

DEPARTMENT: NIAGARA COUNTY WATER DISTRICT
CLASSIFICATION: COMPETITIVE
APPROVED: MARCH 30, 2023

ELECTRONICS TECHNICIAN - WATER

DISTINGUISHING FEATURES OF THE CLASS: This is a responsible position that maintains and repairs electrical/electronic equipment, devices, and apparatus that are located in a water treatment facility and transmission system. Work is performed on a wide variety of electrical/electronic equipment which requires an in-depth knowledge of modern repair and maintenance procedures. The incumbent assembles and installs electrical/electronic equipment and maintains its proper operating condition. The incumbent is also responsible for the maintenance and repair of electric/electronic equipment including supervisory control and data acquisition equipment used in a water treatment facility and transmission system. The incumbent may be assigned responsibility for maintaining critical equipment during emergencies. General supervision is received from the Chief Water Treatment Plant Operator, Superintendent of Water Transmission and the Supervisor of Water Maintenance. Considerable leeway is allowed for the exercise of independent judgment in accordance with applicable laws and district policy. Employees in this class are required to travel between facilities. Does related work as required.

TYPICAL WORK ACTIVITIES:

1. Conducts detailed process and equipment evaluation studies;
2. When assigned, oversees and directs the start-up of major process operations;
3. Maintains and repairs such machines as generators, motors, volt meters, oscillators, digital computer trainers, radio transmission equipment, variable and constant speed drive controller, process or treatment plant controller, industrial controls, flow meters, motorized valves, computers (micro and mini), programmable logic controllers, supervisory control and data acquisition equipment, etc. Calibrates instrumentation devices for pressure, flow and level with or without HART;
4. Diagnoses and corrects problems in electrical and electronic control circuits for various pumping and mixing equipment;
5. Assembles purchased equipment and sets in place; tests new equipment for accuracy in operation and adjusts or calibrates where necessary;
6. Maintains inventory of equipment and tools, and requisitions supplies as required;
7. Keeps abreast of latest developments in the field of electronics and communications;
8. May design, fabricate or assemble various types of tools or equipment for use in portable water treatment control;
9. Updates and maintains department electrical plans with all modifications, keeping necessary maintenance reports as needed;
10. Maintains department electrical systems, heating, ventilating, air conditioning, telephone, paging systems, supervisory control and data acquisition equipment, etc;
11. Prepares reports and maintains records on all instrumentation repair and maintenance work performed.

FULL PERFORMANCE KNOWLEDGES, SKILLS, ABILITIES AND PERSONAL CHARACTERISTICS:

Thorough knowledge of the tools, terminology, procedures and equipment of electricity and electronics; good knowledge of the operation and maintenance of electronic equipment; working knowledge of computers and related equipment; working knowledge of electrical/electronic equipment and controls used in a water treatment facility and transmission system; working knowledge of process control equipment; working knowledge of medium voltage as well as 3 phase 480V and 120/208V systems, Logix 5000 program language and GE IFix HMI software; good communication and report writing skills; ability to diagnose problems and make repairs to scientific electronic equipment; ability to read and interpret schematics, diagrams and drawings; ability to design, fabricate and repair various types of electrical and electronic equipment; sound judgment; dependability; willingness to be called into work during emergencies; physical condition commensurate with the demands of the position.

CONTINUED

ELECTRONICS TECHNICIAN - WATER CONTINUED

MINIMUM QUALIFICATIONS: Graduation from high school or possession of an equivalency diploma and one of the following:

1. Graduation with an Associate's Degree in electronics and two (2) years of satisfactory experience in the maintenance and repair of Supervisory Control and Data Acquisition (SCADA)* equipment; **OR**
2. Four (4) years of satisfactory experience in the maintenance, repair and fabrication of electronic equipment, two (2) years of which must have been in the maintenance and repair of Supervisory Control and Data Acquisition (SCADA)* equipment.

NOTE:

1. Degrees must have been awarded by a college or university accredited by a regional, national, or specialized agency recognized as an accrediting agency by the U.S. Department of Education/U.S. Secretary of Education;
2. Examples of SCADA equipment include but are not limited to remote readings of temperature, pressure, flow data, elevations of process material, the control of pumps, chemical injections, etc.

SPECIAL REQUIREMENTS:

1. In order to receive a temporary, provisional, or permanent appointment, candidates must undergo and pass a physical/fit test required under 29 CFR 1910 of the Occupational Safety & Health Administration Labor Code of Federal Regulations;
2. Candidates must live within the territorial boundaries of the Niagara County Water District at time of appointment and for the duration of employment;
3. Candidates must possess a valid New York State Driver's license to operate required vehicles at time of appointment and for the duration of employment.