



THE METROPOLITAN WATER DISTRICT
OF SOUTHERN CALIFORNIA

POWER SCHEDULING AND TRADING PROGRAM MANAGER

Group-Section: Water System Operations Group - Operation and Maintenance Planning Section	FLSA Status: Exempt Bargaining Unit: MAPA	Salary Grade: 060 Job #: PM013
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JOB SUMMARY

Responsible for power and energy scheduling, trading, and accounting. Areas of responsibility include securing sufficient energy resources; optimizing available power resources and minimizing cost; administering long and short-term power contracts and agreements; and power marketing and operational projects and issues.

A program may be an ongoing endeavor, strategic actions of limited duration within an ongoing program, or may comprise multiple large projects which constitute or support a major goal or operation of Metropolitan. A program typically involves external agencies and matrix management of multiple staff. Programs may also involve a single major effort of a comprehensive nature.

OVERSIGHT

Supervision Received: Receives direction from the Operations Planning Unit Manager.

Supervision Given: May exercise technical and functional supervision over assigned staff.

JOB DUTIES

1. Secures sufficient energy resources for the Colorado River Aqueduct pumping operations from various generation resources and marketing pools; optimizes the available power resources and minimizes energy costs for the pumping operations from the regional energy markets to supplement the Hoover and Parker generation resources; establishes guidelines and procedures to monitor energy markets; develops and plans strategies dealing with power operational issues and provides solutions for associated problems that may arise; and prepares the budget for Colorado River Aqueduct energy cost and tracks the actual cost.
2. Administers the terms and conditions of various long and short-term power contracts and agreements and continuously evaluating the terms and conditions against the market opportunities; establishes energy transaction strategies; manages financial resources and contains the Colorado River Aqueduct power costs to minimize the cost impact to Metropolitan's operating budget; and negotiates energy exchange transactions.
3. Participates in the establishment and revision of operational and planning procedures; represents Metropolitan's interests during power operational and marketing policy setting events and meetings; and provides feedback on current and future operational and planning issues.

4. Surveys and analyzes the daily forward energy market for energy prices, energy data, and products; makes commitments to forward energy purchases and sales; and develops risk management policies and procedures related to forward energy purchases.
5. Determines power needs; interprets regulatory conditions; identifies critical issues, advises appropriate staff, recommends solutions, and resolves complex problems; and develops new processes and procedures to meet new requirements or anticipated changes.
6. Analyzes the power needs and defines program goals, objectives, and priorities; recommends modifications for improving the program efficiency to management staff; and incorporates approved modifications.
7. Identifies the necessary staff and resources to accomplish the scheduling and trading of power; organizes the work; assigns activities to other staff; reviews and provides input on the standards of performance; manages program consultants and vendors; and performs complex professional project management work as a member of a project team.
8. Monitors and evaluates the efficiency and effectiveness of scheduling and trading methods and procedures; and develops reports and makes presentations to management on key internal and external factors that influence power trading.
9. Performs and reviews power planning controls including annual work plan, progress, cost forecasting, variances, change management, and power reports; maintains master schedules of power delivery and informs management of potential scheduling conflicts; and prepares and reviews compliance with Metropolitan's mission statement, objectives, scope, task, schedules, budgets, and resources.
10. Analyzes proposed and current legislation and governmental policies, rules, and regulations; works with internal resources on various program issues; and determines their impact and develop recommendations for compliance.
11. Prepares and presents reports on the status of power acquisition to the Board, management, staff, other departments, outside agencies, and the public.
12. Performs other related duties as required.

Job Title: Power Scheduling and Trading Program Manager

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Adopted: 03/22/05

Revised: 02/14/17

Supersedes: 11/03/15

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EMPLOYMENT STANDARDS

MINIMUM QUALIFICATIONS

Education and Experience: Bachelor's degree in civil or electrical engineering or related technical field from an accredited college or university and twelve years of increasingly responsible relevant experience in power engineering with emphasis on power scheduling, dispatching, Supervisory Control and Data Acquisition operating systems, power marketing, and power operations, of which four years must have been in a supervisory, project management, or lead position; or an advanced degree in civil or electrical engineering or related field (i.e., master's or doctorate) from an accredited college or university and ten years of increasingly responsible relevant experience in power engineering with emphasis on power scheduling, dispatching, Supervisory Control and Data Acquisition operating systems, power marketing, and power operations, of which four years must have been in a supervisory, project management, or lead position.

Required Knowledge of: Electrical operations of power systems; utilization of contractual resources and market transactions to meet system demands; interactions between contracts and the operations of hydroelectric power plants; resource planning and energy marketing practices; California Independent System Operator's operational practices and tariff; energy metering concepts and practices; Supervisory Control and Data Acquisition; Western Electricity Coordinating Council and North American Electric Reliability Council operating practices or their equivalent; principles of electrical engineering as it relates to water system operations and distribution; program management; budgetary concepts and procedures; relevant federal, state, and local laws; contract administration; and Metropolitan facilities.

Required Skills and Abilities to: Resolve complex electrical engineering problems; perform complex power system studies; interact with utilities and agencies to negotiate problem resolutions; plan and organize work; review work products for detail and adherence to existing guidelines; negotiate contract changes; interpret and analyze results; exercise judgment and discretion; operate computer equipment and use a variety of computer software packages to include but not limited to word processing and spreadsheets; encourage and facilitate cooperation; communicate effectively both orally and in writing on administrative and technical topics; represent Metropolitan to public agencies, regulatory bodies, special interest groups, and members of the public; and establish and maintain effective working relationships with coworkers, other agencies, regulatory agencies, and the public.

CERTIFICATES, LICENSES, AND REGISTRATIONS REQUIREMENTS

Certificates

- None

Licenses

- Valid California Class C Driver License

Registrations

- None

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DESIRABLE QUALIFICATIONS

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