

PRINCIPAL POWER PLANT ENGINEER

DEFINITION

To plan, organize and direct professional engineering activities related to the long-term maintenance and operations of the City of Roseville's generation assets; to review asset performance data for improvements in performance; to perform a variety of complex and difficult engineering tasks relative to assigned area of responsibility; to serve as administrator for the computerized maintenance management system; and to provide highly responsible professional support to higher level management as assigned.

SUPERVISION RECEIVED AND EXERCISED

Receives general direction from higher level management staff.

Exercises direct supervision over professional and technical staff.

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

Recommend and implement section goals and objectives; establish performance standards and methods for professional engineering work related to assigned section operations; develop and implement policies and procedures.

Plan, prioritize, assign, supervise and review the work of staff involved in a variety of engineering tasks related to the operations and maintenance of generation equipment.

Evaluate operations and activities of assigned section; determine section priorities; implement improvements and modifications; prepare various reports on operations and activities.

Implement schedules and methods for troubleshooting operational issues and review operating chemistry associated with the operation of the power plant; analyze data and develop options to improve performance.

Participate in budget preparation and administration, including capital improvement budget; prepare cost estimates for budget recommendations; submit justifications for services, labor, and materials; monitor and control expenditures.

Develop long-term maintenance schedules; oversee the work of outside contractors and consultants in the repair and maintenance of the power plant.

Identify beneficial Capital Improvement Projects; develop Requests for Proposal; participate in the selection and oversight of contractors and consultants.

Work collaboratively with compliance personnel to ensure implementation of regulatory requirements do not adversely impact operations.

Principal Power Plant Engineer

-2-

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.

Serve as administrator for Computerized Maintenance Management System (CMMS); initiate work orders, assign projects to personnel, audit completed work, produce reports.

Participate in the selection of staff; coordinate staff training; conduct performance evaluations; recommend discipline; implement discipline procedures as directed.

Answer questions and provide information to the public and city leaders; investigate complaints and recommend corrective action as necessary to resolve complaints.

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:

Advanced 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.

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

Technological programs used in the tracking and scheduling of maintenance activities and modeling of power plant operations.

Methods for developing and implementing long-term maintenance programs.

Principles of supervision, training and performance evaluations.

Principles of budget monitoring.

Principles and practices of safety management.

Pertinent local, State and Federal laws, ordinances and rules.

Ability to:

Organize, implement, and direct section activities related to professional engineering in support of power generation plant operations and maintenance activities.

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.

Review operational and maintenance issues, determine how changes will impact the overall operation of the power plant and determine appropriate course of action.

Interpret, explain and apply City and department policies and procedures.

Assist in the development and monitoring of an assigned program budget.

Prepare and present technical reports.

Effectively operate and maintain industry specific technology.

Oversee and manage projects.

Communicate clearly and concisely, both orally and in writing.

Supervise, train and evaluate assigned staff.

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

Experience and Training

Experience:

Two years of responsible professional engineering experience similar to that of a Senior Power Plant Engineer with the City of Roseville, including one year of lead or supervisory responsibility.

AND

Training:

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

License or Certificate

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

Possession of a certificate of registration as a Professional Engineer by date of appointment.

California registration is desirable but not required.

04-08-23 Principal Power Plant Engineer