



**JOB TITLE:** PLANT MAINTENANCE / PROJECT ENGINEER

**REFERENCE NO:** 100025

**DIVISION:** ENERGY & UTILITIES

**DEPARTMENT:** ELECTRIC GENERATION

**APPROVAL DATES:** BY:

  
ENERGY & UTILITIES COMMISSIONER

**DATE:** June 6/19

BY:

  
GENERAL MANAGER OF HUMAN RESOURCES

**DATE:** June 4/19

**GENERAL DESCRIPTION:**

This position is accountable for engineering support to management, operations and maintenance trades personnel on a daily basis, and for the design, project management, and construction of plant equipment improvement projects.

**ORGANIZATIONAL RELATIONSHIPS:**

- Reports to the Maintenance and Engineering Manager - Electric Generation.
- Internal relationships are maintained with department co-workers and Inter-departmental staff.
- Maintains external contacts with outside regulatory agencies such as:
  - Alberta Environment - Alberta Environmental Protection Services.
  - The Association of professional Engineers and Geoscientists of Alberta.
  - Alberta Occupational Health and Safety.
  - Original Equipment Manufacturers.
  - Corporative Insurance Agencies.
  - Alberta Boiler Safety Association

**PRIMARY FUNCTIONS/ACCOUNTABILITIES:**

- Prepare and /or coordinate designs, specifications, budgets, and schedules for the implementation of capital and operational equipment improvements. Liaison with consultants, contractors, equipment suppliers and plant staff to ensure successful implementation of equipment improvements.
- Provide technical support in planning and resolving maintenance problems on a daily basis. Assist in planning maintenance work and power plant equipment outages with input from the Maintenance and Operations Departments, Planning and Management as part of the Electric Generation team.
- Work closely with the operations and maintenance departments to maintain optimum plant and equipment operating efficiencies.
- Prepare budgetary justifications for equipment alterations and plant additions.
- Assist with the preparation of operating and capital budgets, monthly cost variance reports and cash flow forecasts.
- Performs document management including retention of engineering drawings and document lists.
- Assist Operations in monitoring and interpreting readings from log sheets, identify potential equipment deficiencies, and then correct them in cooperation with all plant staff.

- Ensure plant compliance with regulatory agencies.
- Support a constructive culture by maintaining effective employee relations.
- Promote safe working conditions and participate in all plant safety programs.
- Available for stand-by duties as required.
- Other duties as assigned

**REQUIRED COMPETENCIES:**

- Thorough technical knowledge of combined cycle power plant theory and physical processes.
- Thorough problem-solving and analytical ability with creative skills to conceptualize and develop solutions.
- Strong knowledge of Process Safety Management principles including Management of Change (MOC), Process Hazard Analysis (PHA), Pre-Start-up Safety Reviews (PSSR) and Compliance Audits.
- Ability to apply economic evaluation methods to evaluate plant performance and improvement projects
- Strong interpersonal skills to establish and maintain effective working relationships with internal and external customers
- Strong communication skills enabling clear and effective expression of ideas both orally and in writing.
- The ability to develop and implement standards, procedures, and guidelines to support operational processes.
- Skilled in operating a personal computer using Microsoft Office software in a network environment, including working knowledge of AutoCAD and other engineering related software.
- Thorough understanding and experience in Project Management
- Working knowledge of the Alberta Occupational Health and Safety Act and other relevant Federal and Provincial Legislation.
- Commitment to promoting a safe working environment for self and others.
- Completion of all required Health & Safety related training as per current training standards.

**REQUIRED QUALIFICATIONS:**

- Successful completion of a Bachelor's Degree in Mechanical Engineering from a recognized post-secondary institution.
- Professional Membership in, or the ability to become a Professional Member of the Association of Professional Engineers and Geoscientists of Alberta (APEGA).
- Five (5) years of directly related experience as a Professional Engineer.
- Training in the operating principles and practices of high pressure steam boilers, steam and combustion turbine electrical generators, and their associated auxiliary equipment.
- Project Management Professional (PMP) designation or ability to obtain.
- Valid Class 5 driver's license with an acceptable driving record.
- An equivalent combination of management approved training and experience may be considered.