

Utility Instrumentation Technician (Electrician)



To perform this job successfully, an individual must be able to perform the essential job functions satisfactorily. Reasonable accommodations may be made to enable individuals with disabilities to perform the primary job functions herein described. Since every duty associated with this position may not be described herein, employees may be required to perform duties not specifically spelled out in the job description, but which may be reasonably considered to be incidental in the performing of their duties just as though they were actually written out in this job description.

JOB SUMMARY

Entry-level electrician position which is assigned work involving installation, maintenance and repairs of both high and low voltage electrical or electronic systems found in City water and sewage treatment plants, pumping systems, or general electrical tasks in City Building or Street facilities (lighting, circuitry, electrical drives or services or controls). An employee in this position repairs electrical/electronic components; conducts preventative maintenance; disassembles and reassembles electrical equipment; uses various meter testing equipment; interprets diagrams; conducts thermographic scans; and maintains related records. This position also orders repair parts; sets up generators for City functions; and responds to emergency calls.

ESSENTIAL JOB FUNCTIONS (examples, not all-inclusive)

The list of essential functions, as outlined herein, is intended to be representative of the tasks performed within this classification. This is a generic job description that covers operations in both water and wastewater facilities and is not necessarily descriptive of any one position in the class. The omission of an essential function does not preclude management from assigning duties not listed herein if such functions are a logical assignment to the position.

- Installs, alters, repairs, and maintains both high and low voltage motors, generators, switchgear, motor controllers, transformers, wiring system electronic components, and other related equipment.
- Checks electrical ladder diagrams for repairs on electrical equipment.
- Performs electrical connections and disconnects.
- Conducts thermographic scans.
- Installs variable frequency drives (VFD) in water and waste plants.
- Maintains accurate records of the maintenance and repair history of electrical equipment on which work is performed.
- Orders parts for repairs.
- Sets up generators for City functions.
- Responds to emergency calls.
- Performs related work as required.
- Participates in training under the direction of appropriate Supervisor or Industry Trades Offerings.
- Conducts frequent and periodic inspections of plants to detect malfunctions and initiates corrective actions under supervision.
- Executes work within schedules as assigned by supervisor which may include building, grounds, or plant equipment or electrical systems or equipment, and maintains these in proper condition.

- Performs work on interior and exterior plant maintenance systems and may be assigned general housekeeping duties as well as stocking, ordering, and documenting progress and achievements.
- Performs electrical related assignments for City's wastewater lift stations, City's building facilities, or grounds equipment (irrigation, HVAC, etc.) and follows all safety guidelines and standard operating procedures when performing work; maintains awareness of and reports/corrects any trip hazards, spills, or any unsafe equipment; handles, stores, and labels various electrical related equipment.
- Punctuality and reliable attendance are essential functions of this position.
- Must be available to work during emergencies for extended periods, if required.
- Performs other duties assigned.

QUALIFICATIONS

Education and Experience:

High school diploma or equivalent. A minimum of one (1) year of experience in a related field; or an equivalent combination of education, training, and experience.

Completion of an apprenticeship program as an electrician and attainment of journeyman rank.

Additional qualifying experience or completion of coursework at an accredited college or university in a job-related field may substitute on a year-for-year basis for one year of the required experience or education.

Previous experience as an electrician, preferably in both new construction and maintenance work; or any equivalent combination of training and experience.

Preferred Special Qualifications:

Must possess a valid driver's license with an acceptable driving record. Must obtain a valid Florida driver's license prior to hire. Florida or Broward County Journeyman Electrical license or a Master Electrical license or equivalent, Bucket Truck Certification and Forklift Certification. (Please upload proof with your application)

Knowledge, Skills, and Abilities:

- Knowledge of standard practices, materials, tools, and equipment of the electrical trade.
- Knowledge of the occupational hazards and appropriate safety precautions of electrical work.
- Knowledge of the installation, alteration, repair and maintenance of both high and low voltage electrical and electronic systems and equipment found in the plant of assignment.
- Knowledge of circuitry and motor control installation and repair.
- Knowledge of local and national electrical codes.
- Skill in the use and care of electrical tools and equipment.
- Skill in using department software.

- Ability to install and test electrical systems and equipment and to locate and repair defects.
- Ability to work from electrical drawings, schematics, and specifications.
- Ability to carry out oral and written instructions.
- Ability to physically perform required duties.
- Ability to establish and maintain effective working relationships with department officials, other employees, and the general public.
- Ability to read, write, and perform basic mathematical computations.
- Ability to clearly communicate and understand information in English, both orally and in writing.
- Ability to work, learn, and progress in a career-development job classification program.

PHYSICAL/MENTAL DEMANDS

Tasks involve the ability to exert moderate physical effort requiring considerable mobility in moving from one location to another in the performance of essential tasks. Involves various other intermittent physical activities that include, but may not necessarily be limited to, climbing, crawling, stooping, kneeling, and bending. Tasks may involve some lifting, carrying, pushing, and pulling of objects and materials of moderate to heavy weight. Some tasks require manual dexterity in addition to visual and hearing acuity. Some tasks may involve identifying and distinguishing colors. Must be physically able to operate equipment and tools when needed.

WORKING CONDITIONS

Tasks are mostly performed inside the plant facility with regular visits to the outside environment with potential for exposure to adverse conditions, such as dirt, dust, pollen, odors, fumes and poor ventilation, wetness, humidity, rain, temperature, and noise extremes, machinery and moving vehicles, vibrations, electric currents, toxic/poisonous agents, gases or chemicals, oils, and other fluids, or pathogenic substances.

Work is performed primarily in a plant environment. Tasks are regularly performed with varied amounts of exposure to adverse environmental conditions indoors and outdoors.

Noise, heat, cold and rain may be encountered during the course of repairs to equipment and infrastructure located throughout the utility system.