



Terrebonne Parish Consolidated Government

JOB DESCRIPTION

POSITION TITLE.....: Electrical Technician
DEPARTMENT.....: Utilities
DIVISION.....: Electric Generation
CLASSIFICATION/GRADE.....: Electrical Technician /109
REVISED.....: 01/2014
REPORTS TO.....: Electrical Plant Operations Supervisor
REVIEWED.....: 01/2014
WAGES.....: Hourly

SUMMARY:

The Electrical Technician is responsible for the maintenance and repairs of the power plant electrical systems, and should be qualified for all power plant electrical positions and/or classifications. The individual must monitor, update and/or establish electrical safety procedures and standards applicable to electrical work areas, and ensure compliance by plant personnel. The individual must demonstrate operating knowledge of electrical generation, motor control centers, substation equipment and emergency power systems. The individual must be capable of administering a preventative maintenance, special testing, spare parts and training programs. The incumbent will be evaluated on technical, administrative, and management capabilities and performance. The Plant Electrician reports to the Electric Plant Operations Supervisor.

BASIC FUNCTIONS:

1. Monitor, update and/or establish safety precautions applicable to electrical work areas, equipment, and ensure compliance by personnel.
2. Be capable of administering resuscitation and first-aid treatment to individuals in contact with an energized electrical circuit.
3. Maintain and have knowledge of operations, maintenance and repair of all power plant electrical systems and components.
4. Be competent in delivering instructions to other electricians, either orally or in writing.
5. Ability to interpret and work from blueprints, sketches and diagrams, and also develop such information for new installations or modifications at the power plant.
6. Ability to operate all electrical test equipment at the facility.
7. Be knowledgeable of substation, transformer, and OCB operations, maintenance and testing.
8. Inspect and adjust any alignment, in regards to generator brush pressure and length, brush holder clearance, cleaning of commutator and collector ring assemblies, and train other electrical field personnel.
9. Be knowledgeable in the theory and principals of operation, in regards to AC generation, electrical circuitry, battery principles, conductors and insulators, measuring/indicating equipment, motors, transformers and three-phase power, and be capable of training other personnel.
10. Be proficient at bending and installing conduits, and be capable of instructing others.
11. Have the knowledge and ability to use electrical formulas for both AC and DC circuitry.
12. Develop and maintain equipment and recommend spare parts listing, and ensure adequate spare parts are available for routine work.

13. Administer a preventative maintenance program on all facility electrical system equipment.
14. Be capable of developing an annual turnaround and five (5) year overhaul inspection, maintenance and testing work list.
15. Know the location of all emergency generators, emergency battery and egress lighting system circuitry, components and how each system is operated, interconnected and fused.

OTHER REQUIREMENTS:

1. Capable of updating all blueprints and diagrams, as necessary.
2. Knowledgeable and capable of installing and troubleshooting a cathodic protection system.
3. Knowledgeable and capable of installing and troubleshooting a facility grounding system.
4. Ability to obtain information on the capabilities, limitations, and functions of electrical systems, in relations to planning, designing and implementation of electrical circuits for installation, or modifications of equipment.
5. Continuously update the preventative maintenance program.
6. Have knowledge of applications and methods of determining type and value of acceptable substitute components when a designed spare is no longer available.
7. Have knowledge of safety circuit cutouts/trips, regarding start-up of steam and diesel generation systems.
8. Operate and be capable of training personnel on the uses of various test equipment, megger, ohmmeter, multimeter, wattmeter, frequency meter, oscilloscope, stroboscope, etc.
9. Conduct electrical safety and on-the-job training classes.
10. Know how to de-energize all electrical branch circuits within the power plant facility.
11. Be physically capable of performing labor intensive tasks.
12. Willingness to assist during emergency situations and fill-in, as required.
13. Have or acquire and maintain a personal telephone service.

EDUCATION/EXPERIENCE:

1. High School Diploma or GED Graduate.
2. Experience in the industrial electrical field, which includes maintaining and trouble-shooting high voltage systems.
3. And equivalent combination of electrical trade school education, training, and/or experience my substitute.