



# *Provincial Job Description*

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***TITLE:***  
**(444) 3<sup>rd</sup> Class Building Systems  
Engineer**

***PAY BAND:***  
**14**

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***FOR FACILITY USE:***

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## ***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:***

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***SGEU:***

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***SEIU:***

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***SAHO:***

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***Date: October 8, 2013***