

**CITY OF ANAHEIM  
CLASS SPECIFICATION**

**TITLE CODE: F37**

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**CLASSIFICATION:**   **Apprentice Substation Test Technician**

**DEPARTMENT:**       **Public Utilities – Electric Services**

**CLASS DEFINITION:** To acquire journey level Substation Test Technician skills through on the job training and supplementary education.

**DISTINGUISHING CHARACTERISTICS:**

This is the entry-level classification where incumbents participate in a formal apprenticeship program.

**SUPERVISION RECEIVED AND EXERCISED:**

Work under the supervision of a journey-level Substation Test Technician who makes assignments and periodically reviews work.

**EXAMPLES OF ESSENTIAL JOB FUNCTIONS:** Responsibilities and duties may include, but are not limited to, the following:

Assist the Substation Test Technician and Substation Test Technician Supervisor in the installation, testing, maintaining and repairing of SCADA (Supervisory Control and Data Acquisition), protective relay equipment and fiber optic equipment.

**THE APPRENTICE PROGRAM DUTIES:**

Step 1 – Six months: Under supervision of a Substation Test Technician, perform construction and maintenance tasks on de-energized high voltage substation equipment, including deactivated control circuits.

Step 2 – Six months: Under supervision of a Substation Test Technician perform construction and maintenance tasks on de-energized high voltage substation equipment, including current transformer (CT) circuits and control circuits. May work energized AC and DC circuits up to 240 volts.

Step 3 – Six months: Under supervision of a Substation Test Technician perform construction and maintenance tasks on de-energized high voltage substation equipment, including CT circuits and control circuitry. May work energized AC and DC circuits up to 750 volts.

Step 4 – Six months: Perform construction and maintenance tasks on de-energized high voltage substation equipment, including control circuits and current transformer circuits and working energized AC and DC circuits up to 750 volts without supervision. Under supervision of a qualified Substation Test Technician, may perform tests on relay protective equipment and test energized equipment to 69KV.

Step 5 – One year: Perform construction and maintenance tasks on de-energized high voltage substation equipment, including control circuits and CT circuits and working energized AC and DC circuits up to 750 volts without supervision. Under supervision of a Substation Test

Technician, perform tests on relay protective equipment and test energized equipment up to 230KV.

**JOB RELATED QUALIFICATIONS:**

Experience and Training Guidelines: Any combination of experience and training that would likely provide the required knowledge and abilities is qualifying. A typical way to obtain the knowledge and abilities are as follows:

Knowledge of: Principles of electricity, electronic circuitry, and mathematics through trigonometry; personal computers and software.

Ability to: Use small tools; operate an aerial device; read blue prints and schematic diagrams; follow instructions; communicate clearly; establish and maintain effective and cooperative working relationships with those contacted in the course of work; and attend evening classes and related courses as outlined in the Apprenticeship Agreement.

License/Certification Required: Possession of a valid Class C California Driver's License.

**WORKING CONDITIONS:**

Environmental Conditions: Due to the nature of work assignments, incumbents are exposed to live electricity, dirt/dust and other allergenic substances. Work extended and irregular hours and under varying weather conditions to include excessive heat, cold, wind and rain.

Physical Conditions: Due to the nature of work assignments, incumbents must have the physical ability to stand, sit and walk; lift up to 100 pounds; carry up to 50 pounds; push and pull up to 200 pounds; climb stairs and ladders; stoop, twist repeatedly bend, squat/kneel, and crawl; have finger dexterity, grasp, repeatedly move wrists, reach overhead, use both hands, legs and feet; work in confined spaces and at heights of up to 40 feet, speak, hear, touch/feel; have depth perception and color vision to determine color of wire and insulators; see at a distance and up close.

**OTHER:**

FLSA Designation: Non-Exempt

Unit Designation: International Brotherhood of Electrical Workers (IBEW) - Local 47

**CAREER LADDER INFORMATION:** Experience in this class and satisfactory completion of step five of the apprenticeship and all related courses outlined in the Apprenticeship Agreement will result in promotion to Substation Test Technician.

Note: The above statements are intended to describe the general nature and level of work being performed by persons assigned to this job. They are not intended to be an exhaustive list of all duties, responsibilities and skills required of personnel so classified. All requirements are subject to possible modification to reasonably accommodate individuals with disabilities.

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