

**MAJOR FUNCTION**

This is advanced professional level work that provides engineering support to the Electric Utility in one of the operational areas including: Power Delivery, Energy Supply, System Operations, or System Planning. The incumbent will perform engineering work on a variety of equipment and systems within the assigned area of responsibility. The incumbent is responsible for technical work in the particular engineering discipline. The duties allow for a wide latitude of independent action, judgment and decision making with a minimal direction and supervision. Work is checked upon completion for technical proficiency and adherence to standard practices.

**ESSENTIAL AND OTHER IMPORTANT JOB DUTIES**

Performs engineering tasks requiring application of engineering principles and prescribed methods, procedures and standard designs to perform work of specific and limited scope. Develops project/study plans, specifications and bid documents. Evaluates bid/proposal documents and develops award recommendations. Acts as the project manager on assigned projects/studies to field and contract personnel. Provides supervision of other engineering staff, field personnel and contract forces. Prepares bid specifications and purchase requisitions. Performs operating and economic feasibility studies and evaluates alternatives. Responsible for the execution of assigned projects and studies. Provides field direction for assigned projects and studies. Coordinates or prepares various internal and external reports. Maintains accurate and complete records and files. May recommend the hire, transfer, promotion, grievance adjustment, discipline or discharge of subordinate personnel. Performs other duties as required.

**Power Delivery:** Plans, designs and analyzes overhead and underground distribution lines, distribution substations, bulk power substations, switchgear, power system communications, relay and protection systems and other power system facilities. Participates in the development of standards for design and materials for the transmission and distribution system.

**System Planning:** Conducts studies related to planning of generating, transmission distribution, substation and alternative/renewable energy 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. Establishes and develops relationships with key participants in the alternative/renewable energy marketplace in order to capitalize on existing, potential and future market opportunities. Maintains awareness of advances in alternative/renewable power supply options and related markets.

**Energy Supply:** Provides diagnostic tests on plant equipment to support preventative maintenance and operational reliability needs. Troubleshoots and initiates design changes or modifications in the analysis of plant system problems. Functions as coordinator when assigned to provide evaluation, coordination and planning for maintenance work. Plans, performs and documents performance test work on all major plant equipment. Provides testing and input data for maintenance management and equipment outage analysis.

**System Operations:** Provides engineering support to division field personnel. Assists in the review, installation, testing and setting of system protection devices and transformer control systems.

**Other Important Duties**

Keeps abreast of general and job specific developments in area of responsibility. Performs special projects as assigned. 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 engineering in one or more of the operational areas. Ability to understand and apply computerized solutions to engineering problems. Ability to prepare and/or modify drawings in electronic format. Considerable knowledge of the City's electrical, generating, transmission and distribution system. Considerable knowledge of the use and care of electric utility equipment and systems. 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 engineering and two years of engineering experience in one or more of the electric utility operational areas. A master's degree in engineering may be substituted for one year of the required experience.

**Necessary Special Requirements**

Individuals in this classification are considered essential during emergency and storm situations and must be able to work 16 hours per day for extended periods of time and may be required to be away from their family.

Individuals in this classification must be available to serve on-call and are subject to having to work outside of their assigned shift/schedule to meet operational needs.

Employees in this classification that are required to have unescorted access to the Electric Control Center will be required to complete a personnel risk assessment consisting of an identity verification and seven-year criminal history screening (minimum) and maintain satisfactory clearance for continued employment.

If assigned to System Operations (Relay and System Communications), Must be able to distinguish between red and green.

An employee assigned to the Purdom or Hopkins Power Plants must be medically certified to wear a respirator and pass a respirator fit test prior to employment.

An employee assigned to the Purdom or Hopkins Power Plants must obtain within one year, and maintain for continued employment, HAZMAT and oil spill certifications within one year of employment.

An employee assigned to the Purdom Power Plant, or who may be occasionally required to have unescorted access to the Port Facility portion of the Purdom Power Plant, (as determined by the General Manager-Electric & Gas), must obtain Transportation Workers Identification Credentials (TWIC) within 90-days of employment, and must maintain such credentials throughout his/her period of employment in that capacity, as a condition of continued employment.

Must possess a valid Class E State driver's license at time of appointment.

Established: 06-30-12

Revised: 06-06-20  
04-20-21