

SENIOR POWER PLANT OPERATOR/TECHNICIAN

DEFINITION

To organize, assign and review the work of assigned personnel engaged in operating, monitoring, and maintaining electric power plant generation systems and related water cooling, and zero liquid discharge processing; to perform duties requiring specialized knowledge; and to provide administrative support to assigned supervisor.

DISTINGUISHING CHARACTERISTICS

This is the advanced journey level in the Power Plant Operator/Technician series. Positions at this level are distinguished from other classes within the series by the level of responsibility assumed, complexity of duties assigned, independence of action taken, by the amount of time spent performing the duties, and by the nature of the public contact made. Employees perform the most difficult and responsible types of duties assigned to classes within this series, including providing technical and functional supervision over assigned personnel and perform troubleshooting to resolve difficult operational problems and power failures. Employees at this level are required to be fully trained in all procedures related to assigned areas of responsibility.

SUPERVISION RECEIVED AND EXERCISED

Receives direction from the Power Plant Operations & Maintenance Supervisor.

Exercises technical and functional supervision over assigned technical staff.

EXAMPLES OF ESSENTIAL DUTIES - Duties may include, but are not limited to, the following:

Plan, prioritize, and review the work of staff assigned to operating, monitoring, and maintaining a combined cycle electric power plant.

Develop schedules and methods to accomplish assignments ensuring work is completed in a timely and efficient manner.

Participate in evaluating the activities of staff, recommending improvements and modifications.

Provide and coordinate staff training; work with employees to correct deficiencies.

Operate and monitor electric power plant generation systems and related water cooling and zero liquid discharge processing; observe plant operating status; monitor plant operations via automated instrument and control equipment; perform regular visual checks of mechanical and electric processes and related equipment; check gages and equipment to ensure proper operation.

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Monitor, test and adjust water chemistry and related pumps to maintain efficient operation of boilers, steam turbines, the cooling tower, and heat recovery steam generators; ensure protection of equipment from damage due to water chemistry problems; and maintain consistency of water flow usage to chemical feed.

Perform chemical testing related to quality control of steam, cooling and condensation systems; monitor acidity levels and temperature for efficient processing and hardness related to the reverse osmosis processing system.

Perform start up of processing systems as required to avoid plant down-time, lost revenue, repair costs, and to promote efficient plant operation.

Observe and monitor air quality emissions, especially as related to adverse weather or operating conditions that may result in damage to equipment; prepare related reports, including steps taken to resolve problem and/or make recommendations.

Prepare documentation and reports and maintain logs and records related to work performed, supplies used, plant operations issues and regulatory compliance; review activity logs at the beginning of assigned shift to be familiar with condition of systems and operations.

Perform start up of processing systems as required to avoid plant down-time, lost revenue, repair costs, and to promote efficient plant operation.

Perform routine preventive maintenance when plant conditions allow; assist maintenance staff in shutdown related maintenance and repair activities.

Initiate log out/tag out orders for work to be completed; initiate permits for live wire and confined space work; and issue safe work permits for outside contractors/vendors performing work in the plant.

Make recommendations regarding safety, administrative, and operating procedures and plant operating efficiency.

Coordinate, monitor, and schedule the work of outside vendors and contractors.

Perform the most difficult work related to the operation and maintenance of a combined cycle electric power plant.

Build and maintain positive working relationships with co-workers, other City employees and the public using principles of good customer service.

Perform related duties as assigned.

MINIMUM QUALIFICATIONS

Knowledge of:

Principles and practices of technical and functional supervision and training.

Principles and practices used in the operation, monitoring, and maintenance of a combined cycle electric power plant.

Equipment, tools and materials used in operating, maintaining, and repairing combined cycle power plant equipment, including automated instrument and control equipment.

Basic electric theory as related to operation of pumps, motors and other electric and mechanical equipment.

Local, State, and Federal codes, regulations, and laws pertaining to operation, maintenance, and safety in an electric power plant environment.

Department policies and procedures.

Ability to:

Provide technical and functional supervision over assigned staff; effectively train staff.

Perform the most complex duties related to the operation, monitoring, and maintenance of a combined cycle electric power plant.

On a continuous basis, know and understand operations and maintenance activities and observe safety rules; intermittently, analyze problem equipment; identify safety hazards; locate equipment; interpret work orders; remember how to operate equipment; and explain jobs to other employees.

Intermittently, sit while studying or preparing reports; intermittently reach, bend, squat, climb, kneel and twist when inspecting or repairing equipment; perform simple and power grasping, pushing, pulling, and fine manipulation; use telephone, and write or use a keyboard to communicate through written means; and lift or carry weight of 25 pounds or less.

Perform complex troubleshooting problem identification and difficult work related to the operation and maintenance of combined cycle power plant electrical and mechanical equipment and systems.

Prepare and maintain records of activities, supplies used, and regulatory compliance.

Communicate clearly and concisely, both orally and in writing.

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Establish and maintain effective working relationships with those contacted in the course of work.

### Experience and Training

Any combination of experience and training that would provide the required knowledge and abilities is qualifying. A typical way to obtain the required knowledge and abilities would be:

#### Experience:

Two years of responsible journey experience performing duties similar to a Power Plant Operator/Technician II with the City of Roseville.

AND

#### Training:

Equivalent to completion of the twelfth grade.

### License and Certificate

Possession of, or ability to obtain, a valid California driver's license.

02-09-13	Senior Power Plant Operator/Technician
09-10-05	Power Plant Lead Operator/Technician