

MAJOR FUNCTION

This is advanced professional level engineering work related to electrical power systems. Duties may include supervision of subordinate engineers, technicians and/or clerical employees. Work is performed under the general direction of the appropriate Division Superintendent or assigned supervisor with considerable independence, initiative and professional discretion in discharging responsibility. The work is reviewed through conferences and reports.

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

Plans, designs and analyzes overhead and underground distribution lines, distribution substations, bulk power substations, low voltage switchgear, power system communications, relay and protection and other power system facilities. Prepares cost estimates and technical assistance for large construction projects in the capacity of project engineer and coordinator when necessary. Creates construction specifications. Coordinates protective devices on both transmission and distribution systems for the safe and reliable operation of such systems. Conducts computer simulated system studies, analyses, and reports as required. Conducts studies related to planning of generating, transmission distribution, and substation facilities so as to maintain an adequate and reliable system for the supply of power to customers. Forecasts energy requirements and peak loads for budgetary, operation, and planning purposes as required. Supervises and reviews work of drafting and design technicians. Supervises inspection on construction projects and attends pre-construction conferences as necessary.

Other Important Duties

Prepares reports and maintains accurate records. Performs related work as required.

DESIRABLE QUALIFICATIONS**Knowledge, Abilities and Skills**

Considerable knowledge of the modern practices, methods, techniques, and equipment used in activities involved in electrical power engineering. Considerable knowledge of the City's electrical, generating, transmission and distribution system. Considerable knowledge of the use and care of electrical apparatus and instruments. Ability to take field notes and use them in drawing plans and specifications. Ability to plan projects, prepare cost estimates, conduct engineering and research, make inspections, and prepare progress and accomplishment reports. Ability to maintain records, coordinate and/or supervise subordinates, and maintain effective working relationships with fellow employees, contractors, and the general public. Ability to communicate effectively, orally and in writing. Skill in the use of personal computers and associated programs and applications necessary for successful job performance.

Minimum Training and Experience

Possession of a Bachelor's Degree in electrical engineering and two years of professional electrical engineering experience, or a Bachelor's Degree in general engineering, science or mathematics and three years of the aforementioned experience. A Master's Degree in any of the aforementioned areas may be substituted for one year of the required experience.

Necessary Special Requirements

Must possess a valid state driver's license at the time of appointment. (At the department director's discretion, the noted license may not be required.)

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