

MAJOR FUNCTION

This is responsible professional level engineering work involving the design and specification of electrical power systems. Work is performed under the general direction of the division Superintendent or assigned supervisor with considerable independence, initiative and professional discretion in discharging responsibilities. Duties may include supervision of subordinate engineers, technicians and/or clerical employees. 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 and bulk power substations, low voltage switchgear, power communications, relay and protection and other power system facilities. Supervises the preparation of construction drawings by others. Prepares construction budget for major aspects of electrical construction. Coordinates protective devices on both transmission and distribution systems for the safe and reliable preparation of such systems. Conducts computer simulated system studies, analyses and reports as required. Conducts studies and site analyses related to planning of generation, transmission distribution and substation facilities. Forecasts energy requirements and peak loads for budgetary, operation and planning purposes as required. Supervises drafting and design technicians. Supervises inspection on construction projects. Recommends hiring, transfer, promotion, grievance adjustment, discipline and discharge of subordinate personnel. Conducts performance evaluations and recommends the approval or denial of merit raises. Performs related work as required.

Other Important Duties

Evaluates bids for equipment and construction. Authorizes payment requests from vendors and installers. Performs related work as required.

DESIRABLE QUALIFICATIONS**Knowledge, Abilities and Skills**

Thorough knowledge of the modern practices, methods, techniques and equipment used in activities involved in electrical power engineering. Thorough knowledge of the use and care of electrical apparatus and instruments. Thorough knowledge of the City's electrical generating, transmission and distribution system. Ability to take field notes and use them in drawing plans and specifications. Ability to plan projects, and use them in drawing plan specifications. Ability to plan projects, prepare cost estimates, conduct engineering research, make inspections, and prepare progress and accomplishment reports. Ability to maintain records and coordinate and/or supervise subordinates. Ability to maintain effective working relationships with fellow employees, contractors and the general public. Ability to communicate clearly and concisely 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 five years of professional electrical engineering experience; or a degree in general engineering, science or mathematics with six years of professional experience in the electrical engineering field. A Master's Degree or a Doctoral Degree in any of the aforementioned areas may be substituted for one year or two years of the required experience, respectively.

Necessary Special Requirements

Possession of a valid State driver's license at time of appointment.

Established: 10-11-83
Revised: 11-07-86
01-04-88
02-15-90
10-02-90
12-06-90
12-03-96
02-08-99
06-04-02
05-05-04*
11-03-08