CITY OF LODI

October 15, 2003
Updated November 2019
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SENIOR POWER ENGINEER

DEFINITION

Performs a variety of professional office and field engineering work relating to planning, design, construction and maintenance of electric utility systems and projects within the Engineering and Operations Division of the Electric Utility Department and performs related work as required.

SUPERVISION EXERCISED AND RECEIVED

Receives general direction from the Manager, Engineering and Operations. May provide supervision or lead direction to lower-level engineers, electrical estimators and technicians.

DISTINGUISHING CHARACTERISTICS

This is a flexibly staffed class series in that the Electrical Engineer may reasonably expect to progress to the Senior Power Engineer with training, satisfactory performance and management approval.

EXAMPLES OF DUTIES

Duties may include, but are not limited to the following:

Performs complex professional engineering work in the design, construction and maintenance of City's electrical and communication facilities, including system modeling and planning, engineering studies, material specification, cost and scheduling estimates and written reports and presentations;

Develops material and equipment standards and specification, and operating and maintenance procedures for the electric utility;

Prepares reports and presentations for load forecasts and analyses, system expansion studies and other power system studies, analyses and calculations;

Prepares bid specifications and Council communications, reviews bids and proposals, recommends awards of contracts and monitors progress of capital improvement projects and professional services contracts;

Prepares plans, specification, and cost estimates for electric utility construction projects, makes feasibility and economic studies of alternative plans;

Coordinates Electric department activities with other city departments and outside agencies;

Performs engineering assignments for a wide range of utility, commercial and residential electric systems, including substations, overhead and underground electric

distribution, transmission, generation, metering, grounding systems, protective fuse and relay systems, and sports and street lighting systems;

Assists in the training of utility personnel;

Provides technical guidance and work supervision for engineering division staff;
Assists and provides guidance for the utilities' customers for the efficient use of electric energy, in establishing utilities service requirements, fault current protection, load management and demand control, power factor correction, and systems safety and protections schemes;

Prepares division budget and assists in the preparation of the utility's annual budget, capital improvement programs and reports as required;

Performs long and short term system planning studies for transmission, substation and distribution systems modifications, improvements and additions to serve existing and new loads;

Monitor system performance and efficiency and recommends corrective measures as required;

Performs load studies and prepares forecasts as required for the utility's distribution system planning and budget preparation;

Performs other related duties as required.

MINIMUM QUALIFICATIONS

Knowledge of:
Electrical theory, design parameters and applicable codes and regulations as applied to electrical utility distribution, transmission and generation facilities;

Methods, materials and techniques used in the construction of electric transmission, distribution and substation projects;

Principles and practices of applicable codes and standards;

Principles of supervision and training; principles of budget preparation and administration;

Principles and practices of safety;

Ability to:
Prepare complex engineering plans, specifications, engineering computations and studies; check design and supervise the preparation of engineering plans, studies and reports;

Supervise, train and evaluate assigned staff;

Communicate clearly and concisely, both orally and in writing;

Use and operate centralized telephone equipment, personal computer, related software and peripheral equipment;
Establish and maintain cooperative and effective relationships with those contacted during the course of work.

EDUCATION AND EXPERIENCE:

Any combination of experience and education that would likely produce the qualifying knowledge and ability. A typical combination is:

Education:

Equivalent to a Bachelor's degree from an accredited college or university with major coursework in electrical engineering or a related field.

Experience:

Four (4) years of responsible professional electrical engineering experience. One (1) year of which was in a supervisory or lead capacity.

LICENSES AND CERTIFICATES

Possession of the appropriate valid Driver's License from the California Department of Motor Vehicles.

Professional registration as a Professional Electrical Engineer, in the State of California is desirable.

FLSA Status: EXEMPT