Summary of Duties: Controls the switching of electric energy and maintains proper voltage regulation and load allocation for a large generating, transmission, and distributing system by giving orders and issuing clearances from a central dispatching office; or acts as lead for such work; or supervises, plans, and coordinates the load dispatching operations of the Power System of the Department of Water and Power; and does related work.

Distinguishing Features: A Load Dispatcher is responsible for maintaining the proper flow of electric energy to all parts of the distribution system by directing the amount of energy from various power sources and coordinating its distribution through field operating personnel. All requests for the removal of equipment from service, for the issuance of clearances on such equipment, and for the issuance of switching orders are cleared through the load dispatching unit. The work is complicated by the widespread nature of the system and the constant maintenance and construction work in process. Since errors in load dispatching operations may endanger lives of employees, seriously damage lines and equipment, and interrupt services, procedures have been devised to govern issuance of switching orders and clearances. However, in instances of unusual occurrences or emergencies, there is opportunity for the exercise of considerable independent judgment. All entry level Load Dispatcher positions are trainee positions. A Load Dispatcher in a training position must successfully complete an intensive on-the-job training program and be assigned to a permanent position within one year.

A Senior Load Dispatcher participates and directs the activities of a group of Load Dispatchers. An employee of this class has considerable responsibility for making independent decisions relative to switching operations, the adjustment of generating schedules, the scheduled receipt and sale of purchased power, and a number of matters affecting systems operations.

A Chief Load Dispatcher assists in or is in charge of all load dispatching operations or supervises a single shift of Senior Load Dispatchers and Load Dispatchers. Supervision is exercised through written and oral orders issued to subordinates and review of records kept and results obtained. Assignments received are general in nature and performance is measured by the degree of efficiency maintained by the load dispatching unit. A Chief Load Dispatcher uses considerable independent judgment in the development and maintenance of standard operating procedures covering normal load dispatching operations. A Chief Load Dispatcher has the final responsibility for issuing orders in emergency situations.

Examples of Duties: Load Dispatcher: Issues emergency and routine switching orders to station operators based on allocation of load and the operation of generation units, high tension lines, and other equipment, and orders generation, transmission, and distribution equipment removed from and placed in service; receives requests for removal of equipment from service and determines whether requests can be granted and which takes precedence; issues clearances on electric equipment and power lines for
testing and other work; coordinates the activities of various units in placing new equipment into service; initiates prompt procedures in emergencies such as injury to personnel, damage to equipment, and interruptions to service; requests necessary medical assistance, fire and police protection and additional operators and patrol workers; determines sequence of emergency switching, need for repair service, and when to reenergize equipment;

Makes frequent checks of dispatcher's diagram board for indications of system trouble and for guidance in planning and writing switching programs; maintains diagram board by placing and shifting colored and coded plugs; checks meters in dispatcher's office and reports of telephoned information to insure continuity of service and proper maintenance of load schedules, system voltages, and interchange of power with other utilities and municipalities; records in log book all system operations personally handled, such as issuing switching orders and subsequent issuing of clearances for work on the system; prepares various operating reports such as a daily summary of dispatcher's activities and major system disturbances, and daily reports of receiving station output, generation, and of totals of kilowatt-hours generated and distributed; plots daily load curves on charts; changes charts on various meters; plans necessary switching operations to meet future work schedules of operating divisions;

Instructs other employees during training periods for relief assignments and replacements in the load dispatching offices; and studies system diagram board, dispatching bulletins, emergency orders, operating orders, contracts with outside utilities, and related material in order to maintain familiarity with current operating conditions and system requirements.

**Senior Load Dispatcher**: Directs and participates in the work of a group of Load Dispatchers; may assign and coordinate duties of Load Dispatchers during emergencies or major system troubles; may co-ordinate load dispatching functions required for the restoration of service after major interruptions; frequently checks dispatcher's diagram board in coordinating the work of Load Dispatchers; posts to supervisor's log book brief entries of dispatching operations, including special reports of unusual conditions; makes necessary changes to the system diagram board and transmission line prints; and prepares and reviews a variety of reports and records relating to load dispatching operations.

**Chief Load Dispatcher**: Plans, assigns, co-ordinates, and reviews the load dispatching operations of the Power System; supervises the work of several shifts of Load Dispatchers; determines proper procedures regarding system operations as related to load dispatching functions and issues permanent and temporary orders; studies available power resources and equipment and assists in developing plans for their current use in the generation, transmission, and distribution of electric energy; reviews current information concerning Department obligations and rights regarding sources and interchange of power as stipulated in various contracts; attends daily and special meetings with engineers relative to general planning of Power System operations; assists in the preparation of equipment overhaul programs;

Reviews log books and a variety of reports prepared by subordinates; makes up daily system load schedules for generating plants, advises subordinate Load Dispatchers on unusual problems; develops training programs for load dispatching activities; suggests necessary changes in system diagram board and transmission line prints;
As assistant to the head of the load dispatching office, or as the supervisor of a single shift assists in planning, assigning, coordinating, and reviewing all load dispatching operations, supervises the load dispatching activities on various shifts; supervises revisions of the dispatcher's diagram board and of high-voltage line blueprints; attends meetings with the divisional supervisor or acts as the divisional representative; assumes the duties of the higher level position in the absence of the Load Dispatching Chief.

Employees in these classes may occasionally be assigned to other duties for training purposes or to meet technological changes or emergencies.

Qualifications:

<table>
<thead>
<tr>
<th>Knowledges:</th>
<th>Load Dispatcher</th>
<th>Sr Load Dispatcher</th>
<th>Chief Load Dispatcher</th>
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</thead>
<tbody>
<tr>
<td>General layout, equipment, functions, and capacity of the City electric generation, transmission, and distribution system;</td>
<td>Good</td>
<td>Good</td>
<td>Good</td>
</tr>
</tbody>
</table>
Knowledges (Cont):

Department of Water and Power operating procedures and regulations, including the issuance of clearances, switching operations, and emergency operations; Good

Fundamental principles of electricity as related to its generation, transmission, and distribution; Good

Generating equipment pertaining to output; Working

Contracts between other utilities and the Department of Water and Power; Working

Safety principles and practices; Good

Memoranda of understanding as they apply to subordinate personnel; General

Laws and regulations related to equal employment opportunity and affirmative action; Working

Principles of supervision and management; Good

Department of Water and Power Working Rules;
Working

Factors involved in future load planning and system operation;

General

Literature and recent developments in the field of electric energy transmission and distribution and the utilization of related electric equipment;

General

City personnel rules, policies and procedures;

General

<table>
<thead>
<tr>
<th>Abilities:</th>
<th>Load Dispatcher</th>
<th>Sr Load Dispatcher</th>
<th>Chief Load Dispatcher</th>
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</thead>
<tbody>
<tr>
<td>Determine when and how to take electric lines and equipment out of operation and maintain continuous service;</td>
<td>x</td>
<td>x</td>
<td>x</td>
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<tr>
<td>Analyze emergency situations and to adopt quick, effective, and reasonable courses of action;</td>
<td>x</td>
<td>x</td>
<td>x</td>
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<tr>
<td>Read and interpret system diagrams and various meter and instrument readings and indications;</td>
<td>x</td>
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<td>x</td>
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<tr>
<td>Keep operating records and make reports;</td>
<td>x</td>
<td>x</td>
<td>x</td>
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<tr>
<td>Compute and analyze electrical and hydraulic data with respect to Power System operations;</td>
<td>x</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>Deal tactfully and effectively with department employees and employees of other utilities;</td>
<td>x</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>Organize, assign, and supervise the work of a group of load dispatching personnel;</td>
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<td>x</td>
</tr>
</tbody>
</table>
Plan and coordinate the load dispatching activities of a large municipal power system;

Make analyses and reports relating to load planning and system operation.

Three years of experience as a Power Switchboard Operator, Steam Plant Operator, Senior Electric Trouble Dispatcher, or in a class at that level which provides experience in operating a switchboard controlling the functioning of electrical equipment and lines in an electric power generating plant or in a receiving, switching, or distributing station is required for Load Dispatcher.

Two years of experience as a Load Dispatcher is required for Senior Load Dispatcher.

Two years of experience as a Senior Load Dispatcher is required for Chief Load Dispatcher.

**Physical Requirements:** All Classes: Strength to perform average lifting of less than 5 pounds and occasionally over 15 pounds; good speaking and hearing ability necessary in radio and telephone communication; and good eyesight.

Persons with handicaps may be capable of performing the duties of some of the positions in these classes. Such determination must be made by the medical examiner on an individual basis.

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