

MAJOR FUNCTION

This is a professional supervisory position responsible for the administration, supervision, and coordination of substation operation and maintenance. The work requires the use and exercise of independent judgment to solve complex technical problems which are specialized in nature. Work is performed under the general supervision of the Superintendent of Electric Operations Division and is evaluated through written reports, conferences, and by results obtained.

ESSENTIAL AND OTHER IMPORTANT JOB DUTIES**Essential Duties**

Directs and supervises the activities of the substation, relay, environmental, (PCB & Asbestos) and communications personnel. Performs analysis, studies, and calculation of the transmission and distribution circuits and substations. Determines and/or supervises proper calibrations, maintenance, and repair of all protection devices, communication, and supervisory control equipment. Supervises the testing, repair, changes and/or modifications of substation instrumentation and controls, including computerized supervisory control, load management system equipment, and microwave system. Schedules and supervises preventive maintenance and repair of power transformers, voltage regulators, load tap changers, circuit breakers, re-closers, sectionalizers, and other apparatuses in the City's bulk power and distribution substation facilities. Reviews new substation design plans, equipment installation plans, and shop drawings; and makes recommendations for approval or changes to the Superintendent of Transmission and Distribution. Writes specifications for test equipment, capacitors, re-closers, sectionalizers and other related equipment. Purchases new and replacement components/parts for substation equipment, SCADA, microwave equipment, relays and testing equipment. Inspects new substations, and checks for the recommended installation of equipment, correct wiring, and proper connections; supervises testing, and assures proper functioning of new equipment prior to energizing. Reviews specifications for additions and/or modifications to supervisory control, energy management systems equipment, and microwave system. Coordinates switching of transmission and distribution circuits during normal and emergency operating conditions. Assists in load restoration after system disturbances, and participates in establishing plans and procedures. Participates in pre-design meetings for proposed projects. Prepares and submits technical, economic, and other reports related to the transmission and distribution system's protection, design, construction, operation, maintenance, and disturbances to the Superintendent of Electric Operations Division. Prepares specifications and proposals on PCB and asbestos-contaminated equipment for disposal. Implements the operating practices and procedures required for compliance with the environmental rules and regulations applicable to the Electric Operations Division. Recommends hiring, promotion, discipline, transfer, grievance adjustment, discipline and discharge of employees. Conducts performance evaluations and recommends approval or disapproval of merit increases. Performs related work as required.

Other Important Duties

Completes special projects as assigned. Performs related work as required.

DESIRABLE QUALIFICATIONS**Knowledge, Abilities and Skills**

Extensive knowledge of the principles, practices, and techniques of electrical engineering related to the planning, design, construction, operation, and maintenance of substations. Extensive knowledge of the installation, operation, and maintenance of the protective, supervisory control, and communication devices in electric transmission and distribution systems. Considerable knowledge of appropriate supervisory techniques and skills to administer, supervise, and manage a group of operating personnel. Ability to communicate concisely orally and in writing. Ability to establish and maintain effective working relationships as necessitated by the work. Initiative and good judgment in problem solving and decision

making. Ability to determine and implement appropriate actions in emergency situations, during storms, or abnormal system conditions. Ability to assign and review the work of subordinates and provide proper instructions in a manner conducive to improved performance and high morale. Ability to keep records and prepare complex reports. Skill in the use of microcomputers and the programs and applications necessary for successful job performance.

Minimum Training and Experience

Graduation from a four-year college or university with a degree in Electrical Engineering and five years of professional experience that includes the design, construction, operation, and maintenance of low, medium, and high voltage substations, working with power system relaying and communications equipment repair and calibration; or any equivalent combination of training and experience. Three years of the required experience must have been in a supervisory capacity.

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