

Job Title: Project Engineer **Position Number:** 95-03

Incumbent: _____ **Effective Date:** September 2018

Employment Status: Permanent **Bargaining Unit:** _____ Yes X No

Supervisor's Title: Manager, Electrical Engineering **Department:** Eng & Capital Projects

Subordinate Positions: May provide technical project oversight and supervision to trades staff and external contractors and/or consultants

SUMMARY

Under the supervision of the Manager, Electrical Engineering, the incumbent plans, organizes and directs all or part of electric utility projects, from concept through design, construction, and closeout of the project; develops electrical engineering designs, specifications, and cost estimates; prepares written reports for electric utility maintenance and construction programs associated with various projects and facilities.

DESCRIPTION

1. Performs electrical engineering assignments in all aspects of substations, power generation and transmission including additions upgrading or maintenance of protective relaying, instrumentation, and control systems.
2. Performs project management for various capital projects by utilizing the project management body of knowledge and industry best practice.
3. Provides engineering design, technical specifications, bid evaluation and cost estimates; contract administration; project scheduling; coordination; control and monitoring; and field decisions and construction management to ensure projects are completed within the stipulated time and allocated budget.
4. Prepares detailed, project-specific electrical commissioning procedures and carries out or witnesses, as appropriate, the commissioning of electrical systems.
5. Prepares post-project documentation including as-built drawings and operation and maintenance manuals.
6. Reviews and approves new customer connect project designs ensuring accuracy and adherence to construction standards.
7. Provides guidance and work supervision to trades people as well as outside contractors and/or consultants as required.

8. Collaborates and cooperates with other departments in completing multidiscipline projects. Coordinates project execution with construction managers to ensure successful completion of projects.
9. Works with and provides guidance for the utilities' customers for the efficient use of electric energy, in establishing utilities service requirements, fault current protection, load management and demand control, power factor correction and systems safety and protection schemes.
10. Assists in the preparation of electrical project budgets, short and long range plans for electrical equipment and facilities replacement, retirement, additions, and life extensions.
11. Provides project updates and reports as required.
12. Takes part in the development of corporate technical standards, technical procedures, and technical policies.
13. Maintains and up-to-date knowledge of electrical engineering with respect to power systems, power generating plants and equipment, transmission and distribution systems, control systems, construction methods, materials, contract law and engineering and safety codes.
14. Provides technical leadership to peers and other staff and receives advice and mentorship from peers.
15. Adheres to the Corporation's high safety standards by following approved safe working plans, worker administered, and operator administered protections plans and wears appropriate personal protective equipment when required.
16. Other related duties.

WORKING CONDITIONS

The majority of the work is performed in a normal office environment with exposure to outdoor weather, hot, noisy, or cold conditions when working in the field. Must maintain the confidentiality of all corporate information. Adheres to all corporate policies, procedures, and guidelines. Some travel is required.

KNOWLEDGE, SKILLS, AND ABILITIES

- Requires a degree in electrical engineering (in Canada) and must be eligible for registration as a Professional Engineer in the Yukon.
- Knowledge of electrical theory, design parameters and applicable codes and regulations as applied to electrical utility distribution, transmission, generation, and telecommunications facilities.
- Knowledge of utility operations and engineering including computerized maintenance systems, material management and project budgeting.

- Working knowledge of PSS/E, ETAP, and CYME for Power System Studies (Short Circuit, Power flow, Arc Flash, and Coordination studies)
- Knowledge of IEEE 1547, IEEE 1547.1, UL 1741 SA, and UL 1741 SB standards for Interconnecting Distributed Energy Resources (DER) with electric utilities.
- Ability to work independently and in a team and cross-cultural environment.
- Ability to direct, evaluate, and elicit the cooperation of others and negotiate effectively with other departments and outside agents.
- Ability to communicate effectively with others and compose clear, effective, and accurate technical reports and presentations.
- Ability to assimilate and understand information in a manner consistent with the essential job functions.
- Ability to perform as a project manager – review drawings, specifications, cost estimates, construction contracts and request for proposals.
- Ability to make sound decisions in a manner consistent with the essential job functions.
- Must be self-motivated, able to take initiative, versatile and thrive on a variety of work.
- A valid class 5 driver's license.