# POWER PLANT APPRENTICE-ELECTRIC and INSTRUMENT TECHNICIAN

#### MAJOR FUNCTION

This is an apprentice training program designed to provide the knowledge, skill and experience needed to qualify for Power Plant Electric and Instrument Technician. The apprenticeship experience consists of study and work in the respective specialized area. Class incumbents must make satisfactory progress as the training program develops to include more complex and hazardous demands. Work is performed in accordance with established policies and procedures under the general direction of supervisory or journeyman level workers. Work is reviewed through inspection of work in progress and upon completion. Advancement in the apprenticeship program will be dependent upon successful demonstration of mastery of the required competencies for the applicable apprenticeship progression.

# **ESSENTIAL AND OTHER IMPORTANT JOB DUTIES**

#### Essential Duties

Assists in the installation and adjustment of electronic, pneumatic, and/or hydraulic power plant instruments.. Assists with troubleshooting, repairs and calibration of digital and analog control systems, instrumentation, and high and low voltage equipment. Repairs and maintains unit controls and associated equipment such as combustion, steam temperature, and feed-water controls related to the smooth operation of generating units. Makes periodic and special inspections of power plant instruments. Assists in the maintenance of all plant electrical and control systems, including: AC and DC motors; AC high and low voltage switchgear; DC power systems relays and motor protective devices; plant lighting systems, transformers; station batteries; voltage regulators, HVAC systems, and electric control systems. Assists Journey Electric/Instrument Technician in the maintenance and repair of outside equipment such as yard lighting systems, cooling towers, fuel handling and process treatment equipment, switchgear and power transformers, and maintains combustion turbine electrical equipment, controls and generators. Uses test equipment such as voltmeters, ohmmeters, ammeters, phase indicators, meggers, tube and transistor tests, dead weight testers, monometers and other related test equipment. Performs related work as required.

# Other Important Duties

Assists in maintaining records and reports. Performs clean-up in the general work area when regular assignments are completed. Attends various training courses and engages in independent study of power plant equipment operations and maintenance. Performs related work as required.

# **DESIRABLE QUALIFICATIONS**

#### Knowledge, Abilities and Skills

Progressively increasing knowledge of methods and technology essential to the appropriate line of progression. Progressively increasing knowledge of power plant operations and maintenance practices and procedures. Progressively increasing knowledge of applicable safety work practices and rules. Progressively increasing knowledge of occupational and environmental hazards associated with general maintenance and operations. Ability to develop the skills required for the journeyman level work in the respective area of progression. Ability to learn through the theory and application of practices and principles as they relate to the specific line of progression. Ability to work cooperatively with other employees and employ good judgment in complying with instructions and safety measures. Ability to work in adverse weather and operating conditions, including performing heavy manual tasks. Ability to work at heights, climb ladders and work in enclosed spaces.

# Minimum Training and Experience

Possession of a high school diploma or an equivalent recognized certificate.

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Necessary Special Requirements

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

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 and/or the Director of such employee's department), 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.

Must possess a valid class "E" State driver's license at time of appointment.

Must be able to distinguish between red and green.

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

Established: 09-20-03 Revised: 06-16-08 02-07-23 2520