

# ***VALLEY ELECTRIC ASSOCIATION, INC.***

## **JOB DESCRIPTION**

### **I. IDENTIFICATION**

- A. Title: **Telecommunications Technician**
- B. Department: Broadband Communications
- C. Reports To: Supervisor of Telecommunications

### **II. OBJECTIVES**

This position provides support for the Telecommunications Division of the Broadband Communications Department. This position will be responsible to provide the specialized technical skills and knowledge to support carrier grade microwave systems and DWDM and SONET long-haul fiber transport for enterprise, Utility, and broadband services. Duties also include support for two-way radio communications systems (LMR), in-house phone systems, video/door security, LAN network and software support, system testing and programming including TWACS support, and to provide electronic communications support for substation SCADA and control of regulators, reclosures, transformers, and other control equipment.

### **III. KEY RESPONSIBILITIES**

- a. Obtain directions, assignments and instructions from his/her supervisor.
- b. Must have the ability to learn and show a strong aptitude in the following areas:
  - i. Knowledge of microwave and fiber optics backhaul systems.
  - ii. Knowledge of RF communications to include microwave, VHF and UHF.
  - iii. Use of RF, network analyzer, and fiber optic test equipment.
  - iv. Knowledge of two-way radio base stations, repeaters, mobiles and handhelds.
  - v. Knowledge of telephony systems including hybrid digital/VOIP and POTS systems.
  - vi. Understanding of PC hardware and software with a strong knowledge of Microsoft Office programs (Word, Excel, Outlook, etc.).
  - vii. Knowledge of wired and wireless LAN equipment and protocols.
  - viii. Remain up-to-date on current developments in equipment and methods of testing and repair of equipment in order to ensure efficient and economical maintenance and repair of the Cooperative's special equipment.

- c. Assist SCADA and/or Substation technicians with RTU's and/or protective relay communications troubleshooting.
- d. Install, provision, troubleshoot and maintain microwave and fiber optic telecommunications infrastructure.
- e. Troubleshoot and maintain hybrid digital/IP telephone systems including PBX and Unified Communications/voicemail servers and connectivity to the desktops.
- f. Perform on-site analysis, diagnosis/troubleshooting and resolution of complex telecommunications problems for a variety of equipment and end users, and recommend and implement corrective solutions.
- g. Troubleshoot LAN connectivity issues with end users.
- h. Install, troubleshoot and maintain security/camera systems and fire alarm systems.
- i. Climb communications towers and operate utility bucket trucks for the purpose of installing or maintaining RF communications parabolic dishes, antennas and associated equipment.
- j. Perform site surveys, utilize microwave link planner and build reports to establish remote microwave backhaul sites for enterprise and/or broadband communication services.
- k. Install and maintain enterprise UPS (Uninterruptible Power Supply) to support the communication infrastructure.

General Duties:

- a. Handles assignments and conducts him/herself in such a manner that will reflect courtesy and professionalism to the organization and the Cooperatives members.
- b. Participates in employee meetings, providing information when requested.
- c. Reads, understands and follows applicable safety rules, regulations and policies.
- d. Follow Valley Electric safe work practices as outlined in the safety manual.

This job description in no way implies that the duties and responsibilities listed herein are the only ones the employee can be required to perform. The employee is expected to perform other tasks, duties and training as instructed by the manager and/or supervisor.

#### IV. AUTHORITIES AND ACCOUNTABILITY

- a. The Telecommunications Technician shall have full authority to carry out the responsibilities and duties of this position in conformity with established policies and procedures.
- b. The Telecommunications Technician is accountable to the management of the Cooperative for the efficient performance of these responsibilities and that, although some of these responsibilities may be assigned to another person, the accountability for the successful completion of these responsibilities cannot be.
- c. The Telecommunications Technician is required to use initiative and judgment in making decisions, remembering that the Cooperative's best interest will be affected.
- d. The Telecommunications Technician will be expected to make suggestions for the improvement of operations and efficiency.
- e. The Telecommunications Technician shall secure the approval of the Supervisor of Telecommunications, Manager of Network Operations, or Executive Vice President (EVP) of Broadband in making decisions when policies are not clear or require interpretation.

#### V. RELATIONSHIPS

Employee will communicate, collaborate, and cooperate with colleagues, customers, and vendors.

##### Inside the Organization:

- a. The position reports directly to the Supervisor of Telecommunications.
- b. There is no reporting responsibility to the Telecommunications Technician.

##### Outside the Organization:

- a. Member/Consumers – Providing prompt, courteous service and information.
- b. Vendors and solicitors contacting a Cooperative representative - Promote courteous and professional relationships.

#### VI. SPECIFICATIONS

To perform this job successfully, an individual must be able to perform each essential duty satisfactorily. The requirements listed below are representative of the knowledge, skill, and/or ability required.

**Education/Experience:** High school diploma and an associates' degree in electronics or related discipline with a minimum of 4 years of job related experience, or a combination of education and experience that would satisfy the requirements of this position. Previous working experience with wireless RF and/or fiber optic communications systems and computer networking is desired. Additional experience with terminations of coax, fiber and data cabling and tower climbing experience is preferred.

**Job Knowledge:** Must possess a moderate amount of working knowledge of wireless RF and/or fiber optic technology. Must have knowledge of electronics fundamentals and theory. Must have sound knowledge of the proper and safe use of the tools and equipment used in the installation and maintenance of wireless RF and/or fiber optic equipment. Must be willing to attend courses relating to his/her area of work.

**Risk Assessment:** This position requires access to certain secure assets and information. As a result, individuals in this position must be able to successfully pass a Personnel Risk Assessment every seven years, as required by the North American Electric Reliability Corporation (NERC) Critical Infrastructure Protection (CIP) standards.

**Abilities and Skills:** Must be skilled in human relations to effectively carry out the responsibilities of the job. Must possess good oral and written communications skills to be able to effectively communicate with others, and be able to convey electrical theory and computer skills to others. Must have the ability to solve practical problems and deal with a variety of variables in situations where only limited standardization exists, as well as general troubleshooting skills. Prefer applicant to obtain and maintain a current Commercial Driver's License (CDL) per Nevada State of Department of Transportation Regulations.

**Working Conditions/Work Environment:** While performing the duties of this job, the employee is regularly exposed to risk of electrical shock and RF/microwave radiation. The employee may work near moving mechanical parts. The noise level in the work environment is usually moderate. Office work, indoor and outdoor work in all conditions may be necessary. Working at heights up to 100 feet on towers or in bucket trucks and working around heavy machinery is possible. Responsibilities occasionally require after-hours, evenings, and weekend work, sometimes with little or no advanced notice. Occasional travel may be required for the performance of normal daily duties or external training requirements.

**Physical and Mental Requirements:** While performing the duties of this job, the employee must have the ability to use hands to finger, handle, or feel objects, tools, or controls and reach with hands and arms. The employee must have the ability to stand, walk, and talk or hear, and occasionally to sit; climb or balance; and stoop, kneel, crouch, or crawl. The employee must have the ability to occasionally lift and/or move irregular shaped loads of up to seventy five (75) pounds. Specific vision abilities required by this job include close vision, distance vision, color vision, depth perception, and the ability to adjust focus. Must have the ability to communicate to individuals in small and large groups. Must have the ability to read, write, and do arithmetic. Must have the ability to analyze data and reports, and conduct research. Must have the ability to develop plans and procedures, and goals. Must have the ability to effectively and patiently communicate to individuals, and be able to present information to others even during stressful conditions.

Must have or obtain a valid Nevada driver's license and pass pre-employment physical and drug test as a condition of employment.

Reasonable accommodations will be made to enable individuals with disabilities to perform the essential functions of this position.

Date Accepted: \_\_\_\_\_  
Employee

Date: \_\_\_\_\_  
Direct Supervisor