Generator Field Service Technician

Category: Classified  
Pay Grade: C23  
Job Code: 12976

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**

Performs skilled technical mechanical work in troubleshooting and correcting electro-mechanical diesel and gasoline engine powered generator systems, plus other highly specialized electro-mechanic work; exercises technical independence in determining work methods and procedures; may direct and lead others during major repair or overhaul projects; applies full performance level mechanical and technical expertise and supervision in one or more specialized assignment areas; executes specialized protocols and procedures for the repair and maintenance of the County fleet and equipment inventory to include critical back-up power control and generating systems; applies a high-level technical expertise in alternating current (AC) voltages up to 4160V, 3 phase, and expert skills in performing activities related to electrical power systems safety if assigned principal responsibility for emergency power generation.

**ESSENTIAL JOB FUNCTIONS (examples, not all inclusive)**

- Performs electro-mechanical maintenance and repair of diesel and gasoline engine powered generator systems;
- Performs electro-mechanical maintenance and repair on portable and stationary emergency powered generators and power generation systems;
- Performs mandatory state fuel tank inspections for emergency generator fuel storage tanks.
- Performs repairs on emergency generator fuel storage tanks and related equipment;
- Diagnoses malfunctions of generators and power generation and control systems;
- Estimates nature and extent of repair services required and procures and receives materials, parts, services, and supplies;
- Reports to and requests from supervision required additional infrastructure items required for work completion, such as tools, equipment, and personnel as required;
- Repairs, replaces, rebuilds, and modifies generators, motors, electrical power switching mechanisms, control relays, and associated system components;
- Coordinates repair and service requirements with representatives of various County departments or agencies;
- Contacts various vendors and manufactures of generator systems and parts for research and procurement of required parts for completion of repair processes;
- Leads, trains, and directs others and provides oversight to peer employees, contractors, and other personnel engaged in the installation and repair of diesel engines, emergency power generators, and power control systems;
- Operates automotive and heavy equipment associated with the installation and repair of emergency power generators and power generation systems;
- Diagnoses malfunctions of generator systems, estimates nature and extent of repair services required, orders materials, parts, and supplies needed, secures necessary personnel, and performs necessary repairs;
- Repairs, replaces, rebuilds, and modifies generators, motors, electrical power switching mechanisms, control relays, and associated system components;
• Coordinates with representatives of various County departments or agencies regarding generator repair or service requirements;
• Contacts vendors and manufactures of generator systems and parts in order to secure necessary parts for repairs;
• Trains, directs, and reviews the work of other individuals engaged in the installation and repair of generator systems;
• Posts relevant work order information to computerized maintenance management system (CMMS); and
• Performs other related job duties as assigned.

QUALIFICATIONS

Education and Experience:
Class covers multiple mechanic positions that may require a candidate to possess either one (or both) specializations, including; four (4) years of electro-mechanical fleet vehicle and automotive mechanic journeyman level experience in the assigned field of automotive related maintenance and repair of emergency generators and power generation control systems fleet duties; and/or four (4) years of electro-mechanical emergency power systems journeyman level experience in the assigned field of maintenance and repair of facilities’ emergency generators and power generation control systems that includes technical expertise and responsibility for AC voltages up to 4160V, 3 phase power systems; or four (4) years of employment in a combination of these journeyman level tasks; or an equivalent combination of education, training, and/or experience.

Special Qualifications (May be required depending on area of assignment):
• Florida Driver's License or Florida Commercial Driver’s License and endorsement, if any.
• Assignment to work a variety of work schedules including compulsory work periods in special, emergency, and/or disaster situations.
• Possession of four-year journeyman level experience in gasoline and diesel engine repair and maintenance.
• Possession of four-year journeyman level electrical repair, maintenance, and installation of facilities’ emergency power generation systems and equipment.
• Possession and maintenance of certificates indicating successful completion of Automotive Service Excellence (ASE) certification in Diesel Engines (T-2).
• Possession and maintenance of Electrical Generating Systems Association (EGSA) Certification as an Electrical Generator Systems Technician within one (1) year of appointment.
• Possession and maintenance of a valid Pinellas County electrician journeyman level Certificate of Competency.
• Other knowledge, skills, abilities, and credentials required for a specific position.

Knowledge, Skills and Abilities:
• Knowledge and skill in one or more specialized assignment areas covering diesel and gasoline engines, generators, engine governors, generator, and engine control gears and electro-mechanical switching mechanisms;
• Knowledge of electrical, electronic, hydraulic, pneumatic, vacuum, and mechanical systems and components of motorized vehicles and equipment;
• Knowledge of the principles of automotive mechanics, design, occupational hazards, and safety precautions;
• Knowledge and skill in maintenance and repair of large complex facilities emergency power generation and control systems;
• Knowledge and skill in the installation, modification, repair, and maintenance of electro-mechanical systems;
• Knowledge of operating and repair characteristics of public works equipment and/or portable and stationary emergency power generation systems;
• Knowledge of the occupational hazards and related safety precautions of the trade, including the supervision of those working with AC voltages up to and including 4160V, 3 phase equipment.
• Skill in troubleshooting and determining reasons for malfunctions in electrical and mechanical components and control systems and correcting of same;
• Skill in the use of tools, machines, and testing instruments used in the diagnosis, repair, and overhaul of power generation units and control system components;
• Skill in troubleshooting and determining reasons for malfunctions in electrical and mechanical facilities’ emergency power generation systems and correcting of same.
• Ability to endure long periods of standing, walking, or working in inclement weather and possession of sufficient physical strength and agility to lift and move heavy objects;
• Ability to maintain effective working relationships with managers, supervisors, employees, vendors, and others;
• Ability to perform heavy manual work for extended periods in inclement weather;
• Ability to read and interpret complex electro-mechanical wiring diagrams and schematics;
• Ability to review, recommend, and implement improvements to servicing methods, and/or repair processes inclusive of required tools and materials;
• Ability to use tools, machines, test instruments, and repair manuals used in fleet maintenance and/or fleet electro-mechanical services.

PHYSICAL/MENTAL DEMANDS
The work is heavy work which requires exerting up to 100 pounds of force occasionally, and/or up to 50 pounds of force frequently, and/or up to 20 pounds of force constantly to move objects. Additionally, the following physical abilities are required:
• Balancing: Maintaining body equilibrium to prevent falling while walking, standing or crouching on narrow, slippery, or erratically moving surfaces. The amount of balancing exceeds that needed for ordinary locomotion and maintenance of body equilibrium.
• Climbing: Ascending or descending ladders, stairs, scaffolding, ramps, poles and the like, using feet and legs and/or hands and arms. Body agility is emphasized.
• Crawling: Moving about on hands and knees or hands and feet.
• Crouching: Bending the body downward and forward by bending leg and spine.
• Feeling: Perceiving attributes of objects, such as size, shape, temperature or texture by touching with skin, particularly that of fingertips.
• Fingering: Picking, pinching, typing, or otherwise working, primarily with fingers rather than with the whole hand as in handling.
• Grasping: Applying pressure to an object with the fingers and palm.
• Handling: Picking, holding, or otherwise working, primarily with the whole hand.
• Kneeling: Bending legs at knee to come to a rest on knee or knees.
• Lifting: Raising objects from a lower to a higher position or moving objects horizontally from position-to-position. Occurs to a considerable degree and requires substantial use of upper extremities and back muscles.
• Mental Acuity: Ability to make rational decisions through sound logic and deductive processes.
• Pulling: Using upper extremities to exert force in order to draw, haul or tug objects in a sustained motion.
• Pushing: Using upper extremities to press against something with steady force in order to thrust forward, downward or outward.
• Reaching: Extending hand(s) and arm(s) in any direction.
• Visual ability: sufficient to effectively operate office equipment including copier, computer, etc.; and to read and write reports, correspondence, instructions, etc.
• Hearing ability: sufficient to hold a conversation with other individuals both in person and over a telephone; and to hear recording on transcription device.
• Speaking ability: sufficient to communicate effectively with other individuals in person and over a telephone.
• Mental Acuity: Ability to make rational decisions through sound logic and deductive processes.
• Talking: Expressing or exchanging ideas by means of the spoken word including those activities in which they must convey detailed or important spoken instructions to other workers accurately, loudly, or quickly.
• Repetitive Motion: Substantial movements (motions) of the wrist, hands, and/or fingers.
• Standing: Particularly for sustained periods of time.
• Stooping: Bending body downward and forward by bending spine at the waist. Occurs to a considerable degree and requires full motion of the lower extremities and back muscles.
• Walking: Moving about on foot to accomplish tasks, particularly for long distances or moving from one work site to another.

**WORKING CONDITIONS**

Work is performed in a dynamic environment that requires sensitivity to change and responsiveness to changing goals, priorities, and needs.