

## PROJECT ENGINEER/PROJECT MANAGER

Title: Project Engineer / Project Manager

Reports To: Manager, Projects and Power Distribution

Direct Reports: none

Issue Date: September 20, 2019 Version: 3.0

## General Description:

The Project Engineer / Project Manager (PE/PM) will liaison with clients, contractors, vendors and internal staff, as well assume responsibility for completing the design and procurement of power system and controls equipment including switchgear and transformers, PLC's, protection relays, drawings, and submittal packages to facilitate the execution of this work. In addition, this the PE/PM will conduct testing, maintenance and commissioning of a wide range of power, protection, and control system equipment and may participate in conducting the analysis and completion of power system studies.

## Leadership:

- Represent Prime Engineering Limited in a positive and professional way, both internally and externally
- Work collaboratively to identify and achieve departmental and company goals
- Foster teamwork both internally and externally
- Become familiar with, and keep abreast of, related industry matters through third party resources and networks
- Ensure proper care and use of vehicles and equipment under your direction
- Maintain a clean work environment
- Take personal responsibility, and foster team responsibility, to work safely and ensure all project and technical functions are performed in a safe and environmentally responsible manner

### Responsibilities:

- Abide by Prime Engineering Quality Standards at all times
- Design, procure, schedule, and completely manage electrical projects in conjunction with our staff and client requirements
- Work safely and efficiently on electrical systems in a variety of environments, including commercial, industrial and utility
- Development and design of the power distribution and transmission systems (HV/MV/LV), including single line diagrams, three-line diagrams, AC/DC schematics and communication systems
- Preparation of project documentation including operation and maintenance manuals, control philosophy, and drawings
- Organize and participate in design reviews and project meeting with both internal and external clients
- Specify and select electrical equipment, prepare data sheets, prepare RFQ's and material requisitions



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- Assist with / perform engineering studies including but not limited to: load flow, short circuit, coordination, Arc Flash, ground grid and motor starting analysis
- Engineering calculations and analysis for demand load, equipment sizing, voltage drop, motor starting, neutral grounding resistors (NGR's), and system power factor improvement
- Analysis of P&ID's and mechanical equipment
- Interface with Mechanical design team
- Assist with cost estimations and technical documentation for proposals
- Design substation layouts, grounding layouts and electrical equipment layouts including control panels, lighting, cable tray, switchgear and components
- Provide technical support to fellow team members and clients as required
- Analysis of P&ID's and mechanical equipment
- Specify and select electrical equipment, prepare data sheets, prepare RFQ's and material requisitions
- Interface with vendors, review vendor bids, conduct technical evaluations and make recommendations
- Prepare electrical cable schedules
- Manage and schedule projects in conjunction with colleagues and clients' needs and demands
- Technical report writing and completion of test sheets
- Track and be responsible for project costing and profitability
- Maintain a desire to learn and research topics outside area of expertise to implement within new designs

This description is not a comprehensive listing of activities, duties or responsibilities that may be required. Other duties, responsibilities and activities may be assigned or may be changed at any time with or without notice.

## Required Competencies:

- Capable of assuming responsibility and exercising independent judgement
- Abie to evaluate assignments, determine procedures and implement solutions, help schedule work to meet objectives, participate in short- and long-range planning
- Excellent written and verbal communication skills, with tenacity to resolve issues in a timely manner
- Effective time management skills with the ability to multi-task and work on multiple projects concurrently under strict deadlines
- Able to adapt quickly to changing work demands without compromising accuracy and quality of work
- Outstanding client service
- Self-motivated, demonstrated initiative with a strong sense of urgency
- Ability to work effectively in a multidisciplinary team and interact with staff at various levels of the organization



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## Qualifications:

- Electrical engineering degree or diploma or other applicable certification
- Registration as a Professional Engineer or Engineer-in-Training in BC, or eligibility for registration with EGBC is required
- At least 4-6 years of related experience in project management and power distribution
- Excellent knowledge of three phase power systems
- Knowledge of CEC and IEEE standards
- Excellent knowledge of power distribution, switchgear, generation and substations
- Excellent MS Office skills
- Willing and able to work out of town as needed
- Valid Class 5 Driver's License & clean driver's abstract
- Must be legally entitled to work within Canada

# Measures of Performance:

- Ability to manage work to deadline
- Quality of production, detail in technical work
- Quality of documentation
- Communication and collaboration at all levels
- Customer satisfaction
- Adherence to Prime safety and training requirements