



UNION JOB DESCRIPTION

TITLE: Water Electrician

DEFINITION:

This position provides technical electronic, electrical, and mechanical work involving installation, replacement, predictive, preventative, and corrective maintenance of the District's electrical and SCADA systems for treatment plants, booster/supply pump stations, variable frequency drives, generators, transfer switches, and switching gear. Position may be called out to work on water system piping. This position receives work direction from the Water Crew Coordinator.

DISTINGUISHING CHARACTERISTICS:

This is a Journey Level classification within the Water Unit. Incumbents work independently and as part of a team. The Water Electrician may be required to work on water piping, hydraulic controls, pumps, and operate CDL rated vehicles. The Water Department Electrician must be available for regular duties and cannot take overtime callouts from other District workgroups if the callouts interfere with those regular duties.

Incumbents in this classification assigned to the Lake Stevens Water Operations headquarters are required to establish their residence so they will be able to report to work within thirty (30) minutes after being called.

BASIC RESPONSIBILITIES:

1. Installs, inspects, maintains, and repairs electrical equipment necessary to power and control Water Department facilities such as – treatment plants, booster/supply pump stations, reservoirs, wells, control valves, large meters, and other District facilities
2. Works with District staff, and District consultants, identifies and schedules maintenance to the electrical systems of treatment plants, booster pump stations, reservoirs, wells, control valves, large meters, and other district facilities
3. Plans, coordinates, and implements upgrades to the electrical controls in treatment plants, booster/supply pump stations, reservoirs, wells, control valves, large meters, and other Water Department facilities
4. Works directly with District staff, District consultants, and vendors to plan, and maintain the District's SCADA telemetry and telemetry systems
5. Performs routine inspections of Water Departments electrical and SCADA systems
6. Prepares facility and other electrical reports
7. Ensures work site safety compliance during field operations; including, but not limited to, traffic zones, confined space entry, safety equipment usage, excavation planning and execution, in equipment usage compliance with Federal and State regulations
8. Responds to emergency call outs and provides after hours support to on-call week duty staff
9. Maintains accurate, updated, and appropriate information, for facilities and electrical systems

OTHER RESPONSIBILITIES:

1. Performs associated duties as assigned
2. Depending on experience may be eligible got on-call/standby duties

3. Attends various training related to job duties; trains and provides information to other Water Department staff as needed

MINIMUM QUALIFICATIONS:

Knowledge of:

- Advanced electrical concepts, theories, and relay protection schemes
- Electronic theory, standard electrical drawing code numbers, and basic mathematics
- Safety procedures when working near energized equipment
- Arc hazards
- Lock out Tag Out procedures
- Concepts, principles and operations of electrical protection and control equipment including relays and circuits, layout of electrical power generations plants
- Computer and associated SCADA software such as Wonderware
- Analog 4-20ma signal instrument devices
- PLC's, HMI's on many different devices
- Proportional Integral Derivative (PID) circuits

Ability to:

- Read and interpret electrical drawings, blueprints, and schematics
- Install, troubleshoot, and repair generator equipment
- Operate Multimeter, Amp Meter, Megohmmeter, Analog Signal Test Meter, Analog Signal Generator, Infrared Thermal Meter, Vibration Meter
- Use computer and associated software, including data recording hardware and software
- Work independently and communicate and work effectively with coworkers and contractors and another District department
- Analyze and resolve situations accurately and adapt an effective course of action
- Analyze and Document Submersible motors single and three phase and winding resistance measurements
- Physically perform duties of job, walk on varying terrain, work in varying weather environments and varying noise levels
- Lift and carry equipment and materials up to 50 pounds
- Learn and apply District Accident Prevention Manual and WAC Electrical Safety Rules
- Learn and apply District Policies, Procedures and Directives

Education/Experience:

- High School diploma or equivalent

License, Certification and/or Testing:

- Licensed Electrician EL03 with current Washington Department of Health Water related certifications (Water Distribution Manager and Water Treatment Plant Operator) OR Licensed Electrician EL01
- Four years' experience as a licensed electrician, with preference to experience with the electrical systems in water operations, telemetry systems, or other like infrastructure
- Water Distribution Manager I (within twelve months of hire)
- Water Treatment Plant Operator I (within 24 months of hire)
- Commercial Driver's License – Class A with a good driving record and with airbrake and tanker endorsement (within twelve months of hire)
- Certified Work Zone Traffic Control (Flagging Card) (within twelve months of hire)
- CPR First Aid Certification (within twelve months of hire)
- Forklift Certified (within twelve months of hire)

WORKING CONDITIONS:

- Duties are performed in a variety of environments both indoors and outdoors
- Work is physical in nature
- Must be able to operate tools and equipment of the electrical trade
- Incumbent must be able to: lift and carry equipment and materials up to 50 pounds; climb ladders up to 120 ft in height
- Incumbent may be exposed to hazardous chemicals used in potable water treatment
- This position may be required to work non-standard hours and respond to callouts as emergency conditions dictate
- Required driving to various District facilities or meetings and training sessions
- Subject to 24-hour call-out for emergency conditions