

Job Title: Instrument, Controls & Electrical (IC&E) Apprentice

**Reports to:** Maintenance Manager **Location:** Allendale, South Carolina

**Summary:** The IC&E Apprentice is responsible for learning the methodology of installing, maintaining, testing, and troubleshooting of instrumentation, controls, and electrical /electronic system at a solid fuel steam turbine power generation plant. This position requires a hands-on learner to obtain a high degree of knowledge on instrumentation, controls, low, medium and high voltage switchgear, transformers, generators, protective relays, motor control centers and continuous emissions monitoring systems (CEMS). This person will also be taught on how to advise and train Operations and Maintenance on instruments, controls and electrical equipment.

**Job Description:** With safety of yourself and all those around you as the highest priority, the Instrument, Controls & Electrical Apprentice (IC&E) is expected to learn how to:

- Calibrate, test, maintain, troubleshoot and install all power plant instrumentation, control systems and electrical equipment.
- Perform maintenance on motor control centers, motor operated valves, generators, excitation equipment and motors.
- Perform preventive, predictive and corrective maintenance on equipment, coordinating work with various team members.
- Design and install new equipment and/or system modifications.
- Troubleshoot and perform maintenance on DC backup power equipment, process controls, programmable logic controls (PLC) and emission monitoring equipment
- Schedule, coordinate, work with and monitors contractors on specific tasks as required.
- Train other team members in the areas of instrumentation, control, and electrical systems.
- Perform Operations tasks on an as-needed basis and other tasks as assigned.
- Be available within a reasonable response time for emergency call-ins and overtime.
- Provide an acceptable off-hour contact cell phone number or carry a company provided cell phone.
- Respond to alarms in a timely manner; operate firefighting equipment as necessary and within reason.
- Perform other comparable duties during plant shutdowns.
- Maintain professional competence in the field of power plant operations.
- Maintain a safe work environment though job planning, housekeeping and identification and correction of hazards.
- Work in confined spaces.
- Adhere to all applicable health & safety, environmental and administrative policies, procedures and regulations.
- Attend training, implement and pursue personal development goals.
- Other duties as assigned

## **Requirements:**

### **Education**

- High school diploma or equivalent required.
- Associate Degree equivalent from a two-year college or technical school preferred, or 4
  years of experience.

### Experience

- Valid Driver's License;
- Proficient in basic mechanical repair;
- Experience in an industrial setting preferred.
- Demonstrate basic knowledge of electrical equipment, electronics, schematics, basics of chemistry and physics, and controls and instrumentation.
- Knowledge of safe work practices associated with a power plant environment.
- Ability to productively work independently and as an overall integral team member.
- Must have strong communication skills and the ability to effectively organize and facilitate process teams.
- Ability to understand contractual issues as they relate to plant operations and maintenance.
- Travel to other plant locations and to corporate may be required.
- Thorough knowledge of the location, purpose and proper use of the plant safety equipment.
- Ability to read and interpret mechanical drawings, electrical one-lines, logic drawings, technical manuals and P&ID's.

#### Work Process Skills

- While engaged in company business, employees are expected to conduct themselves in a courteous business-like manner, showing respect and consideration for fellow employees and other site personnel, such as contractors and guests, with a focus on servant leadership;
- Cooperate with your co-workers in a manner that is positive and constructive; accept
  that there are different opinions and ideas; discuss issues in a professional manner
  looking for solutions that can be resolved at your level;
- To communicate work related issues along with recommended solutions to your coworkers and/or supervisor in a timely and professional manner;
- Be accepting of changes to your day to day routing as the business needs dictate;
- To be appropriately dressed and ready for work prior to the start of a working shift through to the end of the shift;
- Comply with all Atlantic Power policies and procedures.

# Physical Requirements

- Ability to perform manual tasks including but not limited to operation of hand and power tools;
- Ability to lift at least 80 lbs.;
- Ability to bend and maneuver in tight, cramped quarters;
- Ability to work in hot, noisy and dark environments;

- Ability to work at heights;
- Ability to work with and wear respiratory protection;
- Ability to reach with hands and arms above shoulder level and at shoulder level;
- ability to walk, stand, stoop, kneel, and bend for prolonged periods of time;
- Able to grip and manually manipulate, often with repetitive motion, items such as, but not limited to, hand tools and machine parts;
- Ability to communicate clearly with plant personnel, including the ability to give and receive instructions over a radio;
- Ability to see clearly; safely and readily identifying the labels, gauges, dials and indicators typically encountered in performing job duties;
- Ability to read, write and understand instructions and procedures in English;
- Ability to work outside of a normal shift rotation during call-outs or planned maintenance outages.