

SENIOR ELECTRIC SUBSTATION TECHNICIAN

DEFINITION

To organize, assign and review the work of assigned personnel engaged in installing, testing, maintaining, calibrating, repairing and modifying electrical, electronic, communication and protective relay equipment related to receiving and distribution substations; to perform duties requiring specialized knowledge; and to provide administrative support to assigned supervisor.

DISTINGUISHING CHARACTERISTICS

This is the advanced journey level in the Electric Utility Technician series. Positions at this level are distinguished from other classes within the series by the level of responsibility assumed, complexity of duties assigned, independence of action taken, by the amount of time spent performing the duties, and by the nature of the public contact made. Employees perform the most difficult and responsible types of duties assigned to classes within this series, including providing technical and functional supervision over assigned personnel and perform technically complex duties related to substations. Employees at this level are required to be fully trained in all procedures related to assigned areas of responsibility.

SUPERVISION RECEIVED AND EXERCISED

Receives direction from an assigned supervisor.

Exercises technical and functional supervision over assigned technical staff.

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

Plan, prioritize, lead and review the work of staff assigned to a variety of installation, testing, construction, maintenance and repair duties related to electric high voltage substations.

Develop schedules and methods to accomplish assignments ensuring work is completed in a safe, timely and efficient manner.

Participate in evaluating the activities of staff, recommending improvements and modifications.

Provide and coordinate staff training; work with employees to correct deficiencies.

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Install, troubleshoot, repair, upgrade, test, and program electromechanical, solid state and microprocessor protection relays. Install, troubleshoot, repair, upgrade, test, and program telecommunication equipment; install, maintain, and operate receiving and distribution high voltage electrical substations.

Perform low and high voltage work on live circuits and related equipment.

Install, test, and provide data interpretation for voltage and current recordings, power quality analyzers, and energy recordings at substations.

Install and maintain various telecommunication equipment to provide supervisory control and data acquisition.

Work with high voltage in the construction, commissioning, testing, trouble shooting and maintenance of substation and switchyard equipment.

Design, understand and troubleshoot complicated control and relaying schemes; test, maintain, and troubleshoot all components using computer software.

Design, install and maintain various types of telecommunication and supervisory equipment to include SCADA, JungleMux, fiber optic equipment, Ethernet and phone systems.

Check on methods used by crews to ensure adherence to safety guidelines; ensure that protective devices and equipment are used when necessary; conduct safety tailboard meetings and monitor safe working habits throughout project construction.

Perform the most difficult work related to installation, maintenance and repair of substation systems.

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:

Principles and practices of technical and functional supervision and training.

Principles of electrical systems and electrical theory.

Approved methods, materials and tools used in substation construction, maintenance or repair work.

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Local, State, and Federal codes, regulations, and laws pertaining to electric utility maintenance and safety.

Department policies and procedures.

### Ability to:

Provide technical and functional supervision over assigned staff; effectively train staff.

Perform the most complex duties related to construction, maintenance and repair substation systems.

On a continuous basis, know and understand construction and maintenance activities and observe safety rules; intermittently, analyze problem equipment; identify safety hazards; locate equipment; interpret work orders; remember how to operate equipment; and explain jobs to other employees.

Intermittently, sit while studying or preparing reports; reach, bend, squat, climb, kneel and twist when repairing or installing equipment; perform simple and power grasping, pushing, pulling, and fine manipulation; and lift or carry weight of 50 pounds or less.

Perform complex electrical substation work.

Identify electrical and electronic system defects and recommend appropriate corrective actions.

Read and interpret sketches, blueprints and diagrams and modify as necessary to complete the work.

Work assigned shift schedules; be available for call-back and on-call assignment.

Work unusual and prolonged work schedules during emergencies, seasonally-caused circumstances in varying weather and temperature conditions.

Communicate clearly and concisely, both orally and in writing.

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

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### Experience and Training

Any combination of experience and training that would provide the required knowledge and abilities is qualifying. A typical way to obtain the required knowledge and abilities would be:

#### Experience:

Two years of responsible journey experience performing duties similar to an Electric Utility Technician II with the City of Roseville.

#### Training:

Equivalent to the completion of the twelfth grade supplemented by specialized training in electronics or a related field.

### License and Certificate

Possession of, or ability to obtain, a valid California driver's license.

Possession of, or ability to obtain, First Aid and cardiopulmonary resuscitation (CPR) certificates.

11-06-09	Senior Electric Substation Technician		
07-01-02	Metering Crew Supervisor	07-01-02	Substation Crew Supervisor
03-31-98	Senior Electronics Tech	03-31-98	Senior Electronics Tech
06-12-97			
10-01-88			
09-16-87			
08-01-86			
07-01-02			