

**SACRAMENTO REGIONAL TRANSIT DISTRICT
JOB DESCRIPTION**

LINEWORKER TECHNICIAN

FLSA Exemption Status: Non-Exempt

Authorized: 11/05

Bd. Revised: 04/15

Job Summary

Inspects, tests, conducts diagnostic analyses, maintains and repairs the District's Light Rail traction power substations, electrical distribution and signal systems, including protective relay testing (PRT), train-to-wayside communication (TWC), program logic controller (PLC) systems, and related alarm systems; troubleshoots emergencies and/or operational problems, diagnoses problems and performs emergency repairs; practices safe work processes and contributes to the creation and maintenance of a safe working environment for self and others; and performs related duties as assigned.

Distinguishing Characteristics

This is the advanced-journey level classification within the Lineworker job series. This job class is distinguished from the Journey Lineworker job class in that it is responsible for performing the most complex duties on the most sophisticated systems and equipment to include working with high voltage distribution lines and equipment. Incumbents in this classification receive only occasional instruction or assistance as new or unusual situations arise, and are fully competent and knowledgeable of industry standards as well as the operating procedures and policies within the District.

Supervision Received

Receives limited supervision within a framework of standard operating policies and standard operating procedures.

Supervision Exercised

May provide technical and/or functional supervision to other Lineworkers as assigned and within a framework of established policies and procedures.

Essential Functions and Responsibilities

Utilizes PC's, network I/O devices and multiple PLC control systems for purposes of programming vital circuits and PRT; inspects, tests, conducts diagnostic analyses, maintains, troubleshoots and repairs the District's light rail traction power signaling, Overhead Catenary System (OCS), electrical distribution and substation systems including related alarm systems; inspects, tests, conducts diagnostic analyses, maintains, troubleshoots and repairs the operations signal systems, TWC system, traffic warning devices and crossing gates, power switch and electric lock mechanisms; updates signal prints with new circuits and relay wiring; troubleshoots and repairs designated electronic equipment; designs and fabricates system improvements as necessary; may design complex schematics and mapping documents utilizing

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computerized drafting software; may direct the work of lower level personnel, as assigned; performs duties such as a switch or flagperson for the protection of the public, other employees, and trains during emergencies and rerouting of trains; operates a variety of non-revenue District vehicles including construction and heavy equipment vehicles; and performs other related duties as assigned.

Required Education, Experience, Knowledge Skills and Abilities

Any combination of education and experience that would likely provide the required knowledge and abilities is qualifying. A typical way to obtain the knowledge and abilities would be:

Required Prior Education:

High school diploma or equivalent and completion of an approved apprenticeship program similar to the District-sponsored Journey Lineworker training and certification program. Coursework or completion of an apprenticeship program in electrical circuitry/electronics or related skill area is required.

Required Prior Experience:

Two (2) years of journey level work experience performing inspection, testing, diagnostic analyses, maintenance and repair of high voltage electrical distribution lines and/or railroad traction power substations and electrical distribution systems similar to the duties performed by the District's Journey Lineworker.

Special Requirements, Licenses and/or Certificates:

Possession of a valid Class C Driver's License; ability to obtain a Class A Instructional Permit with air brake endorsement prior to the start of employment; a satisfactory driving record; the ability to pass Ishihara Eye Test; possession of a QEW Certification as High Voltage Qualified; possession of Federal Railroad Administration (FRA) Certification as a qualified Railroad Inspector; required to obtain the tools for the Lineworker Technician by the end of the probationary period.

Required Knowledge of:

- Standard and accepted theories, principles, codes and laws applicable to light rail traction power substations, electrical distribution, signal systems, control systems and related alarm systems.
- Principles and practices of railroad track maintenance.
- Effective utilization of PC's, network I/O devices, and PLC control systems used for programming and testing.
- Standard and accepted hand tools and equipment used in the testing and repair of electrical systems.
- Standard and accepted DC and AC switchgear and rectifier circuitry.
- Standard and accepted safe work practices and procedures relative to working with high voltage lines, wires and cables to include grounding procedures.
- Basic mathematics.
- Standard and accepted first aid practices

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Required Ability to:

- Comply with random drug testing provisions for safety-sensitive classifications as required by the Department of Transportation (49 CFR, Part 655).
- Read, interpret, and record changes to schematics, plans, and specifications in reports or revising existing schematics with computerized drafting software.
- Understand and effectively follow written and oral instructions.
- Work independently in the absence of supervision.
- Effectively direct the work of others.
- Prioritize workload to ensure successful job performance for self and others.
- Work safely at elevated heights.
- Splice all signal, substation, and OCS cables, including underground cables and energized high voltage conductors in a safe and effective manner.
- Perform tasks efficiently and in compliance with all safety rules and regulations.
- Communicate clearly and concisely, both orally and in writing.
- Safely operate District non-revenue vehicles and construction and/or heavy equipment such as bucket trucks, pole climbing equipment, and elevated platforms.
- Pass Light Rail Vehicle Rule Book examination.
- Calculate basic mathematics in an accurate manner.
- Establish and maintain effective working relationships with those contacted in the performance of required duties.
- Perform essential functions of the job without causing harm to self or others.

Required Computer Skills with:

- Personal computers and Windows applications
- GroupWise email software.
- Switch logic control interface.
- Read, understand, and interpret computer readouts and diagnostics accurately.
- Designated computerized drafting software.

Physical and Mental Requirements

The essential functions of this job are performed primarily outside in various weather conditions, potentially exposing incumbents to extreme heat and cold. Work is frequently performed around high voltage electrical energy, on ladders and scaffolding at elevated heights, and around equipment and machinery with moving parts. Incumbents are regularly exposed to toxic and/or caustic solvents and chemicals, heavy dust, grease, and intermittent moderate to loud noise. Job duties require working non-traditional and/or odd hours, including holidays and incumbents may be called in to work at any time during emergencies.

Essential duties of this job require incumbents to have a high degree of concentration; to sit and use leg/foot to reach or handle controls; to climb stairs and ladders and work at elevated heights; to stoop, stand, walk, and reach with hands and arms to grasp, handle or feel objects or controls; to bend and twist at the waist; to hear and talk to give and receive instruction and other information; to maintain body equilibrium; to possess depth perception and peripheral vision; to view objects within one to twenty feet, adjust

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focus, and distinguish between basic colors and shades of color; to push and/or pull 75 pounds, or carry weight up to 50 pounds; and to use both hands and feet to operate vehicles and equipment.