



JOB DESCRIPTION

Title: Electronics Technician

Department: Electric

Reports to: Electric Superintendent

Pay Grade: 69

Date Adopted: August 2, 2021

Previous Revision Date:

Last Revision Date: May 2001

Type: ☒ Full Time

☐ Part Time

FLSA: ☐ Exempt ☐ Salary

☒ Non Exempt ☒ Hourly

Union: ☒ Yes

☐ No

Job Summary:

Perform preventive maintenance, installation, design, and repair of electrical control and electronic instrumentation systems/devices and programmable controller monitoring systems, including Supervisory Control and Data Acquisition (SCADA) systems. Repair and maintain varied sizes of electric meters, transformers, switches, traffic control devices, and other related electrical and electronic components and systems.

Essential Functions:

1. Perform Polychlorinated Biphenyl (PCB) testing by arranging for or drawing oil samples from substation transformers and oil circuit breakers. Repair PCB contaminated transformers and/or arrange for replacement. Maintain necessary PCB records and arrange for disposal of PCB contaminated oil.
2. Perform testing for location of electrical interference and advise customers of need to discontinue equipment use due to said interference.
3. Analyze all oil or tar filled equipment including transformer oil, transformer bushings, open/closed bushings (OCB), mercury vapor (MV) ballasts, MV fixtures, and mercury switches from MV relays, to determine PCB contamination.
4. Analyze drawings and/or blueprints and measure transformer pad specifications.
5. Maintain inventory of transformers and any other oil filled equipment.
6. Schedule and direct the preventative and corrective maintenance of the electrical, instrumentation, or electronic systems. Perform or oversee preventative maintenance

activities according to standard and special instructions. Instruct other personnel in routine servicing and maintenance activities. Standardize system, instrumentation, and electrical systems. May test new products, designs, or systems for potential enhancement to monitor and regulate systems.

7. Design, operate, repair, and implement a Supervisory Control and Data Acquisition (SCADA) control system including: installing and maintaining Programmable Logic Controller (PLC) controls in City Substations; wiring metering controls, automatic electric system controls, and the master SCADA controller.
8. Maintain and monitor electric load shedding software to ensure proper management of City Electric Load shedding during high peak time of the year.
9. Plan, design, install, and program all equipment within City substations, including expansions, which includes: reclosers, breakers, transformers, remote terminal units (RTUs), meters, and relays.
10. Program, install, repair, and operate capacitor controllers.
11. Conduct maintenance on components of data communication system and inspect for potential breakdowns. Maintain servicing and maintenance records. Maintain supply of replacement parts. May erect and maintain antennas, towers, and associated transmission lines and diagnose and repair malfunction in radio communications equipment.
12. Program, test, and troubleshoot traffic and pedestrian lights.
13. Assist other City Departments in troubleshooting, equipment repair, and location of underground faults.
14. May assist in answering Service Center phones and perform duties of Storekeeper in his/her absence.
15. Establish a working relationship with Environmental Protection Agency (EPA) representatives and maintain compliance with local, state, and federal regulations.
16. Must be able to report to work within thirty-five (35) minutes for emergencies under normal driving conditions.
17. Employee must be able to be "on-call".
18. May be required to work extended hours during natural disasters, declared disasters, and similar events.
19. Maintain positive relations with the community. Establish effective working relationships with management, employees, employee representatives, and the public representing diverse cultures and backgrounds.

20. Keep confidential information confidential.
 21. Work the days and hours necessary to perform all assigned responsibilities and tasks. Must be available (especially during regular business hours or shifts) to communicate with subordinates, supervisors, customers, vendors, and any other persons or organizations with whom interaction is required to accomplish work and employer goals.
 22. Punctual and timely in meeting all requirements of performance, including, but not limited to, attendance standards and work deadlines; beginning and ending assignments on time; and scheduled work breaks, where applicable.
 23. Perform other work which is consistent with the essential functions of the job.
 24. Perform other duties as assigned.
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Education and Special License(s)/Certifications:

High school diploma or equivalent required.

Must possess a valid driver's license and maintain an insurable driving record.

Associates Degree in Computer Science, Electronics, Engineering, or related field required.

Experience:

Three (3) years experience working in a municipal utility department maintaining, designing, and repairing electrical/electronic control equipment, or equivalent experience preferred. (Breaks in service of no more than ninety (90) calendar days shall be considered *de minimus* and shall not be considered in calculating the consecutive years.)

Skills:

1. Good oral and written communication skills.
 2. Good listening skills.
 3. Manual dexterity.
 4. General construction skills.
 5. Good driving skills.
 6. Ability to read and comprehend.
 7. Ability to prioritize work.
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Mental Requirements:

1. Ability to analyze safety situation.
2. Ability to make quick decisions.
3. Ability to stay alert for long periods of time.
4. Ability to work independently.
5. Ability to work in a team.
6. Ability to assess situation and use judgement in responding.
7. Ability to work under distracting conditions.

8. Mechanical aptitude.
 9. Alpha/numeric recognition.
 10. Ability to carry out assignments through oral and written instruction.
 11. Diplomacy and judgement.
 12. Logical reasoning.
 13. Ability to adapt to changing environment.
 14. Concentration.
 15. Ability to analyze problems and recommend possible solutions.
 16. Knowledge of the physical layout of the Department's service area, including street locations.
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Physical Requirements:

1. Ability to work at extended heights.
 2. Ability to crawl, run, climb, bend, stoop, twist, reach, contort and lift up to sixty (60) pounds.
 3. Ability to sit or stand for long periods of time, but also have the mobility to respond immediately for emergency incidents.
 4. Hand, eye, and body coordination to operate light to moderately heavy machinery, equipment and vehicles.
 5. Ability to withstand extreme weather conditions.
 6. Exposure to vibrations.
 7. Ability to transverse rough terrain on foot.
 8. Ability to work with exposure to noise.
 9. Ability to distinguish among colors.
 10. Ability to drive city vehicle.
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Supervisory Responsibility (Direct and Indirect):

None

Disclaimer:

This job description is intended to convey information essential to understanding the scope of the job and the general nature and level of work performed for individuals with this job title. However, this job description is not intended to be an exhaustive list of all qualifications, skills, efforts, duties, responsibilities, or working conditions associated with the position.

Approved:



Tobias J. Tempelmeyer, City Administrator

8-2-21
Date