

Position Title: Substation Automation Engineer
Employment Status: Full Time
Location: Calgary, Alberta
Closing Date: Aug 6 2010

Summary

An opportunity currently exists for a Substation Automation Engineer in the Strategic Engineering team within the Asset Management Department of Altalink. Reporting to the Manager of Strategic Engineering, and under the general technical direction of the Principal Engineer of Protection and Control, the successful candidate will work with internal and external technical staff to ensure that, effective Supervisory Control And Data Acquisition (SCADA) and Substation Automation facilities are appropriately integrated into existing assets in terms of operability and performance.

This position will appeal to individuals with multi-discipline skills in Protective Relaying, SCADA, Digital Communications, Networking and Distributed Controls, and who are looking for an opportunity to leverage their engineering and leadership talents in a dynamic utility environment.

Responsibilities

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The successful candidate will be accountable for:

- Develop and implement application standards (i.e. philosophy and practice) for substation integration and/or automation, SCADA, substation mimic and annunciation (HMI), local substation networks and time synchronization.
- Develop and implement drawing-template standards (i.e. engineering standards) required by AltaLink, in the aspects of substation integration and/or automation, SCADA and the associated control systems.
- Lead the investigation and specification of new substation integration/automation equipment, and assist in the selection of associated telecommunication equipment.
- Propose practical strategies for SCADA and Automation systems to meet end-users' and stakeholders' requirements.
- Investigate, evaluate and recommend new technologies and developments in the domain of SCADA and Automation.
- Develop workable system and management process for SCADA record/documentation keeping.
- Within the aspect of SCADA and Automation, recommend, specify and initiate Maintenance-Capital and/or system improvement projects as required.
- Provide technical supports to Project Engineering (as required) to ensure AltaLink projects meet the expected requirements on operability, functionality, maintainability, reliability, durability and safety.
- Interface with System Operations to identify operational needs and functional criteria for SCADA, and provide technical assistance and inputs as required.
- Provide engineering and operational assistance to Operational Engineering, regarding the performance of SCADA systems.
- Collaborate with Telecommunication Group to ensure SCADA strategies align with Telecommunication Network strategies.
- Provide technical supports to Field Operations, regarding routine maintenance and trouble-shooting of SCADA systems.

Qualifications

The minimum qualifications for this position are as follows:

- Bachelor's Degree in Electrical Engineering.
- Qualifies for registration as a Professional Engineer with the Association of Professional Engineers, Geologists and Geophysicists of Alberta (APEGGA).
- At least 6 years of SCADA, telecommunication and/or Protective Relaying experience.
- Technical understanding and experience in SCADA systems, Protocols, Ethernet and IP networks, Serial communication and Metering.
- Engineering and design skills in Substation Integration/Automation systems using DNP3 and/or IEC 61850.
- Working knowledge of Power Systems and Power System Elements.
- Effective communication skills with ability to work in a team environment, and to positively influence others.
- Ability to develop and maintenance strong internal and external working relationships.
- Demonstrated analytical, risk assessment and problem solving skills.
- Strong written, reporting, graphical and oral presentation skills.
- Excellent organizational skills and ability to manage a wide variety of issues simultaneously.
- Preference will be given to individuals with the knowledge and experience in the following aspects:
 - GE Energy Controls systems and D2x family of products

- Cybectec/Copper Power Systems
- Schweitzer Engineering Laboratories products
- SUBNET Solutions systems and products
- IEC 61850, including GOOSE protection schemes and XML file handling
- HMI system redundancy, LAN redundancy including IEC 62439
- IED time synchronization and IEEE 1588
- Data encryption and NERC CIP standards
- RuggedCom, Cisco, GarretCom or Alcatel LAN hardware.
- G.703, MODBUS, DNP3.0 and SEL Mirror-Bit.

Interested applicants can submit their resume and cover letter by Aug 6 2010. Apply online at altalink.ca.