UNION JOB DESCRIPTION

TITLE: Wire Apprentice

DEFINITION:

Assists Substation Department personnel in the maintenance and construction of switching stations and substations. Attends formal classes to supplement on-the-job-training. The Wire Apprentice reports to and is under the direct supervision of a Journeyman Wireman, Wireman Foreman, or Manager, Substation Construction & Operations.

DISTINGUISHING CHARACTERISTICS:

This is a minimum 8000-hour, 4-year apprenticeship program approved by the Joint Apprentice Training Committee (JATC). Apprentices will receive and must attend a minimum of 144 hours of related/supplemental instruction on non-paid status per year. This is a progressive position with time requirements and with more responsibility assigned as experience is gained. The job skills obtained in each 6-month, minimum 1000-hour step are intended to be guidelines and may be moved by the District to earlier or later steps as appropriate to their training based on the timing and availability of projects. The JATC determines if the incumbent may progress to the next step, based on satisfactory job performance, classroom progress, step tests, final examination at IBEW Local #77, and evaluations and recommendation by the Wire Sub-Committee. Apprentice is required to purchase appropriate footwear and all personal hand tools as outlined in Exhibit A of the Collective Bargaining Agreement. Per CBA 7.9.7: A Wire Apprentice in their final period may, for relief only, take the place of a Journeyman Wireman, if qualified and by the Joint Apprenticeship Training Committee's (JATC) approval, and shall be paid Journeyman Wireman's rate of pay only while working as a Journeyman.

FIRST SIX (6) MONTHS (Step 1 - First 1000 hours):

ESSENTIAL JOB FUNCTIONS:

1. As outlined in the Wire Apprentice program, this step will require a minimum of 1000-hour but not less than six (6) months to cover basic orientation, the opportunity to learn, apply, and demonstrate competence in the following skills:

    - Attend and complete District core classes, acquiring required employment skills
    - Attend District training and obtain First Aid/CPR Card, Defensive Driving Training card, and Forklift operator card
    - Introduction and review of Safety procedures and rules, including WAC 296-24, 296-45, 296-54, 296-62, and 296-155 (Electrical Workers Safety Rules), and the District Accident Prevention Manual
    - Become familiar with safety devices and protective equipment
    - Become familiar with equipment installed in substations and how it works
    - Learn methods for safe rigging and lifting
    - Perform repair, painting, and maintenance work on de-energized distribution transformers, reclosers, regulators, and sectionalizers in the transformer shop
    - Load and unload tools, materials and equipment used in the maintenance and construction of stations and substations

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SECOND SIX (6) MONTHS (Step 2 - Next 1000 hours):

ESSENTIAL JOB FUNCTIONS:

2. As outlined in the Wire Apprentice program, this step will require a minimum of 1000-hour but not less than six (6) months to provide the opportunity to learn, apply, and demonstrate competence in the following skills:

    - Obtain Washington State Commercial Driver' s License (CDL) Class A
    - Familiarity with substation one-line diagrams, station prints, and schematic diagrams
    - Prepare stock issue and stock return forms, and accounts for material used, as well as daily driver' s logs for trucks
    - Erect steel structures and buswork (de-energized)
    - Assist with physical assembly of transformers and regulators
    - Assist with physical assembly of switchgear

THIRD SIX (6) MONTHS (Step 3 - Next 1000 hours):

ESSENTIAL JOB FUNCTIONS:

3. As outlined in the Wire Apprentice program, this step will require a minimum of 1000-hour but not less than six (6) months to provide the opportunity to learn, apply, and demonstrate competence in the following skills:

    - Pull and terminate de-energized wires
    - Assist with physical assembly of switches and circuit breakers
    - Maintain vacuum circuit breakers
    - Maintain air-circuit breakers

FOURTH SIX (6) MONTHS (Step 4 - Next 1000 hours):

ESSENTIAL JOB FUNCTIONS:

4. As outlined in the Wire Apprentice program, this step will require a minimum of 1000-hour but not less than six (6) months to provide the opportunity to learn, apply, and demonstrate competence in the following skills:

    - Install station ground mat and Cadweld connectors
    - Terminate 12 kV cables in switchgear
    - Install and wire protective relays
    - Collect oil samples for DGA, PCB, and oil quality testing, use the oil test equipment

FIFTH SIX (6) MONTHS (Step 5 - Next 1000 hours):

ESSENTIAL JOB FUNCTIONS:

5. As outlined in the Wire Apprentice program, this step will require a minimum of 1000-hour but not less than six (6) months to provide the opportunity to learn, apply, and demonstrate competence in the following skills:

    - Maintain 115 kV circuit switchers, circuit breakers, and line switches
    - Perform equipment testing (Doble, TTR, ductor, Profile, etc)
    - Perform wiring in energized panels

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SIXTH SIX (6) MONTHS (Step 6 - Next 1000 hours):

ESSENTIAL JOB FUNCTIONS:

6. As outlined in the Wire Apprentice program, this step will require a minimum of 1000-hour but not less than six (6) months to provide the opportunity to learn, apply, and demonstrate competence in the following skills:

    - Maintain load tap changers (LTC' s)
    - Install battery banks and battery chargers
    - Prepare switching requests and understand clearance procedures
    - Assist with protective ground installation

SEVENTH SIX (6) MONTHS (Step 7 - Next 1000 hours):

ESSENTIAL JOB FUNCTIONS:

7. As outlined in the Wire Apprentice program, this step will require a minimum of 1000-hour but not less than six (6) months to provide the opportunity to learn, apply, and demonstrate competence in the following skills:

    - Maintain station batteries and perform battery testing
    - Troubleshooting Load Tap Changers and LTC controllers
    - Mobile substation setup
    - Understand protective relay functions and settings

EIGHTH SIX (6) MONTHS (Step 8 - Next 1000 hours):

ESSENTIAL JOB FUNCTIONS:

8. As outlined in the Wire Apprentice program, this step will require a minimum of 1000-hour but not less than six (6) months to provide the opportunity to learn, apply, and demonstrate competence in the following skills:

    - Troubleshooting circuit breakers
    - Perform station inspections
    - Terminate fiber-optic, Ethernet, & RS-232 cables
    - Understand substation data networks and cabling

OTHER RESPONSIBILITIES:

- Ensures a safe and neat working area.
- Assists Substation Department personnel in the shop and in the field.
- Maintains accurate records.
- Performs other related duties as assigned.

MINIMUM QUALIFICATIONS:

Education/Experience:

- High School diploma or equivalent.

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MINIMUM QUALIFICATIONS (Continued):

License or Certification:

- Valid Driver's License with the ability to obtain a valid Washington State Driver's License within thirty (30) days of job start date.

Age:

- Applicants for apprenticeship shall be at least 18-years-old.

SELECTION PROCESS:

Successful completion of such selection tests as approved by the JATC large committee and administered by the District.

WORKING CONDITIONS:

- Work is generally performed both in the shop and in the field.
- Work performed in the field is subject to varying weather conditions, including severe weather conditions, during daylight and hours of darkness.
- Incumbents are required to use color perception to accurately read schematics and correctly identify and work with various colors of wire and cable.
- Incumbents must be able to walk varying distances on varying surfaces and terrain.
- Must be able to drive District vehicles in varying traffic conditions.
- Must be able to lift and carry up to 60 lbs.
- Must be able to work in elevated positions at heights up to and in excess of 50 feet.
- Must be able to work in confined spaces, such as underground vaults and deep shored trenches.
- May be exposed to energized equipment, heat, radiation and loud noises.
- Required to respond to call-outs during emergencies.

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