

MAJOR FUNCTION

This is a highly skilled journey level work requiring a significant degree of technical ability to install, calibrate, repair, adjust, inspect and perform preventative maintenance on electrical power plant equipment and power plant instrumentation and control systems. Tasks are performed in accordance with established policies and procedures under the general supervision of the Power Plant E&I Supervisor.

ESSENTIAL AND OTHER IMPORTANT JOB DUTIES**Essential Duties**

Troubleshoots, repairs, calibrates and performs preventative maintenance on digital and analog control systems, plant instrumentation, and power plant low and medium voltage equipment. Installs, repairs and maintains a variety of plant equipment including, but not limited to, electrical bus and bus duct, dry and oil immersed power transformers, switchgear, power plant equipment, lighting systems and AC and DC motors. Makes assessment of power generation controls, steam turbine/generators, and combustion turbine/generators and reciprocating engine/generators as needed. Maintains power plant communication and video systems as assigned. Performs maintenance on Distributed Computer Control System software graphics and database to include loop and ladder tuning and testing of power plant control systems. Maintains accurate and up to date instrumentation preventative maintenance schedules and calibration data on instrumentation, control systems and electrical equipment. Monitors, installs and repairs steam and combustion turbine generator components. Maintains and repairs HRSG, fuel, combustion and safety management system devices and equipment. Plans, engineers and implements various improvement projects to power plant control loops and related systems. Assists Power Plant Engineer with specialized turbine, boiler and auxiliary systems testing. Inspects, troubleshoots, repairs, calibrates and maintains electronic, pneumatic and hydraulic power plant sub-systems. Performs preliminary assessment on pumps, fans, burners, air compressors, motors and electric and pneumatic valves. May direct the work of apprentice level employees. Performs other duties as required.

Other Important Duties

Obtains quotes as needed for materials and supplies, and maintains accurate records of same. Performs other duties as required.

DESIRABLE QUALIFICATIONS**Knowledge, Abilities and Skills**

Considerable knowledge of the standard practices, tools and terminology of the electrical trade and national electric codes. Considerable knowledge of electronic, hydraulic, and pneumatic theory, application, methods, standards, tools and materials as related to the repair and maintenance of electronic, hydraulic, and pneumatic power plant instrument and control systems. Considerable knowledge of safety precautions and procedures. Considerable knowledge of general parts supply and procurement procedures. Considerable knowledge of specialized tools and test equipment and their use as applied to electric, instrumentation and controls. Must demonstrate skill in the maintenance, repair and calibration of electrical, electronic, hydraulic, and pneumatic instruments and controls and other related equipment. Ability to interpret technical manuals, schematics and blueprints, and effectively use this information to identify malfunctions, and repair and replace defective parts and subassemblies. Ability to communicate effectively and maintain working relationships conducive to successful job performance. Skill in the use of microcomputers and the programs and applications necessary for successful job performance.

Minimum Training and Experience

Possession of a high school diploma or an equivalent recognized certificate and completion of the Electric & Gas Utility's apprenticeship program for Power Plant Electric and Instrument Technicians covering power plant electrical, instrumentation and control systems; completion of an equivalent external apprenticeship program and one year of journeyman level work experience that includes the installation, calibration, testing and maintenance of power plant electrical or instrumentation and control systems; completion of an electrical, electronics or instrumentation and control apprenticeship program and one year of work experience in the same trade at the journeyman level; or an equivalent combination of training and experience.

Necessary Special Requirement

Must be medically certified to wear a respirator and pass a respirator fit test prior to employment.

Must possess a valid Class E State driver's license at the time of appointment.

An employee assigned to the Purdom Power Plant, or who may be occasionally required to have unescorted access to the Port Facility portion of the Purdom Power Plant, as determined by the General Manager-Electric & Gas, must obtain Transportation Workers Identification Credentials (TWIC) within 90-days of employment, and must maintain such credentials throughout his/her period of employment in that capacity as a condition of continued employment.

Individuals in this classification are considered essential during emergency and storm situations and must be able to work 16 hours per day for extended periods of time and may be required to be away from their family.

Individuals in this classification must be available to serve on-call and are subject to having to work outside of their assigned shift/schedule to meet operational needs.

Must be able to distinguish between red and green.

Must obtain within one year, and maintain for continued employment, HAZMAT and oil spill certifications within one year of employment.

Established: 09-30-99

Revised: 08-01-00

05-26-04*

06-13-06

06-16-08

09-02-11*

09-23-19

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