ELECTRICAL MECHANIC, 3833
SENIOR ELECTRICAL MECHANIC, 3834

Summary of Duties: Does skilled mechanical and electrical work in installing and maintaining electric equipment in electric stations, generating stations, pumping and chlorinating stations, and similar facilities; or participates in and supervises such work; and does related work.

Distinguishing Features: Employees of these classes are primarily concerned with the installation and field maintenance and repair of electric equipment, wiring, and circuits in electric plants and installations rather than with the extensive and detailed repair, rewinding, or rebuilding of rotating electric equipment and transformers.

The class of Senior Electrical Mechanic is distinguised from the class of Electrical Mechanic in that employees of the latter class are skilled journey-level workers and do not have supervisory responsibilities. However, Electrical Mechanics may occasionally participate in providing guidance to apprentices. A Senior Electrical Mechanic acts as a lead to a small group of Electrical Mechanics and helpers in addition to performing or providing the technical support for the more difficult and skilled electrical mechanical work. Assignments are in the form of written or verbal instructions or plans and diagrams and work is always subject to inspection.

Much of the work of employees of these classes is outdoors and in all kinds of weather. A good deal of the journey-level work is on energized equipment which involves hazards in addition to those normally found in construction crafts.

Examples of Duties: Installs, maintains, repairs, inspects, and tests electrical facilities in pumping, chlorinating, and electric generating plants, electric stations, airport installations, and warehouses, office buildings, shops, and other buildings and structures, including station control, supervisory control and service wiring, conduit, starters, outlets, fixtures, motors, protective devices, overhead and underground signal lines, time, disconnect, grounding and other switches, relays, oil and air blast circuit breakers, feeder voltage regulators, transformers, condensers, busses, generators, switchboards, pressure recorders, telemeters, and other metering equipment, communications and pole lines, underground services, runway, landing, approach, and clearance lights, and electric refrigeration, air conditioning, and heating equipment; Inspects contacts, connections, coils, and motor windings for overheating; tests and adjusts relay and control apparatus; inspects, maintains, and meggers power circuits; inspects and adjusts motors; repairs and services cables, control apparatus, control overhead lines, motor and excitor windings, power tools, cranes, arc welders, shop equipment, automatic fire fighting equipment, kitchen or laboratory electric equipment, various remote and local alarm systems,

electric locomotives and battery charging equipment; repairs gas, oil and water leaks relating to transformers; performs heliarc welding of aluminum busses;

Investigates trouble complaints from industrial and commercial electric pumping stations; performs switching operations and inspects, tests, and maintains equipment at these stations such as automatic throw over and trip mechanisms on oil circuit breakers, busses, and insulators;

Secures clearances to remove equipment from service, checks disconnect switches, and applies grounds to prevent injuries during repair operations; and prepares time and equipment inspection reports.

Senior Electrical Mechanic: In addition to the above, supervises and works with a small group of Electrical Mechanics and Electrical Craft Helpers; personally performs the more difficult work; may determine work methods and assures that materials and supplies are available; determines priority of work; maintains standards of quality and quantity of work performed; assures that proper safety precautions are taken by subordinates; may keep records of time and materials.

Both Classes: Employees in both classes may occasionally be assigned to other duties for training purposes or to meet technological changes or emergencies.

Qualifications:

Knowledges:	Electrical Mechanic	Senior Electrical Mechanic
Tools, methods and materials used in the installation, maintenance and repair of transformers, oil and air blast circuit breakers and meters, controls, busses racks and other electric equipment used in electric stations and generating plants, pumping stations and other electrical plants and layouts;	Good	Good

Qualifications: (Cont'd)

Knowledges:	Electrical Mechanic	Senior Electrical Mechanic
Hazards involved in working on or near energized equipment and the proper safety precautions and first aid treat-		

ment;	Good	Good
Fundamentals of electricity and electronics as related to the installation and maintenance of electric equipment in stations, plants, and area head-quarters;	Good	Good
Electrical circuit plans and diagrams;	Good	Good
Strength of materials used and the methods of moving or hoisting heavy electrical equipment in electrical installation and maintenance;	Good	Good
Department procedures in obtaining clearances to work on high voltage electrical equipment;	Good	Good
CAL/OSHA Title 8 Electrical Safety Rules.	Good	Good
Los Angeles City Electrical Code;	General	Good
Principles of supervision;		General
Memorandum of understanding as they apply to subordinate personnel;		General
City personnel rules, policies and procedures;		General

	Electrical	Senior Electrical
Abilities:		
Use tools needed in electrical mechanic work;	x	x
Read and interpret blueprints and electrical diagrams;	x	x
Understand and follow directions;	x	x

Make routine work reports;	x	x
Estimate time and materials to complete an electrical mechanical job;	x	x
Deal tactfully and effectively with subordinates, other employees and the public;	x	x
Weld aluminum bus connections;		x
Supervise Electrical Mechanics and helpers in a lead capacity.		x

Completion of a recognized apprenticeship as an electrical mechanic **or** the attainment of journey-level rank as an electrical mechanic or as an electrician with experience in the installation or maintenance of industrial electrical equipment including large power transformers, circuit breakers, and switchgear of 2400 volts or greater **or** five years of experience as an electrical craft helper assisting an electrical mechanic in the work described above is required for an Electrical Mechanic.

Two years of experience as a journey-level electrical mechanic is required for Senior Electrical Mechanic.

License: A valid California driver's license and a good driving record are required.

Physical Requirements: Strength to perform average lifting of 35 pounds and occasionally over 70 pounds; body agility and equilibrium involved in activities such as climbing and balancing under precarious conditions; back an leg coordination involved in activities such as stooping, kneeling, crouching and crawling; arm, hand and finger dexterity with both hands involved in activities such as reaching, handling and feeling; good speaking and hearing ability and good eyesight.

Persons with medical limitations may, with reasonable accommodations, be capable of performing the duties of some of the positions in these classes. Such determination must be made on an individual basis in light of the person's limitations, the requirements of the position, and the appointing authority's ability to effect reasonable accommodations to the limitations.

As provided in CSC 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.