

JOB DESCRIPTION



ELECTRICAL DISTRIBUTION ENGINEER

(Exempt/Management Position)

DEFINITION

Under general direction of the Director of Electric Utility, plan, direct, supervise, and coordinate the system planning, design, construction, operations and maintenance of an electrical distribution system; prepare plans, specifications, and cost estimates for the installation, maintenance, repair and expansion of City electrical distribution system; to provide highly responsible and technical staff assistance; and to perform related work as assigned.

EXAMPLES OF DUTIES:

In support of the operation and maintenance of the Electric System, these examples are intended only as illustrations of the various types of work performed in positions allocated to this class. The examples of work performed are neither restricted to nor all encompassing of the duties to be performed under this job title. **(E) Essential Duty; (M) Major Portion of Time**

- Develops plans, specifications, and cost estimates for the installation, maintenance, repair and expansion of the City electrical overhead and underground distribution system, including substations, and transmission lines. (E-M)
- Inspect the installation of electrical equipment and related facilities. (E-M)
- Monitor the electric system performance.
- Develops a yearly planning and capital improvement study .
- Develop goals, objectives, policies, and priorities. (E)
- Prepare studies, reports and recommendations pertaining to the overall electric system operation.
- Advise developers and contractors regarding technical requirements. (E-M)
- Respond to emergency conditions and assist in restoring the electrical distribution system to normal operation. (E)
- Respond to citizen complaints and questions. (E)
- Coordinate the work of crews engaged in the operation and maintenance of structures, distribution lines and substations. (E-M)
- Coordinate electrical distribution system, street lighting and traffic signal activities with other City departments, and with outside agencies. (E-M)
- Supervise, train and evaluate assigned staff. (E)
- Develop specifications for material purchases and construction standards. (E)
- Recommend construction practices and procedures. (E)
- Calculate customer loads for sizing transformer banks and services. (E)
- Design underground facilities. (E)
- Perform system planning studies. (E)
- Meet with customers/contractors to identify and solve voltage and construction problems. (E)
- Manage the maintenance and capital improvements of the distribution system, substations, switch yards, sectionalizing devices, relays, SCADA and communication systems. (E)
- Manage the operation and maintenance of a 3.5 MW Hydro Generation Plant. (E)
- Perform system protection and coordination studies. (E-M)
- Other duties as assigned. (E)

QUALIFICATIONS

Knowledge of:

- Principles and practices of electrical engineering as applied to the design and construction of an electrical power transmission and distribution (T&D) system.
- Methods and materials used in the construction, operation, and maintenance of an electrical (T&D) system.
- Fundamentals and practices of electrical engineering.
- Safety practices and State and Federal regulations relating to T&D system operation, maintenance and construction.
- Methods and tools of drafting.
- Computer applications: MS Office, Computer Aided Drafting and distribution system analysis software.
- Principles and practices of organization, administration, budget, and personnel management.
- Municipal operations as they relate to other City departments and divisions.
- Pertinent State, Federal and local rules, regulations and ordinances.

Ability to:

- Properly interpret and make decisions in accordance with Federal and State laws, regulations, and policies.
- Communicate clearly and concisely, orally and in writing.
- Perform technical electrical engineering work of a complex nature.
- Review plans and documents for conformance to regulations.
- Develop design drawings for customers and construction teams.
- Gather data and make accurate engineering computations.
- Prepare plans and specifications, neatly and accurately.
- Establish and maintain cooperative relationships with those contacted in the course of work.
- Tolerate changes in outside temperature from winter to summer and tolerate dust, pollen, wind and rain.
- Sit or stand for long periods of time.
- Walk on uneven or steep ground.
- Supervise, train and evaluate assigned staff.

Experience:

Five years of increasingly responsible experience in electrical engineering work preferably within the Electric Utility industry, including some supervisory experience.

Education:

Bachelor's Degree from an accredited college or university in Electrical Engineering preferably Power Engineering, and minimum of two years experience related to Distribution Engineering. Registration as a Professional Engineer in California or ability to obtain P.E. License in two years.

Necessary Special Requirements:

Possession of a Class C California Driver's License.