

<i>Code:</i> 2721 <i>Title:</i> CO-GENERATION PLANT OPERATOR

SUMMARY: Operates, services, maintains and repairs power generation equipment in a co-generation power production facility providing uninterrupted electrical power and supporting utility system and services to a wastewater treatment facility.

DUTIES/RESPONSIBILITIES: (Work assignments may vary depending on the department's needs and will be communicated to the applicant or incumbent by the supervisor)

Operates, services, adjusts and maintains power generation and related systems and equipment to furnish electrical power, heating water, ventilating and air-conditioning (HVAC) for the wastewater treatment facility;

Operates electrical switchboard to control engine/generating sets, according to changes in power demand;

Observes gauges, indicators and meter readings, records items and makes adjustments to equipment;

Coordinates operations and maintenance actions with other operators and maintenance staff to assure uninterrupted service support to Wastewater Treatment Plant (WWTP) systems;

Maintains, services and repairs auxiliary boiler-room equipment;

Performs running repairs on operating equipment, pumps and related equipment;

Removes, repacks and replaces valve assemblies;

Samples, tests, records and adjusts water chemistry in plant equipment water systems;

Maintains equipment, system, facility and shift operations and maintenance manual and computer-based logs;

Performs preventive maintenance and major overhaul work on equipment;

Assists maintenance mechanics performing repairs to power production facility equipment and related systems.

KNOWLEDGE & SKILLS:

Knowledge of:

- principles of operations, methods and practices of power generation plant operation;
- principles of electricity/electronics, to include high and low voltage electricity, AC/DC and applications in a power-HVAC-production setting;
- principles, practices, operation, maintenance and repair of large stationary engine generator sets, high- and low-pressure boilers and related generation equipment;
- occupational hazards and safety precautions of the trade;
- electrical, hydraulic and pneumatic control systems;
- principles, practices and operation of heating and air-conditioning (HVAC) and related equipment;
- process water chemistry sampling, testing and adjusting.

Skill in:

- operating, maintaining, trouble-shooting and repairing power generation equipment, including electrical switchboards, computerized control systems and related equipment;
- use, care and maintenance of tools, materials and equipment of the trade;
- following verbal and written guidance in routine and emergency situations;
- use, care and maintenance of safety and personal protective equipment;
- reading, interpreting and applying technical information from operating/maintenance manuals, specifications, schematics, sketches, drawings, blueprints, related technical data and standard operating procedures;
- maintaining and making in-service repairs on power generation equipment;
- maintaining operating records and preparing activity reports.

