

**CITY OF SANTA CLARA, CALIFORNIA
CLASS SPECIFICATION**

TITLE: SENIOR POWER SCHEDULER/TRADER (772)

DEPARTMENT	ACCOUNTABLE TO	FLSA STATUS
Electric Utility	Varies	Exempt

CLASS SUMMARY

The Senior Power Scheduler/Trader is a management position in the unclassified service, responsible for the supervision of the economic coordination of electric schedules, natural gas purchases and deliveries, water storage and release schedules, in real-time and prescheduled. Responsibilities include overall coordination for the assimilation of operating data into report formats, providing assistance to dispatching personnel on matters pertaining to economic system dispatch, and ensuring that all City contractual obligations are met. Performs other related duties as assigned.

MINIMUM QUALIFICATIONS

EDUCATION AND EXPERIENCE

Possession of a Bachelor’s degree from an accredited college or university with a major in Engineering, Economics, Business, or a closely related field AND four (4) years of combined experience as an Operation Planning Technician, Electric and Water Systems Operator, Power Dispatcher or Power Scheduler/Trader with an electric utility.

OR

Education equivalent to the completion of 60 semester units/90 quarter units from an accredited college or university, with a major in engineering, economics, business, or a closely related field, AND five (5) years of combined experience as an Operation Planning Technician, Electric and Water Systems Operator, or Power Scheduler/Trader with an electric utility.

OR

Six (6) years as a Power Dispatcher and/or Scheduler, including four (4) years of experience in arranging purchases and sales of power to third party customers, consumers and suppliers.

LICENSES/CERTIFICATIONS

Possession of a valid California driver's license is required at the time of appointment and for the duration of employment.

DISTINGUISHING CHARACTERISTICS

This is a single incumbent management level classification that oversees the Power Systems Scheduling Division. Incumbents regularly work on tasks that are varied and complex, requiring considerable discretion and independent judgment. Assignments are given with general guidelines and incumbents are responsible for establishing objectives, timelines, and methods to deliver work products. Work is typically reviewed upon completion for soundness, appropriateness, and conformity to policy and requirements. This class is distinguished from the class of Power Systems Scheduler/Trader in that the latter is responsible for managing electric

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and hydro energy requirements in the hour ahead and in real-time markets; whereas, the Senior Power Scheduler/Trader will be prescheduling and forecasting and supervises the Power Systems Schedulers/Traders.

TYPICAL DUTIES

This description may not include all the duties listed below, nor do the examples cover all duties that may be performed.

Under general direction:

- Performs all duties of a Power Scheduler;
- Supervises and develops process and procedures for the 24-hour real time scheduling desk, including but not limited to the economic coordination of electric schedules, outages, reschedules, natural gas purchases and deliveries, water storage and release schedules, and prescheduled and real-time power purchase/sale schedules to meet system load and interchange conditions;
- Prepares daily and annual forecasts of day ahead and weekly hourly loads in the preschedule timeline, natural gas usage to minimize gas balancing deviations, demand, resource, and purchase/sale requirements;
- Prepares daily reschedules and operating criteria;
- Devise a short-term hydro strategy for resources using historical, current, and market knowledge in conjunction with plant operators along with reservoir restrictions and regulations;
- Ensure available generation is economically dispatch to balance gross loads;
- Create and submit generation bid curves, self-schedules, and Inter-Scheduling Coordinator (SC) Trades into the California ISO (CAISO) day ahead markets;
- Monitors daily energy marker prices, reviews sale and purchase arrangements, as well as planned use of contractual and physical resources on a daily through annual basis;
- Reviews operating data, evaluates after the fact schedules, and makes recommendation to improve economic impacts to the City;
- Reviews and authorizes payments and invoices related to wholesale power transactions;
- Provides overall coordination between pre-schedule, real-time, and billing functions of power scheduling operation;
- Assists in budget preparation process;
Manage professional, technical, clerical, and other lower level staff to include, prioritizing and assigning work; conduct performance evaluations; provide training; and making hiring, termination, and disciplinary recommendations. Evaluates training needs and workload balance for staff and prepares plan for implementation;
- Provides assistance to dispatching personnel on matters pertaining to economic system dispatch;
- Ensures that all City contractual obligations are met;
- Prepares various reports, including but not limited to on regular intervals, operational and economic analysis, and presents them with scheduling and trading staff, management, and other governmental agencies as required;
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- Attend and actively participate in training provided by the California Independent System Operator (CAISO), Western Electricity Coordinating Council (WECC), North American Electric Reliability Corporation (NERC), Western System Power Pool (WSPP), and Open Access Technology International (OATI);
- Maximizes resources economic potential by submitting available capacity into the Ancillary Services markets which include the following, Regulation Up/Down, Spin/Non-Spin, Load Following Up/Down and Incremental/Decremental energy bids;
- Coordinate and submit all Meter Sub-system (MSS), Scheduling Coordinator (SC) bids and self-schedules to MSS Schedule Coordinator and directly into CAISO's SIBR system;
- Monitor City's Transmission contracts for available transfer capabilities across interties;
- Coordinate with counterparties for market paths along with physical paths and create E-Tags for all physical generation across interties using the OATI tagging system;
- Coordinate and implement planned and forced outages with counterparties both generation facilities and transmission projects;
- Assure schedules, tags and meter data are validated between the scheduling application and the meter data system by front office staff at least once each afternoon or night, to insure accuracy and align with cleared schedules and work with the settlements group to establish and maintain set of procedures to accomplish this daily task;
- Monitor and assure scheduling/trading staff documents events in the log notes with accurate recording of time and persons involved;
- Notifies by email, the Settlements group when there are any deviations from normal schedules that will likely result in potential settlement impact, such as generation trips or atypical CAISO dispatches;
- Refine and assure that curtailments of individual renewable power purchase agreements and the trigger of said curtailments are recorded accurately, in order to meet the terms of agreements with counterparty;
- Actively work with the Resources Group to monitor CAISO market initiatives and the impact on the utility's assets and portfolio of resources. Offer insights to the team and management on proposed changes during the stakeholder process. Manage the impact of market initiative changes on the portfolio, including training other scheduling/trader staff on those impacts; and
Provide coverage for shifts when needed and performs other duties as assigned.

KNOWLEDGE, SKILLS, & ABILITIES

Knowledge of:

- Principles of effective supervision;
- Tools, terms, principles, and practices associated with power scheduling and dispatching, including the principles of the utilization and conservation of water power in the generation of electricity;
- Principles of load forecasting;
- Operation of an interconnected utility;

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- Administration of inter-utility contracts for sale, purchase, and exchange of energy; and
- Identification and utilization of opportunities for lowering overall system costs by purchases and sales of energy.

Ability to:

- Supervise the work of others;
- Train, instruct, and evaluate personnel;
- Set and achieve goals and objectives;
- Develop effective work methods;
- Plan and schedule work and monitor progress of personnel;
- Prepare clear, complete, and concise written reports, records, schedules, and instructions;
- Receive and carry out complex oral and written instructions;
- Work cooperatively; and
- Communicate effectively with others.

SUPERVISION RECEIVED

Works under the general supervision of an Electric Utility Division Manager or other classifications as assigned.

SUPERVISION EXERCISED

Supervises Power Scheduler/Traders, and others as assigned.

CONFLICT OF INTEREST

If applicable add: Incumbents in this position are required to file a Conflict of Interest statement upon assuming office, annually, and upon leaving office, in accordance with City Manager's Directive 100.

CLASSIFICATION HISTORY

Created 07/2005; Rev. 05/2022