06-12-98    POWER ENGINEERING MANAGER, 9453

**Summary of Duties:** May serve as the administrator and technical director of a business unit, business group, or major project of the Energy Services Organization of the Department of Water and Power; may act as an assistant to the General Manager or to an Assistant General Manager in the technical and administrative direction of the Energy Services Organization; performs difficult and responsible professional engineering and administrative work in supervising the preparation of plan, design specifications, contracts, legislative reports and procedures for the various components of the energy generation, transmission, distribution, and operation activities of the Department; and other related duties.

**Distinguishing Features:** A Power Engineering Manager is distinguished from other engineering classes by its interdisciplinary nature centered around the engineering, construction, operation, and maintenance activities of the Energy Services Organization of the Department of Water and Power. Incumbents must deal with technical and administrative problems requiring coordination of mechanical, electrical, civil, structural, architectural and environmental engineering activities and issues.

A Power Engineering Manager functions as director of a business unit or business group and is responsible for the overall planning, direction, staffing, and coordination of the activities of the Energy Services Organization, or of business units within the Energy Services Organization. This work involves policy development and making difficult decisions pertaining to major technical, management and administrative issues. Assignments to incumbents of this class are made in general terms or are developed in conferences with department executives. The procedures and policies developed by employees in this class are subject only to executive direction and review.

**Examples of Duties:** A Power Engineering Manager:

- Directs or assists in directing the overall planning, organization, staffing, direction and control of the operations and functions of the Energy Services Organization;
• Directs engineering groups performing long range forecasts of electrical load and peak demand requirements;
• Directs the preparation of resource plans and the conduct of energy services planning studies;
• Directs the preparation and revision of engineering analyses, reports, and schedules related to Energy Services Organization design and construction;
• Coordinates the execution of design and construction work for approved plans;
• Directs procurement of materials and equipment for construction;
• Schedules and directs the construction and maintenance of overhead and underground distribution lines, extensions, and equipment;

• Directs the preparation of designs, specifications, cost estimates, procedures, and special studies for inspection, repair, and testing of energy plans, automotive and construction equipment, and the extension of overhead and underground distribution systems;
• Confers with business unit directors on major administrative and policy matters, and to formulate specific policies and long range plans;
• Reviews decisions and approves recommendations of the business unit directors relating to matters such as budgeting, personnel, and technical and administrative problems of major design, construction, maintenance, improvement, operation, customer services, load forecasts, planning and resource development;
• Directs a business unit involved in design, construction, operation, maintenance, laboratory testing, research, or other engineering activities;
• Makes field inspections of electric facilities including hydro-electric and steam generating facilities;
• Analyzes and directs the preparation of cost and work progress reports for the purpose of determining the efficiency of present operations and the economic feasibility of proposed construction and operations;
• Prepares, with staff support, the annual expenditure program for a business unit;
• Reviews and approves proposed work programs;
• Reviews and analyzes engineering and design plan and specifications to determine possible environmental impact;
• Coordinates environmental matters with Department personnel and outside agencies and organizations;
• Directs the preparation of financial planning and electric rate studies;
• Directs the activities of operating engineering personnel involved in contract administration, scheduling, fuel studies, and coordination with other utilities;
• Directs the planning, design, construction, operation, and maintenance of the communication system for the Department of Water and Power;
• Plans, coordinates, and directs the activities of the Energy Services Testing Laboratories;
• Directs activities related to the operation and maintenance of converter station facilities;
• Directs the operation and maintenance activities of the energy control system;
• Serves on department management and advisory committees and may represent the Department on committees established to administer and operate jointly owned energy plants;
• Confers with other utilities on problems concerning the community or area, such as energy interchange, energy contracts and the integration of electric energy;
• Confers with officials of the City on problems of mutual interest, such as budget reports, legislative matters affecting the Department, annual and special reports, and right-of-way proceedings;
• Presents testimony before commissions, regulatory agencies, or utility groups;
• Directs or assists in directing the development of regulations, ordinances and agreements;
• May act as staff assistant to higher level engineers in planning and directing major organization activities;
• Coordinates the processing of city, state, and federal legislative matters of interest to the Department;
• Directs the preparation of reports to inform management and the Board of attitudes, purposes and actions of governmental authorities and agencies;
• Directs an important design, construction, operation, or maintenance activity of a business group;
• Confers with engineering and construction supervisors and executives in connection with the planning and organizing of construction projects;
• Makes field inspections of construction projects and operation and maintenance facilities;
• Directs and coordinates the activities of several groups engaged in engineering design and technical research pertaining to the construction and operation of overhead and underground facilities and directs activities relating to the improvement of operating methods;
• Directs and plans the activities of a staff group involved in the setting of standards and procedures and the performance of audits required for nuclear quality assurance;
• Administers the Department’s fuel supply program including acquisition, transportation, storage and inventory control;
• Directs the activities of large groups of employees engaged in the operation and maintenance of overhead and underground distribution systems, transmission lines, control and protection systems, communications systems, street lighting systems, transmission lines, hydroelectric and steam-electric generating plants, and switching stations;
• Directs the patrol, inspection, and repair of transmission lines, roads, and rights-of-way;
•May occasionally be assigned to other duties for training purposes or to meet technological changes of emergencies.

**Qualifications:** Incumbents must have the following knowledges and abilities:

**A good knowledge of:**
The engineering principles and practices as applied to the planning, design, construction, operation, testing, and research activities of a large utility, including generation, transmission, and distribution of electric energy;

- Principles and practices of administration and organization including planning, budgeting and personnel administration;
- Engineering economics and sources of engineering information;
- California Environmental Quality Act and related City guidelines;
- Charter provisions, policies, rules, and procedures affecting Energy Services operations;
- The organization and functions of the Energy Services Organization.

A working knowledge of:

- The laws and regulations related to equal employment opportunity and affirmative action;
- City personnel rules and regulations;
- Memoranda of Understanding as they apply to subordinate personnel.

The ability to:

- Plan and direct work programs, organize procedures, exercise executive direction over many classes, and coordinate and direct the activities of a business unit or business group of a major business unit;
- Develop and implement cost and job progress control systems for major business units or projects;
- Take charge of the engineering investigation, design, purchasing, and construction of large and important projects or operating activities of the Energy Services Organization;
- Direct and review the work of a group of engineers and other employees and to coordinate it within an overall program;
- Evaluate alternative proposals in relation to technical soundness, economic aspects, and long term planning;
- Prepare and supervise the preparation of technical and/or administrative reports;
- Negotiate and to deal tactfully and effectively with contractors, the general public, consulting engineer, and representatives and executives of the Department, other governmental units, and utilities.

Requirements/Registration: Two years of full-time paid experience as a professional engineer in supervising the planning, design, construction, operation, or maintenance of power utility systems in a class which is at least at the level of an Electrical Engineer.
Registration as a Professional Engineer with the California Board of Registration for Professional Engineers is required. Individual positions in this class may require registration in a specific engineering discipline.

**License:** A valid California driver’s license may be required.

Persons with disabilities may be able to perform the essential duties of this class with reasonable accommodation. Reasonable accommodation will be evaluated on an individual basis and depend, in part, on the specific requirements for the job, the limitations related to the disability, and the ability of the hiring department to accommodate the limitation.

As provided in Civil Service Commission Rule 2.5 and 4.55 of the Administrative Code, this specification is descriptive, explanatory and not restrictive. It is not intended to declare what all of the duties, responsibilities and the required qualifications of any position shall be.