



THE METROPOLITAN WATER DISTRICT
OF SOUTHERN CALIFORNIA

OPERATIONS PLANNING SENIOR ENGINEER

Group-Section: Integrated Operations, Planning & Support Services

FLSA Status: Exempt

Bargaining Unit: MAPA

Salary Grade: 060

Job #: 114

JOB SUMMARY

Responsible for the investigation and analysis of complex technical and operational issues and situations including developing and implementing approved solutions and involving water or power operations using engineering principles and methods. Areas of responsibility could include preparation of technical reports and operating plans; preparation and presentation of information and recommended courses of action on water or power system issues to internal and external audiences; diversion scheduling; evaluation and analysis of operational capabilities of new facilities; short-term water demand forecasting; short- and long-term power planning; perform water system studies using computer modeling and statistical analysis; develop, manage, and administer water programs, power programs, and storage agreements; develop and implement operating strategies; lead multi-discipline workgroups on various projects and programs involving water and/or power; lead and work on projects and studies involving member agencies, government agencies, and other program partners including negotiations and contract development.

OVERSIGHT

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

Supervision Given: May exercise technical and/or functional direction over assigned staff.

JOB DUTIES

1. Coordinates and facilitates short-term water or power system planning and scheduling activities; prepares operating plans; performs long-term power planning and analysis; prepares weekly planning agendas to disseminate latest information on water and power system conditions, operating strategies, and decisions on short-term operations; analyzes and prepares State Water Project and Colorado River Aqueduct orders or diversion schedules; and evaluates and analyzes operating capacities of new or existing facilities.
2. Prepares and analyzes short-term water demand forecasts; conducts operational tests of various facilities; and conducts system mass-balance and hydraulic modeling studies.
3. Analyzes and monitors the latest developments on the State Water Project and Colorado River Aqueduct with emphasis on the impact these activities have on reliability, scheduling, and quality and cost of short-term supplies.
4. Assumes administrative responsibility for various water or power management system projects; recommends and administers policies and procedures; develops and recommends goals, objectives, policies, procedures, and quality assurance standards for the activities.

5. 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.
6. Participates in the development and administration of the project budget; and forecasts funds needed, monitors expenditures, and implements budgetary adjustments as appropriate and necessary.
7. 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.
8. 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.
9. Initiates specified correspondence independently for signature by appropriate project management staff; reviews finished materials for completeness, accuracy, format, and compliance with project quality standards and procedures.
10. 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: Water or power distribution systems; basic water or power quality objectives; principles of fluid mechanics and hydraulics or electricity; management science and operations research; team building; budgetary concepts and procedures; relevant federal, state, and local laws; negotiation techniques; project management; contract administration; and trends and emerging technologies of water or power system planning and scheduling.

Required Skills and Abilities to: Lead a diverse work force; plan, organize, and review the work of peers and subordinates; review work products for detail and adherence to guidelines; encourage and facilitate cooperation; mentor, develop, and motivate staff; determine training needs of staff; exercise judgment and discretion; interpret and analyze results; communicate orally and in writing on administrative and technical topics; represent Metropolitan to public agencies, regulatory bodies, special interest groups, and members of the public; represent Metropolitan in negotiations or development of joint projects with external organizations; establish and maintain collaborative working relationships with all levels within the organization, other agencies, regulatory agencies, special interest groups, and the public; and use business applications such as word processing and spreadsheets.

Job Title: Operations Planning Senior Engineer

Job Code: 114

Adopted: 04/27/05

Effective: 03/17/25

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Supersedes: 06/19/16

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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.