Systems ( emphasis on faulted power systems & protective relaying )
- Prior experience in utility protection and control design
- Knowledge of Institute of Electrical and Electronic Engineers (IEEE), International Electro-technical Commission (IEC), and CSA standards
- Prior application & configuration experience with Schweitzer Engineering Laboratories ( SEL ) & General Electric ( GE ) relays

The **RESPONSIBILITIES** of this position include but are not limited to:

- Utilize experience or expertise to solve problems, develop & execute objectives for self and others
- Impact short-term & long-term business goals
- Design protection schemes for industrial & utility substation applications including one-lines, three-lines, AC/DC schematics, & relay settings
- Lead design team in developing panel & interconnect wiring as well as panel layouts and elevations
- Evaluation of interoperability, control features, & communication / protocol aspects of protective relays

- Coordinate with and provide technical assistance to SCADA engineers, substation physical engineers, & control design staff fully developing system integration of protection, control, & monitoring systems
- Meet project specifications, cost control, & schedule objectives
- Work closely with external & internal customers ( Principal Engineers, Project Engineers, Electrical Designers, Physical Designers, Draftsmen, Project Managers )
- Perform power system load flow studies, fault studies, relay setting coordination, & transient Studies
- Lead or support factory acceptance testing and site testing & commissioning
- Develop outage, cut-over, and testing procedures
- Define processes, procedures, perform RCA's (Root Cause Analysis), perform corrective actions, & validate process control
- Support quality initiatives including aspects of ISO9002

**KEY WORDS:** substation engineer, substation protection, substation controls, energy, engineering, system protection, relay selection, settings development, operational analysis, communication systems, maintenance practices, transmission, distribution, generation protection, protective relaying coordination, protective relaying practices, protective relaying, circuit breakers, fuses, circuit switchers, transformers, shunt devices, power flow control, detection, isolation, system faults, professional engineer, PE, Institute of Electrical and Electronic Engineers, IEEE, International Electro-technical Commission, IEC, CSA, Schweitzer Engineering Laboratories, SEL, General Electric, GE, relays, P&C, SCADA, UCA, GOOSE messaging, IEC 61850, logic development, protection IED, substation automation system, power line carrier, transmission line protection, surge and motor starting studies, Six Sigma Green belt Certification, AC, DC, AC DC, AC/DC, ISO9002

If you meet these requirements and wish to be considered for this position, send your résumé to us using Word 97 -2003 at [Resumes@PinnaclePlacementGroup.com](mailto:Resumes@PinnaclePlacementGroup.com) mentioning the **Job ID** and the **Job Title** in the subject line of your email. **In your email please provide us a short narrative detailing your experience and expertise as it applies to this position. Also let us know which location you prefer.**