



## UNION JOB DESCRIPTION

**TITLE: Lead Relayman**

### DEFINITION:

Under the direction of the Manager, Substation Construction & Operations works with and coordinates the activities of the District Relaymen in the installation, maintenance, testing, and repair of protective relays, SCADA, Substation Integration and controls throughout the District. Oversees relay work elements including schematics, equipment, materials and personnel to ensure continuous, reliable, efficient installation, testing and maintenance of Substation system protection and control systems.

### DISTINGUISHING CHARACTERISTICS:

The Lead Relayman classification is distinguished from the Relayman classification by the increased responsibility for coordinating work, developing test procedures, training employees and managing documentation for settings, testing, and changes. Incumbent will review construction plans prior to installation, anticipate and resolve design or construction problems, while working within the District construction standards. This is a working lead position and incumbents must be able to perform the duties of a Relayman and other lower Substation unit classifications.

This classification is the most capable position within the Substation unit for performing electronic troubleshooting, calibration, electronic diagnostics, substation commissioning and similar functions. This classification is a bid classification and awarded subject to the provisions of Article 6.2.7 of the CBA and to the qualified bidder who has held the District Relayman position for the longest period of time, provided they meet the minimum qualifications as outlined in the "Minimum Qualifications" section of this description.

### BASIC RESPONSIBILITIES:

1. Assigns and schedules workload; coordinates and monitors the daily activities of the Relay Shop to ensure high work quality, technical accuracy and completeness.
2. Ensures that records and drawings are correct and reflect field changes during related construction.
3. Ensures that completed work requests are turned in and appropriate records and documentation are updated.
4. Programs test routines used for field-verification of correct relay operation. Troubleshoots relay problems and mis-operations; coordinates investigation of suspicious operations with System Protection department.
5. Handles relay and protection job site problems. Works with substation personnel on maintenance and construction problems; develops solutions to difficult problems. Serves as a point of contact with other departments and the public in the origination of jobs and work planning.
6. Ensures the Relay Shop work areas, equipment rooms, and remote sites are clean and orderly and comply with safety regulations. Monitors the Relay Shop equipment, parts inventory, and the test instrument inventory and calibration records.
7. Writes work project reports as required. Writes and maintains accurate and timely equipment maintenance records. Maintains system relay records and data.
8. Performs tests to insure correct operation of PLC, RTU, Substation Integration systems and SCADA. Tests all new and rebuilt substation equipment before placing into service.
9. Works with the Foreman and/or Engineering to develop improvements or modifications to projects or job design as necessary. Meets with Engineering personnel and Substation Construction Manager during all phases of job to discuss job design, on-going modifications and/or concerns.

BASIC RESPONSIBILITIES: (continued)

10. Sets, tests, and proves operation of relays and controls, and associated circuits on breakers, regulators and transformers. Set and programs electro/mechanical, solid state and microprocessor based equipment and primarily protective relays. Performs preventative maintenance on relays.
11. Operates substations and equipment as required to perform duties.

OTHER RESPONSIBILITIES:

1. Assists in the development of the Relay Shop budget, goals, and objectives.
2. Performs other related duties as assigned, including duties of Relayman, Wireman Foreman and Wireman.

MINIMUM QUALIFICATIONS:

Knowledge of:

- Leadership techniques.
- Relayman and Wireman skills and functions.
- Electronics and trigonometry.
- Three Phase circuit theory, vectors and phasors.
- Microprocessor technologies and PLC's.
- All types of protective relaying, including overcurrent, impedance, differential, generation, breaker failure, frequency, etc.
- Computer systems, relay testing software, and test routine programming.
- Communication technologies.
- District safety and WAC Electrical Safety Rules, Chapter 296-45 WAC.
- First Aid and CPR methods.
- District procedures, policies and standards.
- Analytical and problem solving techniques.
- Collective Bargaining Agreement.

Ability to:

- Coordinate and direct the work of others including organizing personnel during unexpected situations and equipment outages and foresee work requirements and initiate actions.
- Coordinate a variety of workload demands simultaneously, initiate tasks and work without close supervision.
- Train others.
- Identify, analyze and resolve difficult problems; troubleshoot operational problems for relays, PLCs and system devices.
- Read and interpret circuit diagrams as applied to relays and controls.
- Perform electrical tests on all types of relays, circuits and associated equipment.
- Handle tools and instruments to repair and adjust relays and control equipment.
- Analyze and resolve problems.
- Communicate and work effectively with all levels of the organization, other utilities and customers.
- Communicate effectively both orally and in writing including producing legible, complete, and accurate documentation.
- Demonstrate use of computers and associated applications.
- Perform programming of new test routines.
- Anticipate potential field problems and take preventative measures.

### MINIMUM QUALIFICATIONS:

These qualifications are those usually exhibited by a person with:

#### Education/Experience:

- Five (5) years as a District Relayman or Five (5) years progressive experience in the installation, maintenance and troubleshooting of protective relays.
- High School diploma or equivalent.
- Must be familiar with District Safety, First Aid and CPR methods.

#### License or Certification:

- Possess a valid Washington State driver's license.
- TVPPA Relayman certification.
- AVO Relayman certification.
- Possess a valid First Aid certificate.
- Possess a valid CPR certificate.

### WORKING CONDITIONS:

- Work is performed in an outdoor environment in varying and severe weather conditions.
- Incumbent may be exposed to heat, radiation, loud noises and high voltage equipment.
- Must be able to lift and carry heavy equipment and materials up to 60 lbs.
- Must be able to work in elevated positions.
- May be exposed to energized equipment.
- Must be able to walk varying distances on varying surfaces and terrain and drive a District vehicle in varying traffic conditions.
- Work is also performed in a shop environment and may require travel to business meetings or training sessions.
- Incumbents perform repetitive movements from use of a computer and mouse.
- This position is subject to seven days a week and 24-hour call out for emergency situations.