

UTILITIES MAINTENANCE ELECTRICIAN

MAJOR FUNCTION

This is Journey level work in electrical construction and maintenance activities. Positions allocated to this classification report to a designated supervisor and work under general supervision. Work in this class is distinguished from higher classes by its lack of supervisory and administrative duties and from lower classes by its emphasis on specialized electrical skills.

ESSENTIAL FUNCTIONS

The following statements describe the principal functions of this job and its scope of responsibility, but should not be considered an all-inclusive listing of work requirements. Individuals may perform other duties as assigned, including working in other functional areas to cover absences or relief, to equalize peak work periods or otherwise to balance the work load.

- Installs, maintains, and repairs various electrical fixtures and equipment, including outlets, switches, lights, motor starters, motors and electrical panels. Wires buildings and makes additions to existing wiring.
- Troubleshoot various motor controls, VFD, softstart and across the line starters.
- Troubleshoot and maintain analog controls and sensors.
- May perform underground electrical or other cable location using a variety of methods for the purpose of identifying cable runs, cable faults, making repairs or marking locations.
- May perform electrical maintenance at municipal water, sewer and administrative facilities.
- May work from sketches, blueprints, schematics and diagrams.
- Attends work on continuous and regular basis. Thorough knowledge of principles, practices, methods, and materials and theories used in electrical trade.
- Knowledge of the use of various electrical testing devices.
- Knowledge of occupational hazards of the electrical trade and of necessary safety precautions.
- Ability to operate work related equipment.
- Ability to locate and adjust defects in electrical systems and equipment.
- Ability to read and interpret sketches, diagrams, and blueprints.
- Services 480, 240, and 120 volt electrical systems.

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SECONDARY FUNCTIONS

- Keeps records of labor and materials.
- Assists skilled workers of related trades in general electrical and maintenance work.
- Assist semi skilled workers in Utility maintenance activities.
- May operate a two-way radio.
- May frequently chauffeur other employees, depending upon assignment and work location.
- Ability to work effectively with co-workers and the general public.
- Ability to communicate effectively, both orally and in writing.
- Performs other related duties as assigned.

CUSTOMER SERVICE

This is a front-line position for providing excellent customer service to members of the general public and other County employees. Personal contact occurs with other employees of the unit, employees of other departments in the County, citizens, and customers of the department. Service is provided in person and by phone contact.

SUPERVISION

This position does not have any supervisory responsibilities.

EDUCATION, EXPERIENCE, LICENSES, CERTIFICATIONS

Education and Experience

Graduation from high school or GED and two years experience in journey level electrician work. Additional appropriate education may be substituted for up to half the experience and three years experience in journey level electrician work may be substituted for the equivalency diploma. Services 480, 240, and 120 volt electrical systems.

Licenses

Valid Florida Driver's License required.

Successful completion of a qualified electrician apprenticeship program.

Depending on assigned area, may be required to meet security background investigation requirements.

JOB SKILLS

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To perform this job successfully, an individual must be able to perform each essential duty satisfactorily. The requirements are representative of the knowledge, skills, and ability required.

Language Skills

- Ability to read, analyze and interpret general business periodicals, professional journals, technical procedures, or governmental regulations.
- Ability to write reports, business correspondence, and procedure manuals.
- Ability to effectively present information and respond to questions from groups of managers, clients, customers, and the general public.

Mathematical Skills

- Ability to work with mathematical concepts such as probability and statistical inference, and fundamentals of plane and solid geometry and trigonometry.
- Ability to apply concepts such as fractions, percentages, ratios, and proportions to practical situations.

Problem Solving Ability

- Ability to define problems, collect data, establish facts, and draw valid conclusions.
- Ability to interpret an extensive variety of technical instructions in mathematical or diagram form and deal with several abstract and concrete variables.
- Develops plans, policies, specifications and programs continually.
- Functions independently as an expert in matters of specialized code, rules, policy, analyses, advanced budgetary, accounting systems, or complex scientific or technical systems.

Specialized Skills and Abilities

- Able to service 480, 240 and 120 volt electrical systems.
- Must be familiar with 4-20MA analog controls and equipment and be able to calibrate.
- Must be able to read electrical drawings and have a great knowledge of industrial and commercial electric electronics PLC.
- Some knowledge of SCADA, 4-20 milliamps, VFD's, pump controllers and similar equipment.

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- Must have knowledge and understanding of National Electrical Code.
- Ability to remain calm in stressful situations.
- Ability to take a teamwork approach to the job by cooperating with others, offering to help others when needed, and considering larger organization or team goals rather than individual concerns. Includes the ability to build a constructive team spirit where team members are committed to the goals and objectives of the team.

Machines and Equipment

To accomplish the tasks of the position, the employee will be required to operate the following types of machines and equipment: desktop, laptop, electric meter tester, Meger meter, Rotation Meter, OHMS tester, screw drivers, sockets, pliers, drill, know out set, pipe benders, cordless drills, drivers, grinders, saws, punch set and all other customary electrician used tools.

PHYSICAL DEMANDS

While performing the duties of this job, the employee will occasionally be required to sit, will regularly be required to walk, climb or balance, stoop, kneel, crouch or crawl, and taste or smell; will frequently be required to lift twenty to fifty pounds; stand, use hand to finger, handle, feel, reach with hands and arms; talk and hear. Special vision requirements include close, distance, color, and peripheral vision, depth perception, and ability to adjust focus. Work requires physical strength and agility. Work may require exposure to hazardous conditions and noxious chemicals. Work may require performance of tasks outdoors under varying climactic conditions. Work may require performance of tasks at elevated levels. Work may require performance of tasks in extreme heat and confined areas. Additional requirements may be specified depending on needs of department.

WORK ENVIRONMENT

The work environment characteristics described here are representative of those an employee encounters while performing the essential functions of this job. While performing the duties of this job, the employee will occasionally be exposed to high precarious places, fumes or airborne particles, explosives, and vibration; will regularly be exposed to wet or humid conditions, moving mechanical parts, extreme heat, risk of electrical shock, and risk of radiation; and will frequently be required to work in outdoor weather conditions. The typical noise level is loud.

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