

TRANSIT HIGH VOLTAGE TECHNICIAN

CLASS DESCRIPTION

General Responsibilities:

This is highly skilled advanced journey level high voltage electrical work that includes technical programming, diagnostic, repair, and rebuilding work of electrical charging stations both in Metro facilities and on route. Employees are expected to perform a full range of electrical work necessary to program and maintain infrastructure for electric vehicles as well as support mechanics and buildings and grounds staff with vehicle and building electrical work. This work is performed under the general supervision of the Transit Maintenance Managers.

Examples of Duties and Responsibilities

Install and repair various electrical charging systems, communication networks, and electrical components. Develop and carry out or participate in preventive maintenance training for charging stations of depot and on route chargers. Develop or direct development of proposed unit procedures. Test, repair, and replace high voltage components on charging stations. Inspect and diagnose electrical systems issues using advanced electrical theory, programmable logic controller (PLC) and ladder logic. Inspect and communicate issues that arise in the required quality checkout.

Establish monitoring systems. Gather and analyze monthly battery, charging station electrical usage and other statistics. Create related reports.

Interpret blueprints, process sheets, schematics, and instructions for appropriate repairs and processes. Review project plans and drawings to ensure infrastructure projects are built according to design.

Work with vendors during installation, on warranty issues, and to resolve programming issues regarding charging infrastructure and other matters.

Maintain clean and safe work practices with electrical systems by adhering to safety policies, procedures, and processes. Participate in updating procedures in reaction to new industry standards.

Participate in training and research to expand knowledge of technical and maintenance principles, including how to perform work around high voltage (600 – 800 volts), three phase power, running rigid steel conduit and thread pipe. Make recommendations and/or develop updated training on charging systems.

Document work and results and run reports with supports of various software programs including Microsoft Office Suite, Internet browsers, and diagnostic application software.

Serve as liaison between Maintenance and other Metro units regarding electric buses.

Perform related work as required.

QUALIFICATIONS

Training and Experience:

Generally, positions in this classification will require:

Four (4) years of experience involving journey level electrician work

Knowledge, Skills and Abilities:

Thorough knowledge of electrical systems and related diagnostic software. Thorough knowledge of PLC, ladder logic and AC and DC systems. Thorough knowledge of safe work practices and standards. Knowledge of high voltage (600 – 800) systems, three phase power systems, stage 3 charging. Knowledge of running rigid steel conduit and thread pipe. Ability to read engineering documents, wiring schematics and instructions. Ability to inspect, diagnose and repair a wide variety of electrical systems. Ability to maintain workflow and deadlines. Ability to operate a computer and use software relative to the needs of the position. Ability to develop and maintain effective working relationships. Ability to work with a multicultural populations. Ability to communicate effectively in various modes. Ability to maintain adequate attendance.

Specific training and experience requirements will be established at the time of recruitment.

Special Requirements:

Journey Electrician License required at the time of application

IBEW apprenticeship/membership preferred.

Ability to meet the transportation needs of the position.

Physical Requirements:

Ability to work outside in all weather. Ability to reach overhead with both arms and sustain for several minutes holding up to 20 pounds (various components or tools.) Ability to frequently sustain a squatting or kneeling position for up to 10 minutes. Ability to frequently bend and sustain a stooped position for up to five minutes. Ability to safely grasp a variety of hand and power tools and sustain the grasp for several minutes. Ability to manipulate small parts with reasonable dexterity (nuts, bolts, screws.) Ability to stand and work on hard surfaces for long periods of time. Ability to climb ladders and stairs. Ability to access all parts of various facilities.

Department/Division	Comp. Group	Range
Transportation/Metro Transit	41	12

Approved: _____
 Erin Hillson
 Human Resources Director

Date