

POWER PLANT MILLWRIGHT

PURPOSE AND NATURE OF WORK

Positions in this class are responsible for the mechanical maintenance of a fossil fuel fired electric generating station. Incumbents work under the direction of a Plant Maintenance Foreman and may oversee employees working in the class of Plant Maintenance Mechanic II. Position is subject to 24-hour call, overtime and work is potentially hazardous. Incumbents perform tasks requiring advanced knowledge and skills in welding, machining, and repair of heavy industrial rotating machinery. The work of this class requires the use of various machine and hand tools to produce replacement parts and new parts for mechanical equipment operated in the production of electrical power. The work requires the performance of skilled mechanical operations, mechanical installations and repairs to a variety of equipment. In addition to machinist tasks, the employee in this class performs other maintenance tasks, including welding and mechanical work. Assignments are received orally or in writing. Routine work is performed independently, and special assignments are accompanied by sketches, drawings or specifications, and are checked upon completion by a supervisor. All work is subject to inspection while in progress and upon completion.

ILLUSTRATIVE EXAMPLES OF WORK (Note: These examples are intended only to illustrate the various types of work performed by incumbents in this class. All of the duties performed by any one incumbent may not be listed, nor does any incumbent necessarily perform all of these duties.)

Operates lathe and precision tools and instruments to repair or produce replacement and new parts for mechanical equipment such as generators, turbines and auxiliary equipment. Installs parts and realigns them to factory specifications. Dismantles machinery, takes and logs all measurements of shafts, bearings, bushings, seals, wear rings and coupling alignments for future maintenance and repair needs. Performs structural and pipe welding. Estimates, fabricates and installs needed modifications to piping systems, cat-walks, handrails, ladders, tanks and related types of structures. Performs routine maintenance and repairs to a variety of equipment such as valves, pumps, air compressors, air conditioners, and related equipment. .

Enters and works inside boiler, condensers and other confined spaces through 18-inch diameter manholes. Reads, reviews, and stays abreast of equipment specifications, operating characteristics, training materials, regulations, policies and procedures affecting plant maintenance. Safely climbs ladders and stairs, enters confined spaces, works in and around high temperatures, pressures, hazardous chemicals, and noise levels. Performs related work as required.

NECESSARY KNOWLEDGE, ABILITIES, AND SKILLS

Thorough knowledge of the standard practices, materials, tools and equipment of the machinery and welding trade.

Thorough knowledge of the occupational hazards and safety precautions of the trade.

Ability to follow oral and written instructions and to work from sketches, diagrams, blueprints and specifications.

Ability to take accurate measurements and make close alignments of machine components.

Ability to locate and repair, or replace defective parts.

Ability to establish and maintain effective working relationships with other employees.

Skill in the use of a wide variety of tools and machines, including lathes, drill presses, precision instruments and related tools and equipment.

Thorough knowledge of all applicable industry standards, practices and regulations

DESIRABLE TRAINING AND EXPERIENCE

Completion of high school supplemented by specialized technical training in close tolerance machinist work and welding. Considerable experience working as a machinist and welder; or an equivalent combination of training and experience.