



JOB DESCRIPTION

ELECTRICAL ENGINEERING TECHNICIAN I

(Entry Level)

DEFINITION

Under general supervision, to perform a variety of subprofessional office and field engineering work in the planning, design, construction, operation, and maintenance of an electrical distribution system; to assist other engineering staff in the performance of office and field engineering work; and to perform related work as assigned.

The Electrical Engineering Technician I is the entry level class in this skilled technical support series and performs the more routine drafting, calculation and technical support work. He/she interacts with customers in the repair or development of electrical services.

EXAMPLES OF DUTIES:

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**

- Assist in the preparation of detailed plans, specifications, and cost estimates in connection with the construction, maintenance, or removal of a variety of electrical facilities such as service feeds, line extensions, transformers, meters, switch gear, and street lighting. (E-M)
- Determine proper wire sizes and metering equipment. (E)
- Determine transformer sizes and combinations for given loads on the distribution system. (E)
- Maintain electrical system maps and records. (E-M)
- Inspect the installation of electrical substructures and equipment. (E-M)
- Respond to citizen complaints and questions; Assist customers with electrical distribution part of building permit process. (E)
- Assists in coordination of electrical distribution system, traffic signal, and street lighting activities with other City departments and divisions, and with outside agencies. (E)
- Works cooperatively with Electrical Metering Technician and Building Inspector in the overseeing of electrical meter, panel, and switch gear installation. (E-M)
- Other duties as assigned.

QUALIFICATIONS

Knowledge of:

- Fundamentals of electricity.
- Safety practices and regulations.
- Mathematics including algebra, geometry, and trigonometry.
- Methods and tools of drafting.
- Computer applications, including databases and spreadsheets (CAD, MS Word, & Excel).

Ability to:

- Review plans and documents for conformance to regulations.
- Gather data and make accurate engineering computations.
- Prepare plans and specifications, neatly and accurately.
- Prepare and carry out oral and written instructions with minimum of supervision.
- Establish and maintain cooperative relationships with those contacted in the course of work.
- Lift and carry twenty-five (25) pounds on occasion.
- 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.
- Relate well with the general public.

Experience and Education:

- Any combination of education and experience equivalent to the completion of the twelfth grade, including or supplemented by courses in basic electricity, algebra, geometry, trigonometry, and physical sciences, or three years of increasingly responsible experience in the construction, operation, and maintenance of an electrical distribution system.
- Employees in this classification shall have the individual choice whether or not to obtain the Rubber Glove training and certification to become eligible for 6% Qualified Rubber Glove Observer incentive pay.

Necessary Special Requirement:

Possession of a valid Class C California Driver's License.

Residency Requirement:

All members of the Electric Unit shall be expected, within six months of hire, to establish residence allowing response to the Electric Shop within 35 minutes of notification to report.

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