

POWER PLANT SHIFT FOREMAN

PURPOSE AND NATURE OF WORK

Positions in this classification are responsible for providing reliable and efficient power through the continuous safe operation of any of three fossil fueled steam turbine electric generating units. Incumbents work under the general direction of the Power Plant Operations Supervisor, are in responsible charge of the plant at night and on weekends and holidays and have supervisory responsibilities for technicians and apprentices assigned to their shifts. Work is potentially hazardous. Incumbents work 12-hour rotating shifts and is subject to work additional overtime.

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.)

Administers the tag-out program, acts as Plant Fire Wardens, and performs some maintenance duties in addition to the following. Communicates with supervisor and other shift foremen to relay current operating conditions. Reports and records incidents and plant maintenance needs. Safely climbs, enters confined spaces, and works in and around high temperatures, pressure, and noise levels. Works on elevated platforms and around hazardous materials. Oversees and participates in bringing high pressure boilers, pumps, turbines, generators, condensers, cooling systems, and accessory equipment into operation from cold start; synchronizes the generator with surrounding grid and switches generator online. Monitors fuel consumption according to origin and price; adjusts gas mix; makes short-term purchases as necessary. Monitors instrument panels, alarms and controls, initiates corrective actions, assigns tasks to technicians; trains and supervises technician apprentices as necessary. Makes periodic inspections of plant during each shift. Oversees routine plant water treatment duties. Supervises Plant Technician(s) on shift insuring the unit responds to fluctuations in demand and that operation is done in a safe, reliable, and cost effective manner. Trains operators and apprentices. Reads, reviews, and stays abreast of equipment specifications, operating characteristics, training materials, regulations, and policies and procedures affecting plant operation and systems. Performs related work as required, including equipment and facility cleaning, maintenance and repair.

NECESSARY KNOWLEDGES, ABILITIES, AND SKILLS

Thorough knowledge of plant processes and operating procedures for high pressure boilers, turbines, generators, and related equipment in a power plant.

Thorough knowledge of all applicable industry standards, practices, and regulations.

Knowledge of methods and objectives of natural gas purchasing, as required.

Knowledge of power plant water chemistry, handling of hazardous materials, and related environmental science.

Ability to work safely around plant chemicals and hazardous materials.

Ability to bring boiler, turbine, and generator units from a cold start to stable, synchronized, on line operation.

Ability to climb, lift 50 pounds, work at heights, enter confined spaces, i.e. manholes, work in high temperatures and high noise levels.

Ability to read understand and interpret technical manuals, schematics, P&ID's, as well as to put the information into practice.

Ability to analyze interactions of complex instruments, controls, process and human operators to monitor plant processes and identify and solve problems quickly, independently, and effectively in order to correct abnormal plant conditions and maintain safe reliable plant operation.

Ability to perform duties and direct personnel calmly and effectively in emergency and time critical conditions.

Ability to observe work and remain alert while working under stress and adverse conditions for extended periods of time and at irregular hours.

Ability to use computer equipment as required for controls, instruments, and fuel purchases.

Ability to establish and maintain effective working relationships with supervisors, employees and representatives of other utilities.

DESIRABLE TRAINING AND EXPERIENCE

Completion of high school and significant working experience as an operator/technician, supplemented by specialized training in boiler, steam turbine, and electric generation equipment, with hazardous materials training as applicable; or a related combination of education and experience.