

POWER PLANT ENGINEER I  
POWER PLANT ENGINEER II

DEFINITION

To perform professional level engineering activities related to the long-term maintenance and operation of the City of Roseville's generation assets.

DISTINGUISHING CHARACTERISTICS

Power Plant Engineer I – This is the entry level class in the Power Plant Engineer series. This class is distinguished from the journey level by the performance of the more routine tasks and duties assigned to positions within this series. Employees at this level are not expected to perform with the same independence of direction and judgment on matters allocated to the journey level. Since this class is typically used as a training class, employees may have only limited or no directly related work experience. Employees work under general supervision while learning job tasks.

Power Plant Engineer II – This is the journey level class within the Power Plant Engineer series and is distinguished from the Power Engineer I level by the assignment of the full range of duties. Employees at this level receive only occasional instruction or assistance as new, unusual or unique situations arise and are fully aware of the operating procedures and policies within the work unit. Positions in this class are flexibly staffed and are normally filled by advancement from the Power Plant Engineer I level.

This class is distinguished from the Senior Power Plant Engineer in that latter performs the most difficult and responsible types of duties assigned to classes within this series including assigned responsibility for overseeing the development and implementation of a comprehensive maintenance plan for the power generation facilities and exercising direct supervision over professional engineering staff.

SUPERVISION RECEIVED AND EXERCISED

Power Plant Engineer I

Receives general supervision from the Senior Power Plant Engineer.

May exercise technical and functional supervision over technical staff.

Power Plant Engineer II

Receives direction from the Senior Power Plant Engineer.

May exercise technical and functional supervision over lower level professional and technical staff.

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

Perform a variety of engineering tasks related to the operations and maintenance of power generation equipment.

Assist with the implementation of long-term maintenance schedules; review the work of outside contractors and consultants in the repair and maintenance of the power plant.

Maintain and operate plant specific optimization modeling program to analyze the output and efficiency of the plant; model specific systems and recommend design or procedural changes to improve the efficiency of the plant.

Review operating, startup and shutdown procedures and data and identify areas in need of modification or improvement.

Develop and maintain drawing configurations, technical documents, regulatory, and plant event library.

Prepare requests for bids and proposals; participate in the review of bids and proposals; prepare equipment specifications.

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

Power Plant Engineer I

Knowledge of:

Basic chemistry, thermodynamics, mechanical principles, and electrical principles.

Methods, materials and techniques used in the maintenance and operation of a power generation plant.

Principles and practices of safety management.

Modern office procedures, methods and computer equipment including word processing, database and spreadsheet applications.

Ability to:

Perform professional level engineering work in support of power generation plant operations and maintenance.

On a continuous basis, know and understand all aspects of the job; intermittently analyze work papers, reports and special projects; identify and interpret technical and numerical information; observe and problem solve operational and technical policy and procedures.

On a continuous basis, sit at desk for long periods of time; intermittently bend, squat, climb, kneel or twist while performing field work; intermittently twist to reach equipment surrounding desk; perform simple grasping and fine manipulation; use telephone, and write or use a keyboard to communicate through written means; and lift or carry weight of 10 pounds or less.

Learn to prepare engineering plans and specifications and perform complex computations related to the operation and maintenance of power generation facilities.

Learn to prepare accurate cost estimates and make recommendations.

Learn City policies and procedures and department standards related to the design and construction of electric utility facilities.

Learn pertinent local, State, and Federal codes, regulations, and laws.

Learn to analyze and prepare technical reports.

Communicate clearly and concisely, both orally and in writing.

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

### Experience and Training

#### Experience:

No professional experience is required; one year of technical engineering experience is desirable.

AND

#### Training:

A Bachelor's degree from an accredited college or university in engineering or a related field by date of appointment.

#### License and Certificate:

Possession of a valid California driver's license by date of appointment.

In addition to the qualifications for the Power Plant Engineer I:

Knowledge of:

Chemistry, thermodynamics, mechanical principles, and electrical principles as they relate to the operation and maintenance of a state-of-the-art power generation plant.

Project management, including cost estimating and budget monitoring and control.

Methods for developing and implementing long-term maintenance programs.

Ability to:

Independently perform professional engineering work in support of power generation plant operations and maintenance.

Experience and Training

Experience:

Two years of responsible experience performing duties similar to that of a Power Plant Engineer I with the City of Roseville.

AND

Training:

A Bachelor's degree from an accredited college or university in engineering or a related field.

License and Certificate

Possession of a valid California driver's license by date of appointment.

Possession of an Engineer in Training (EIT) certificate by date of appointment. California certification is desirable but not required.

09-04-18

08-22-15      Power Plant Engineer I/II

03-05-15

07-08-13

02-09-13      Power Plant Engineer

04-19-05      Power Plant Engineer/Maintenance Planner