

MICHIGAN CIVIL SERVICE COMMISSION
JOB SPECIFICATION

POWER PLANT OPERATOR

JOB DESCRIPTION

Employees in this job operate and maintain stations, engines and mechanical equipment, such as steam and electric engines, air compressors, generators, motors, turbines, and steam boilers to provide utilities, such as light, heat, or power for state owned buildings.

There are three classifications in this job.

Position Code Title - Power Plant Operator-E

Power Plant Operator 8

This is the intermediate level. The employee assists the shift operator while learning the operation and maintenance of a power plant.

Power Plant Operator E9

This is the experienced level. As a shift operator, the employee performs a full range of operator assignments using independent judgement to make decisions requiring the application of procedures and practices to specific work situations.

Position Code Title - Power Plant Operator-A

Power Plant Operator 10

This is the advanced level. The employee functions as a crew leader overseeing the work of lower-level Power Plant Operators, prisoner crews, or others and performs experienced-level assignments.

NOTE: Employees generally progress through this series to the experienced level based on satisfactory performance and possession of the required experience.

JOB DUTIES

NOTE: The job duties listed are typical examples of the work performed by positions in this job classification. Not all duties assigned to every position are included, nor is it expected that all positions will be assigned every duty.

Maintains the operation of such equipment as boilers, stokers, pumps, water softeners, water heaters, absorbers, centrifugal chillers, cooling towers, and purge pumps.

Regulates dampers, water level in boilers and fuel supply; checks water gauges and steam gauges to see that sufficient steam is generated, regulates the flow of steam through the distribution system; maintains proper temperature of chilled and condensing water.

Analyzes water samples and adds chemicals as required.

Oils, greases and adjusts machinery and equipment and makes minor repairs.

Makes periodic inspections to see that all equipment and controls are operating properly and are in good condition.

Maintains consumption and production records.

Reports defects and recommends improvements, alterations and repairs.

Maintains inventory lists and requisitions supplies, materials and repair parts.

Cleans floors, windows, tools and power plant equipment.

May assist in training lower-level Power Plant Operators and others.

Performs related work as assigned.

Additional Job Duties

Power Plant Operator 10 (Crew Leader)

Oversees the operation of such equipment as boilers, stokers, pumps, water softeners, water heaters, steam driven turbine generators, diesel driven generators, electrical switch gear and other electrical and steam or chilled water generating and distributing equipment.

Assigns, schedules and oversees the work of Power Plant Operators and others in the operation and repair of machinery on an assigned shift.

Provides instruction and training in the proper methods and processes necessary to carry out assignments.

Inspects and tests new machinery and equipment installations.

Prepares written reports on ongoing projects and on the condition of machinery.

Checks daily logs to determine proper operation of equipment.

JOB QUALIFICATIONS

Knowledge, Skills, and Abilities

NOTE: Developing knowledge is required at the intermediate level, considerable knowledge is required at the experienced level, and thorough knowledge is required at the advanced level.

Knowledge of the operation and maintenance of high-pressure boilers and related mechanical equipment.

Knowledge of the occupational hazards and safety precautions applicable to the work.

Knowledge of the steam and chilled water generating process.

Knowledge of automated boiler and chiller controls and electrical and pneumatic controls.

Knowledge of firing boilers and operation of absorbers and centrifugal chillers.

Ability to detect operating defects or faults.

Ability to work with high voltage equipment.

Ability to keep records of fuel used, steam produced and general operating conditions.

Additional Knowledge, Skills, and Abilities

Power Plant Operator 10 (Crew Leader)

Ability to provide training and explain instructions and guidelines to others effectively.

Ability to organize and coordinate the work of the unit.

Ability to determine work priorities and assign work to employees.

Working Conditions

Some jobs require an employee to be exposed to hazardous work environments.

Some jobs require an employee to work outdoors as well as in an office or a laboratory.

Some jobs require an employee to work in an environment that involves exposure to unpleasant and noxious fumes and odors.

Physical Requirements

The job duties require an employee to bend, reach, stoop, stand and/or walk for extended periods.

The job duties require an employee to lift and/or move heavy objects.

Education

Education typically acquired through completion of high school.

Experience

Power Plant Operator 8

Two years of experience assisting skilled trades staff in operating a power plant.

Power Plant Operator E9

Four years of experience in power plant operation including two years equivalent to a Power Plant Operator 8.

Power Plant Operator 10

Five years of experience in power plant operation including one year equivalent to a Power Plant Operator E9.

Special Requirements, Licenses, and Certifications

None

NOTE: Equivalent combinations of education and experience that provide the required knowledge, skills, and abilities will be evaluated on an individual basis.

JOB CODE, POSITION TITLES AND CODES, AND COMPENSATION INFORMATION

Job Code

POWPLTOPR

Job Code Description

POWER PLANT OPERATOR

Position Title

Power Plant Operator-E

Power Plant Operator-A

Position Code

PWPLOPRE

PWPLOPRA

Pay Schedule

A31-009

A31-012