THE METROPOLITAN WATER DISTRICT
OF SOUTHERN CALIFORNIA

POWER SUPPORT SENIOR ENGINEER

Group-Section: Integrated Operations, Planning & Support Services
FLSA Status: Exempt
Bargaining Unit: MAPA
Salary Grade: 060
Job #: 114

JOB SUMMARY

Responsible for determining and overseeing the day-to-day electrical operation of the Colorado River Aqueduct system, hydroelectric power plants, and water treatment plants. Areas of responsibility include power systems analysis; electrical engineering design support; management of operation and maintenance projects; and interface with utilities and regulatory agencies on interconnection operations and final authority on electrical safety and switching dispute issues.

OVERSIGHT

Supervision Received: Receives general direction from a Team Manager or above.

Supervision Given: May exercise technical and/or functional direction over assigned staff. Provides technical guidance to the Eagle Rock operating control center and Gene dispatch office; and technical support to Electrical Engineering and the field personnel related to substation electrical equipment.

JOB DUTIES

1. Provides technical support concerning the day-to-day electrical operation of the Colorado River Aqueduct system, the hydroelectric power plants, and the treatment plants and troubleshoots substation electrical equipment problems; and develops equipment testing standards and guidelines.

2. Performs power system analysis and protective relay studies, provides settings for all Metropolitan electrical facilities, and develops power system operating bulletin.

3. Coordinates and plans the annual hydroelectric plant shutdown maintenance including both electrical and mechanical.

4. Final authority in resolving disputes associated with electrical switching and safety.

5. Participates in Capital Improvement Project preparation and cost estimating; and reviews engineering specifications and designs for compliance with power system operation and protection standards.

6. Interfaces with electric utilities and regulatory agencies in power system interconnection operations and construction projects.

7. Assumes administrative responsibility for various power system projects; recommends and administers policies and procedures; and develops and recommends goals, objectives, policies, procedures, and quality assurance standards for the projects.

8. Conducts research related to the projects to determine impact of decisions; prepares findings and develops recommendations in support of goals and objectives; monitors and evaluates the efficiency and effectiveness of project administration, service delivery methods, and procedures; and allocates resources accordingly.

9. Participates in the development and administration of the project budget; forecasts funds needed, approves expenditures, and implements budgetary adjustments as appropriate and necessary.

10. Prepares, reviews, and controls project schedules, activities, and operations; prepares and distributes correspondence as related to project operations; leads and participates in project team assignments; and ensures accuracy and efficiency of work performed.

11. Performs and reviews project controls including progress, cost forecasting, variances, change management, scheduling, and close-out procedures; and maintains master schedules and informs management of potential scheduling conflicts.

12. Performs other related duties as required.

EMPLOYMENT STANDARDS

MINIMUM QUALIFICATIONS

Education and Experience: Bachelor's degree from an accredited college or university in engineering or a related field and eight years of increasingly responsible experience, of which two years must have been at the Engineer level; or an Advanced degree from an accredited college or university in engineering or a related field and six years of increasingly responsible experience, of which two years must have been at the Engineer level.

Required Knowledge of: Management and supervisory concepts and techniques; team building; budgetary concepts and procedures; relevant federal, state, and local laws; negotiation techniques; project management; contract administration; and trends and emerging technologies of power system analysis and research, pumping, power plants operation and maintenance, and principles of power system operations and electrical engineering, electrical code, standards, (Western Electricity Coordinating Council and California Independent System Operator) and operating policy.

Required Skills and Abilities to: Manage a diverse work force; plan, organize, and review the work of subordinates; review work products for detail and adherence to guidelines; encourage and facilitate cooperation; exercise judgment and discretion; interpret and analyze results; communicate orally and in writing on administrative and technical topics; establish and maintain collaborative working relationships with all levels within the organization and utility agencies; and use business applications such as word processing and spreadsheets.

CERTIFICATES, LICENSES, AND REGISTRATIONS REQUIREMENTS

Certificates
- None

Licenses
- Valid California Class C Driver License
- License in good standing as a California Professional Engineer

Registrations
- None

PHYSICAL DEMANDS/WORK ENVIRONMENT
The physical demands and work environment characteristics described here are representative of those that must be met or may be encountered by an employee to successfully perform the essential functions of this job. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions.

Physical Demands: The work is sedentary. Typically, the employee may sit comfortably to do the work. However, there may be some walking; standing; bending; carrying of light items such as paper, books, or small parts; driving an automobile, etc. No special physical demands are required to perform the work.

Work Environment: The work environment involves everyday risks or discomforts that require normal safety precautions typical of such places as offices, meeting and training rooms, libraries, and residences or commercial vehicles, e.g., use of safe work practices with office equipment, avoidance of trips and falls, observance of fire regulations and traffic signals, etc. The work area is adequately lighted, heated, and ventilated. May travel to various sites requiring overnight stay.

Vision Requirements: No special vision requirements.