

Copper Valley Telephone Cooperative

Position Title: Director of IT & Engineering	Department: IT/Engineering
Reports To: Chief Operations Officer	FLSA Status: Exempt

General Summary:

Direct, plan and design the effective and efficient use of technology to support CVTC's services and growth plans with a continuous focus on modernization and responsiveness to competitive offerings. Manage the Information Technology and Engineering department and staffing to monitor, maintain, secure, and upgrade our technology, as well as maintain and continually refine our long term technology plans and operating practices for future investments.

This list of duties and responsibilities, as well as an expected knowledge base to have and maintain, are illustrative of the primary functions of this position and are not intended to be all inclusive.

- Ability to build, train and manage our IT and Engineering team to support Managed IT (internal and external), Broadband Internet & voice services.
- Participate as part of the leadership team to help develop strategic plans for the company.
- Have a thorough understanding of ISP operations, including but not limited to Calix, FTTH, Juniper, Ciena, and capacity planning for both electronics as well as backbone circuits, including redundancy.
- Have a good understanding of Telco operations, including TDM, VoIP, SS7, Metaswitch (preferred), Hosted PBX.
- Have a good understanding of network operations, including monitoring, incident management, change management, lifecycle management.
- Have a good understanding of network security, cyber security including SEIM, IDS/IPS, Firewall, Anti-virus.
- Ability to perform the various aspects of being a managed service provider – ability to meet with existing and potential customers, design, recommend and implement solutions for customers and drive delivery of premium-class service to customers. Provide pre-sales engineering support. Manage premium customer relationships.

Essential Job Functions:

- Manages local and wide area network hardware and software installation, maintenance, repairs, and upgrades to ensure network availability. Ensures data and system backups are completed. Monitors network traffic for delays, collisions, etc. and ensures appropriate corrective actions are taken. Oversees installation, configuration and maintenance of operating systems and application software. Ensures current software versions and licenses are maintained.

- Manages the development, modification and operation of IT security systems designed to maintain integrity of CVTC and affiliates' infrastructure and data. Plans, coordinates, and implements controls, policies, and security measures to safeguard information and guarantee the security and integrity of all system data files and records. Ensures regular network security audits are completed and audit recommendations are implemented, with full scale audits completed biannually.
- Analyzes current system equipment and service to ensure high level of service is maintained and service demands are met. Provides technical analyses regarding planned replacement of aging or technically outdated facilities; technological improvements; completion of service requests and handling of customer complaints; and obtainment of current work plan objectives. Assists with problem analyses and solutions.
- Oversees switching and network, deregulated CPE, regulated operations, and engineering activities to ensure maintenance of accurate records, trouble reporting and disposition logs, work orders and job orders.
- Maintains accurate records of activities and appropriate files including work order status, project communications, permits, authorizations and licenses, manufacturer certifications and warranties, contractor obligations and technical papers.
- Provides analyses for individual projects including but not limited to, need for quality of service planned, technology options and cost comparisons, life of existing plant facilities, project timeframes, project costs, and safety as a function of cost.
- Manages individual projects to ensure proper plan design and materials, completion of required documentation, proper RUS bidding procedures, adherence to defined specifications, and efficient and timely completion of projects.
- Oversees CVTC usage of service order, billing, plant records and accounting vendor software. Ensures systematic and timely software updates, program additions and revisions, and problem resolution. Interfaces with software vendors to ensure new systems and enhancements are implemented. Works with other department managers to ensure critical business deadlines are met.
- Oversees miscellaneous information system operations and database management. Creates, modifies, and runs queries to generate necessary information for various departments. Manages the integration of miscellaneous systems, equipment and databases. Oversees routine maintenance and repairs of printers, copiers, and fax machines. Implements and maintains systems and databased to ensure continuous business operations. Develops and maintains IT disaster recovery and business continuity plans.

- Ensures prompt helpdesk maintenance and related support service is provided to users. Provides expert technical advice, information and assistance to users as needed. Trains employees on use of hardware and software.
- Maintains current industry knowledge regarding new products/technology, procedure changes, and upgrades and software patches affecting information systems and costs.
- Oversees application system hardware platform operations and maintenance to ensure availability. Ensures system messages and errors are addressed in a timely and efficient manner. Ensures operating system updates and program temporary fixes are completed on a regular basis. Oversees maintenance of user profiles and ensures data and system backups are completed.
- Provides input regarding potential future projects by researching current technologies, determining applicability and feasibility of technologies, applying projected growth factors and communications needs, and exploring alternative methods for accomplishing objectives. Researches new communications devices and services and determines applicability to CVT.
- Oversees installation, maintenance, repair, and upgrades of personal computers. Ensures operating system and application software versions and licenses are maintained. Researches and recommends appropriate hardware and software upgrades, replacements, and relocations.
- Prepares annual departmental budget, administers budget, and tracks budgeted items in comparison to actual expenses. Ensures budgetary expenditure levels are not exceeded.
- Supervises daily activities of department employees by managing workflow and employee scheduling, checking work for accuracy, ensuring appropriate staff levels, counseling, and encouraging employee growth, training employees, and answering employee questions. Maintains awareness of personnel law and assures adherence with CVTC personnel policies.
- Performs all other related duties as assigned by management.*

*These tasks do not meet the Americans With Disabilities Act definition of essential job functions and are usually less than 5% of time spent. However, these tasks still constitute important performance aspects of the job.

Knowledge, Skills, and Abilities:

- Knowledge of MS Windows operating software and registries, IBM OS400 and Client Access, MS Office software products, internet browsers and proxies, IIS, email, and SQL service.

- Knowledge of network protocols including Ethernet TCP/IP, FTP, Telnet, SMTP, HYYIP and Wi-Fi, and of ISP operations, including Calix, FTTH, Juniper, and Ciena. Good understanding of network security, cyber security, SEIM, IDS/IPS, firewall, and anti-virus.
- Knowledge of network and peripheral hardware including servers, hubs, LAN/WAN switches, routers, bridges, modems, printers, scanners, network topologies and wiring standards.
- Knowledge of personal computer components such as hard drives, random access memory chips, video cards, and processor chips.
- Knowledge of RUS contract forms, specifications, guidelines, construction manuals and recommended work procedures.
- Knowledge of plant technologies including switching, transmission and distribution, TDM, VoIP, SS7, Metaswitch, and hosted PBX.
- Knowledge of telephone plant accounting methods including relationships of various processes.
- Knowledge of company policies, procedures, products, and services.
- Knowledge of management principles and practices.
- Skill in analyzing user processes, procedures and needs in order to recommend and implement appropriate, cost effective systems.
- Skill in oral and written communication
- Ability to organize and prioritize multiple work assignments and to plan and complete projects on time and within set budget amounts.
- Ability to sit or stand for most of the day while working on a computer with intermittent breaks, and to stoop, crawl under desks, & reach equipment mounted on equipment racks.
- Ability to work extended hours with occasional travel.
- Ability to work independently.
- Ability to obtain and maintain a valid driver's license.
- Ability to make sound decisions using information at hand and in high stress outage situations.
- Ability to effectively manage personnel, create a team environment, and sustain employee morale.

Education and Experience:

Bachelor’s degree in Information Technology, Electrical Engineering, or related field plus four years progressive experience in computer operations, internet service provisions, network administration and/or computer programming, and appropriate telephone technologies.

An equivalent combination of college study and experience may also be accepted.

Physical Requirements:

PHYSICAL REQUIREMENTS	0-24%	25-49%	50-74%	75-100%
Seeing: Must be able to read computer screen and various reports.				X
Hearing: Must be able to hear well enough to communicate with employees and industry contacts.				X
Standing/Walking:		X		
Climbing/Stooping/Kneeling:	X			
Lifting/Pulling/Pushing: Must be able to lift and transport records weighing up to 40 lbs.	X			
Fingering/Grasping/Feeling: Must be able to write, type, and use phone system.				X

Working Conditions:

This factor measures the surroundings or physical conditions under which a job must be done and the extent to which those conditions make the job disagreeable. Consider the presence and relative amount of exposure to dust, dirt, heat, fumes, contaminants, cold, noise, vibration, wetness, etc.

Good working conditions; may involve occasional exposure to some of the elements listed above.

Note: The statements herein are intended to describe the general nature and level of work being performed by employees, and are not to be construed as an exhaustive list of responsibilities, duties and skills required of personnel so classified. Furthermore, they do not establish a contract for employment and are subject to change at the discretion of the employer.