



Provincial Job Description

TITLE:
**(444) 3rd Class Building Systems
Engineer**

PAY BAND:

FOR FACILITY USE:

SUMMARY OF DUTIES:

Maintains, operates and repairs a 3rd Class plant/energy centre system with additional responsibility for building automation systems and associated equipment within the facility/energy centre.

QUALIFICATIONS:

- ◆ Power Engineering Technology diploma
- ◆ 3rd Class Power Engineer certificate

KNOWLEDGE, SKILLS & ABILITIES:

- ◆ Intermediate computer skills
- ◆ Intermediate knowledge of mechanical and electrical trades
- ◆ Organizational skills
- ◆ Communication skills
- ◆ Interpersonal skills
- ◆ Ability to work independently
- ◆ Ability to read blueprints and schematics
- ◆ Valid drivers' license, where required by the job

EXPERIENCE:

- ◆ **Previous:** Twelve (12) months experience in an industrial/commercial maintenance environment including controls experience.

KEY ACTIVITIES:

A. Plant / Energy Centre Operation

- ◆ Operates and services building/plant (e.g., boilers, fans, cooling towers, chillers, HVAC, automation systems, emergency power, fire systems, ventilation units, call systems) within code requirements.
- ◆ Maintains and services water systems (e.g., tests, analyzes and logs pumps, converters, heat reclamation system, piping).
- ◆ Mixes chemicals.
- ◆ Removes and replaces parts (e.g., pipes, valves, sight glasses, safety valves, pumps, packing and mechanical seals).
- ◆ Prepares shift reports.
- ◆ Performs daily boiler chemical tests, calculates impurities, adds chemicals as necessary.
- ◆ Performs daily equipment checks.
- ◆ Maintains and repairs boilers (e.g., shut downs, boiler inspection, replace parts).
- ◆ Monitors and maintains pneumatic control system.
- ◆ Monitors and responds to plant alarms.
- ◆ Liaises with outside contractors, vendors and inspectors.
- ◆ Repairs electrical equipment and wiring.
- ◆ Prioritizes workload/projects and coordinates the operation of automated building systems and associated equipment.

B. Service Control Systems

- ◆ Troubleshoots, repairs, installs, calibrates, adjusts, monitors, replaces control systems and equipment as required, including fire systems.
- ◆ Modifies and adjusts control systems set points and parameters.
- ◆ Performs diagnostics on control systems.
- ◆ Monitors emergency power systems within facility.
- ◆ Maintains documentation for control system.
- ◆ Provides input into the building systems' preventative maintenance program, and keeps appropriate records.
- ◆ Participates in fire alarm verification.
- ◆ Repairs pumps, fans, motors, dampers, valves, compressors, heat exchangers, humidifiers, ventilation units, filters, sprinkler systems, mixing boxes, sensors, steam heating systems, hydronic systems throughout the building.
- ◆ Performs verifications and commissioning of HVAC systems.
- ◆ Provides technical advice and input to consultants and engineers.

C. Preventative Maintenance

- ◆ Performs preventative maintenance tasks on all plant/energy centre equipment and systems.
- ◆ Performs preventative maintenance tasks on other equipment throughout the facility as per preventative maintenance program, where required.
- ◆ Maintains maintenance logs and records.

D. Related Key Work Activities

- ◆ Maintains a clean work area.
- ◆ Prepares daily reports.
- ◆ Assists tradespersons with repairs to plant.
- ◆ Maintains inventory (e.g., orders parts and chemicals).
- ◆ Participates in renovation projects.
- ◆ Locks / unlocks doors and performs security checks, where required by the job.
- ◆ Performs general maintenance activities throughout the facility (e.g., kitchen, laundry, housekeeping, beds, call system), where required by the job.
- ◆ Performs minor plumbing, mechanical, carpentry and welding duties, where required by the job.
- ◆ Maintains medical gas systems, where required by the job.
- ◆ Provides occasional guidance to the primary function of others, including training.

The above statements reflect the general details considered necessary to describe the principal functions of the job and shall not be construed as a detailed description of all related work assignments that may be inherent to the job.

Validating Signatures:

CUPE:

SEIU:

SGEU:

SAHO:

Date: October 8, 2013