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## **JOB DESCRIPTION**

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**JOB TITLE:** Substation Apparatus Technician Apprentice

**COMPANY/DEPARTMENT:** Arizona Electric Power Cooperative/Transmission O&M

**EFFECTIVE DATE:** April 2005

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**Purpose:** To safely, economically and efficiently install, maintain, test and calibrate as needed, all assigned equipment owned or to be maintained by the Cooperative. On a daily basis, the Electrician will work closely with the Transmission O&M Manager keeping them informed of operation problems, personnel issues and other items of interest or general knowledge.

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

- Completion of a (4) four-year apprenticeship program which is recognized by State Apprenticeship Council and a minimum of (2) two years formal relevant training and (2) years field experience.
- Demonstrated working knowledge of electrical and power systems operations.
- Ability to read and follow schematic prints and wiring diagrams.
- Working knowledge of the following test equipment: Transformer turns ration tester, breaker analyzer, Ductor, high potential tester, power factor test equipment and megohm meter.
- Working knowledge of apparatus insulating oil processing and gas reclaiming equipment.
- Working knowledge of apparatus insulating oil quality tests per ASTM procedures and standards.
- Shall possess or have the ability to obtain a valid Arizona Commercial Driver License (ClassA) within six months from date of hire.

### **DESIRED KNOWLEDGE AND EXPERIENCE:**

- Working knowledge of personal computers.
- Working knowledge of the following testing equipment: Relay test set, meter standard, phase angle meter, power quality test equipment and oscilloscope.

### **ESSENTIAL AND MARGINAL FUNCTIONS:**

- Maintain assigned electrical equipment owned or to be maintained by the Cooperative as required and/or requested.
- Account for and advise of needed maintenance of spare parts in accordance with the Cooperative's policies and procedures.
- Recommend for additions and/or changes in equipment to determine the effect on present and future operations.
- Maintain good housekeeping practices on all equipment to promote efficient operations and appearance.
- Properly care for and protect equipment assigned to the Cooperative to be used in carrying out responsibilities.
- Become familiar with drawings and instruction bulletins on all equipment as required.
- Check, revise and keep current substation drawings and diagrams as required.
- Install and wire new additions or replacements to existing equipment as required.
- Maintain on-going records of all calibration tests on equipment and maintain files of preventative maintenance records.
- Provide feedback on the operations and maintenance of equipment to improve systems reliability.
- Keep informed on current practices of the electrical/utility trade.

- Work with control and communications equipment as required or requested.
- Perform the maintenance and testing of electrical devices, apparatus and equipment within the Cooperative power delivery system as required.
- Comply with all Safety and Health rules.
- Perform electrical and other related duties within the system as required and for which qualified to perform safely.

#### **OTHER DUTIES:**

- Cooperate in achieving the objective of eliminating recognized hazards to safety and health.
- Practice care and protection of clothing and equipment that is provided by the Cooperative.
- Participate in the training and instruction of the safe operation of old and/or new equipment and/or processes.
- Maintain work area and plant to standards of sanitation, safety and health in accordance with applicable regulations.
- Perform work associated with other related occupational groups as required and for which qualified to perform safely.
- Ensures the training of personnel assigned under direction.

#### **PERFORMANCE MEASUREMENTS:**

- Ability to analyze, troubleshoot and repair electrical equipment, apparatus, circuitry.
- Plan out and execute requested maintenance functions and activities.
- Ability to promote and maintain a team environment.
- Initiative and ability to carry out work assignments, with limited supervision.
- Ability to train and/or orient other personnel

**Arizona Electric Power Cooperative, Inc.**  
**APPRENTICESHIP STANDARDS**

**QUALIFICATIONS OF APPLICANTS;**

An Arizona Electric Power Cooperative, Inc. (AEP CO) employee applying for consideration for selection as an Apprentice must possess the following requirements:

1. Have a good safety record.
2. Be physically fit for the work of the trade.
3. Have a minimum of a high school education or its equivalent and shall furnish the AEP CO Joint Apprenticeship Committee with a transcript of high school courses, grade or other conclusive evidence of a proper educational background.
4. Agree to abide by all decisions of the AEP CO Joint Apprenticeship Committee.
5. Successfully pass prescribed test approved by AEP CO Joint Apprenticeship Committee.
6. In addition to basic qualifications, an employee interested in Apprentice training will be required to take certain tests designated by the AEP CO Joint Apprenticeship Committee. Job related tests will be administered as necessary to meet apprentice qualifications of each trade.
7. Applicants shall be at least 18 years of age.
8. Able to obtain CDL license if required by the craft.