

## **Electrical Maintenance Technician**

### **Champlain Water District**

Department: Electrical & Technologies  
\*FLSA Status: Non-Exempt – Bargaining Unit Grade 9/10  
Reports To: Director of Electrical & Technologies

#### **SUMMARY**

This position requires skilled work of a responsible and mature nature. The Electrical Maintenance Technician is responsible to perform all scheduled and unscheduled maintenance of all CWD's electrical/electronic equipment and all computerized control process systems. Employee shall also be responsible for CWD property and equipment as directed by CWD Policy. Employee will often perform job related responsibilities with limited supervision and will be required to make decisions, and take action, on his/her own without continuous supervision.

#### **ESSENTIAL FUNCTIONS**

- Employee shall be fully knowledgeable with the physical components of the CWD system, pumps, and pump stations, lines and metering, valving, control systems, and troubleshooting of all related equipment.
- Employee shall be skilled and experienced regarding the proper operation and maintenance of all CWD property.
- Will be required to use a computer for programming/troubleshooting of field devices. Employee will be required to use the computer system as a maintenance tool. The computer will be used to identify when and what type of maintenance is to be scheduled and to update records of all maintenance and repairs performed.
- Employee is expected to be reasonably available when called upon to participate in non-routine or emergency off shift requirements of the District. Also, employee will be expected to assist, in his/her areas of expertise, other on call personnel as needed.
- Employee will collaborate with the Technical Supervisor in the operation, programming, and maintenance of the Supervisory Control And Data Acquisition System (SCADA).
- Employee is responsible to carry out all assigned maintenance, troubleshooting, and repair of water system facilities, equipment, remote sites, metering, vehicles and machines as directed by policy and as required, such as:
  - Installation of transmitters at remote sites.
  - Installation and maintenance of variable frequency drives.
  - Installation and wiring of SCADA equipment (cabinets, RTU, radio, power supply) at remote sites and main plant. Rewiring pump stations and control circuits to operate the pumps through SCADA.
  - Proactively identify electrical problems, such as lightning protection and grounding at remote SCADA sites, and initiate corrective action.
  - Recognize and correct electrical safety problems.
- Employee shall assist the Electrical Instrumentation Technician to analyze instrument readings and associated requirements related to instrumentation and control; follows procedures necessary to achieve established monitoring, control, testing and calibration of electronic metering equipment.

- Employee shall install new service wiring, electrical panels and power wiring at remote meter and valve vaults to required electrical code standards, to maximize the reliability of monitoring systems.
- Employee is responsible to maintain legible, and complete required records of all troubleshooting and maintenance work performed.
- Employee is responsible to his/her immediate supervisor for the monitoring, recording and notification of reordering of all inventory in his/her assigned equipment area.
- Employee shall assist the Electrical Instrumentation Technician as well as other CWD employees as required or directed for all CWD equipment.
- Employee shall follow all CWD safety program procedures.
- Employee is expected to participate in training sessions as required, keeping current with water system materials, equipment and practices and the proper application of such.
- Employee is responsible to become knowledgeable in all phases of duties.

### **KNOWLEDGE, SKILLS, AND ABILITIES**

- Strong mechanical and electrical/electronics aptitude and possess skills that will enable him/her to analyze and correct mechanical and electrical/electronic problems.
- Knowledgeable in water systems maintenance, repair, and construction practices.
- Ability to exercise sound judgment and be capable of reacting to any unusual or non-routine situation in such a manner to initiate prompt corrective action.
- Employee will be responsible for the proper repairs of equipment and must be able to work with employees assigned to assist in these repairs.
- Responsible to maintain CWD tools and equipment for electrical maintenance.
- Ability to follow oral and written instructions and carry-out those instructions without continual supervision.
- Ability to successfully perform difficult troubleshooting will be required.
- Ability to work effectively as a member of a team, maintain and provide harmonious work relationships, deal with the public in a tactful manner, and be responsible to conduct him/herself in a manner that will continually identify him/herself as an asset to the Champlain Water District.
- Clearly provide electrical documentation, produce day to day correspondence, and adequately assist in maintaining the functionality of the CWD SCADA System.
- Employee shall have completed training and/or provide demonstrated capability for working safely in unusual working environments, and weather conditions, including heights (tanks), confined spaces, and in the proximity of glues, solvents, and aggressive chemicals.
- Employee shall exercise sound judgment and be capable of reacting to any unusual or non-routine situation in such a manner to initiate prompt corrective action.
- Demonstrated aptitude for learning and following required safety precautions and procedures.
- Employee shall be physically capable to perform all manual labor required of this position.

### **EDUCATION, TRAINING AND EXPERIENCE**

- Employee shall have a minimum of a high school diploma or equivalent. Vocational school certificate with study in job related area is preferred.

- Minimum of (-2) two years commercial/industrial working experience in the electrical/electronics field, while successfully demonstrating self-motivation and competence in mechanical, and particularly electronics/electrical components and practices. Current Journeyman Electrical license is desired.
- Employee shall be hired as an Electrical Maintenance Technician I (Grade 9) and is eligible for advancement to Electrical Maintenance Technician II (Grade 10) upon successful completion of his/her probationary period and possession of a State of Vermont Journeyman Electrical license.
- Employee must have mechanical aptitude and be able to read and understand technical maintenance and repair manuals.

## **LICENSES & CERTIFICATES**

- Employee shall obtain a State of Vermont Journeyman Electrician's license within a timeframe determined by the District and shall complete all required National Electrical Code continuing education, achieving National Electrical Code recertification.
- Employee shall possess a valid State of Vermont Motor Vehicles Operator's License with the ability to meet the insurability criteria of the District's insurance carrier.

## **TOOLS/TECHNOLOGY**

- Shall be able to safely operate machinery and equipment typically used for the operation and maintenance of water transmission and distribution systems.
- Shall be able to safely use hand tools and power tools typically used for the operation and maintenance of water transmission and distribution systems.
- Shall demonstrate computer literacy that includes: basic MS Office Suite applications, online training and software services, and the ability to be trained on specialized computer programs used for documentation and asset management.

## **PHYSICAL DEMANDS & WORKING ENVIRONMENT**

The physical demands described herein are representative of those that shall be met by an employee to perform the essential functions of the job safely and successfully. Reasonable accommodations may be considered for made to enable individuals with disabilities.

### **Physical Demands**

Ability to:

- Lift/Carry up to 50 pounds
- Push/pull objects
- Bend, kneel, squat, sit, stand, climb, walk

### **Physical expectations**

Must possess:

- Ability to work alone and with others
- Dexterity and visual acuity needed to operate manual and power tools safely and correctly
- Ability to safely operate fleet vehicles and trailers.
- Ability to climb in and out of truck beds, up and down ladders and into and out of limited space areas
- Good vision (with or without corrective lenses), peripheral vision, spatial orientation, and depth perception
- Good hearing and clear speaking for in person, over the radio and on the telephone communication
- Ability to read, comprehend and follow written and verbal directions and instructions.

### **Environment**

Possible exposure to:

- Noise, moderate to loud
- Dirt/dust
- Fumes/odors
- All weather conditions

### **DISCLAIMERS**

The above information is intended to describe the general nature of this position and should not be considered a comprehensive statement of duties, activities, responsibilities, and requirements. Additional duties, activities, responsibilities, and requirements may be assigned, with or without notice, at any time.

### **EQUAL EMPLOYMENT OPPORTUNITY**

The Champlain Water District is an Equal Employment Opportunity employer.

### **SIGNATURES**

#### **Employee Acknowledgement**

I have received and understand the requirements, essential functions, and duties of this position.

\_\_\_\_\_  
Employee Signature

\_\_\_\_\_  
Date

#### **Approvals**

\_\_\_\_\_  
Director Signature

\_\_\_\_\_  
Date

\_\_\_\_\_  
General Manager Signature

\_\_\_\_\_  
Date