

ELECTRICIAN - 3252
Revised September 18, 2020

GENERAL DEFINITION AND CONDITIONS OF WORK:

Performs general to intermediate skilled work in the installation, maintenance and repair of low to medium voltage systems and equipment; does related work as required. Work is performed independently, with other electricians or helpers and under the regular guidance/supervision of the Electrical/ Mechanical Superintendent.

This is heavy work requiring the exertion of 100 pounds of force occasionally, up to 50 pounds of force frequently, and up to 20 pounds of force constantly to move objects; work requires climbing, balancing, stooping, kneeling, reaching, standing, walking, pushing, pulling, lifting, fingering, grasping, and feeling; vocal communication is required for expressing or exchanging ideas by means of the spoken word; hearing is required to perceive information at normal spoken word levels; visual acuity is required for color perception, visual inspection involving small defects and/or small parts, use of measuring devices, assembly or fabrication of parts at or within arms length, determining the accuracy and thoroughness of work, and observing general surroundings and activities; the worker is subject to inside and outside environmental conditions, extreme cold, extreme heat, noise, vibration, hazards, atmospheric conditions, and oils.

ESSENTIAL FUNCTIONS/TYPICAL TASKS:

Maintaining and repairing electrical power and distribution systems, lighting systems and related equipment.

Maintains and repairs substation and lighting transformers;

Installs, maintains and repairs tunnel lighting, roadway lighting and tunnel switchgear;

Assists with repairs and maintains the electrical distribution system;

Repairs and maintains large and small electric motors;

Assists with maintaining power substations;

Repairs and maintains transformers, switchgear, breakers, panels, control cabinets, motors and pumps;

Replaces and repairs District building, tunnel and trestle lights and navigational aides;

Repairs, replaces, splices and terminates medium voltage, 13.8KV, cable system;

Performs preventive maintenance on switchgear, cable pits and substations;

Collects and logs megger readings, cell readings, transformer and substation readings;

Maintains and repairs industrial computers and sensors as required;

Tests emergency equipment and generators;

Repairs and maintains elevators, carbon-monoxide monitoring units, and electrical systems;

Assists with general maintenance tasks;

This position requires employees to work outside, and potentially in excess of, normally scheduled hours in response to District needs, including but not limited to, accidents, incidents and/or weather events.

Performs related tasks as required.

KNOWLEDGE, SKILLS AND ABILITIES:

Applicant should have thorough knowledge of the methods, materials, tools, and equipment used in installing, maintaining, and repairing electrical wiring systems, controls and electrical motors, machinery and equipment of roadways, tunnels, or buildings; thorough knowledge of the provisions of the appropriate electrical code, inspection and safety requirements; ability to diagnose and correct electrical and mechanical failures; ability to climb ladders and work from an elevated bucket truck; thorough knowledge of computers; ability to read and interpret plans and specifications for electrical and mechanical projects; ability to prepare accurate and detailed reports.

EDUCATION AND EXPERIENCE:

Any combination of education and experience equivalent to graduation from high school and experience as a general electrician, including experience in industrial electrical work.

SPECIAL REQUIREMENTS:

3 to 5 years demonstrated experience in troubleshooting electrical systems and related equipment. Possession of a class A commercial driver's license valid in the Commonwealth of Virginia or the ability to obtain within 180 days.

Successful completion of statutory drug and alcohol testing (both pre-employment and random testing). Successful completion of a full background check. Possession of a Journeyman's or Masters Electrician Tradesman License valid in the Commonwealth of Virginia is not required, but desired.