

STEAM PLANT ASSISTANT, 5622

Summary of Duties : Works as a trainee under close supervision assisting Steam Plant Operators, Steam Plant Maintenance Mechanics, or Instrument Mechanics in the operation and maintenance of steam-electric generating plant equipment, including turbogenerator units, high pressure boilers, auxiliary equipment, and electrical switching facilities; and does related work.

Distinguishing Features : An employee of this class assists in either operating, maintaining, or repairing steam electric generating plant equipment, including mechanical, electrical controls and instrumentation, and auxiliary equipment.

A Steam Plant Assistant is distinguished from other steam plant personnel in that the Steam Plant Assistant receives extensive on-the-job instruction, is closely supervised, and is required to successfully complete a home study course in order to acquire the proficiency needed for all phases of the work. The Steam Plant Assistant initially performs relatively routine work of an unskilled or semi-skilled nature and in time learns to perform the more difficult work. Employment is limited to four years during which time the trainee is expected to qualify for promotion.

Examples of Duties : Assists Steam Plant Operators at a centrally controlled steam-electric generating plant by testing, adjusting and operating main and auxiliary controls and equipment to assure that each unit is safely and economically providing load, voltage and frequency ordered by Load Dispatchers; assists in the operation of boilers, turbine generators, and auxiliary equipment; assists in starting and stopping of main and auxiliary equipment as necessary for maintenance and repairs; takes readings from meters, instruments, gauges, and charts on machinery and equipment, and records readings on appropriate forms; assists in unloading and transferring fuel oil; makes necessary adjustments as directed to regulate oil systems; inspects and monitors for proper operations of auxiliary equipment; inspects batteries as directed; operates gas or oil fired fuel oil heaters; assists in operations to condition water for use in steam plants;

Assists Maintenance Mechanics in maintaining, checking, repairing, lubricating, overhauling and adjusting steam-electric generating equipment and mechanical and auxiliary equipment; assists journey-level workers in dismantling and repairing machinery and equipment; installs and removes insulation materials used in steam plant equipment; assists in disassembling, cleaning, repairing and reassembling main fuel oil burners, valves, pumps and diesel generators; operates hand and portable power tools in the maintenance of equipment, such as pneumatic tube cleaning devices, sandblasting equipment, and oxyacetylene cutting and burning equipment; assists in the construction of prefab platforms and scaffolding; assists in boiler and furnace maintenance; may assist in unloading oil tankers at Harbor Steam Plant; may assist in maintenance and repair of control systems at a tank farm or at fuel oil handling and storage facilities;

Assists Instrument Mechanics in servicing steam plant equipment by calibrating, cleaning, checking, lubricating, inspecting, adjusting, maintaining and making minor repairs to automatic controls, indicating and recording instruments and components,

and may assist in the major overhaul of instruments and controls; assists in inspecting and determining operating conditions of indicating and recording instruments, automatic control equipment and electrical, electronic, hydraulic, and pneumatic systems; assists in disassembling, testing, and repairing instruments and controls; as assigned, maintains records of inspections, calibrations, and maintenance and repair activities; uses various gases and liquids such as oxygen, mercury, carbon monoxide and acids when cleaning or calibrating; checks mechanical charts and recorders for proper operations; may assist in repairing closed circuit television monitors;

Monitors indicators for equipment malfunction and reports improper operations; keeps equipment, adjacent areas, and working areas clean; drives dump trucks, fork lifts, power sweepers, and other equipment, as required; checks oil levels and lubricates machinery and equipment; changes fuel oil burners; takes readings, logs, and maintains station records; under direction, opens and closes valves and electrical circuit breakers; and may occasionally be assigned to other duties for training purposes or to meet technological changes or emergencies.

Qualifications : A general knowledge of types, principles of operations, and operating methods and practices of equipment and machinery used in both the steam and electrical phases of steam-electric generating plants, including turbogenerator units and auxiliary equipment; a general knowledge of the hazards involved and safety precautions required in working near and operating steam plant equipment, including energized circuits; a general knowledge of the fundamentals of electricity as related to its generation and transmission; the ability to perform manual work and use hand tools associated with routine maintenance activities at a steam-electric generating plant; the ability to follow written and oral instructions and established procedures; the ability to read precision recording instruments and keep records; the ability to detect irregularities in the operation and functioning of machinery and equipment by inspection or review of operating records and reports; the ability to analyze emergency situations and to adopt quick, effective, and reasonable courses of action; and the ability to communicate in an understandable manner.

One year of experience in electrical or mechanical work involving the operation, maintenance, or repair of large machinery such as that found in an engine room on board ship, or in an electric generating plant; or successful completion of a one semester course in mechanics, physics, electricity, electronics or chemistry; or successful completion of the Hayden Electricity course sponsored by the Department of Water and Power; or the Pre-Steam Plant Assistant course given by Los Angeles Trade Technical College.

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

Physical Requirements : Strength to perform average lifting up to 70 pounds and occasionally over 70 pounds; back and 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; normal depth perception and color vision.

Persons with medical limitations may, with reasonable accommodations, be capable of

performing the duties of some of the positions in this class. 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 person's limitations.

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 all of the duties and responsibilities of any position shall be.