

**Position Title:** Senior Network Engineer-Planning & Design

**Department:** Network Engineering

**Reports To:** Director of Network Engineering

**FLSA Status:** Exempt

### **General Summary:**

The Senior Network Engineer-Planning & Design is responsible for projects and tasks related to the OTELCO network, voice and data application systems, and engineering. This position includes responsibility for design, and planning for maintenance, improvements, capacity and upgrades for the relevant systems. The Senior Network Engineer is responsible for planning and designing solutions to enhance the OTELCO data and voice network. Travel to OTELCO properties in Maine, New Hampshire, Massachusetts, Vermont, and West Virginia is required.

The Network Engineering team is responsible for designing, planning, and operating complex network and voice systems to ensure optimal efficiency and cost-effectiveness through utilization of industry best practices. The team is also responsible for complex switch translations, network monitoring and augmentation of facilities and equipment and central office records.

### **Essential Job Functions:**

- Responsible for projects related to evolving the voice and data network to enhance service offerings and reliability
- Plans, designs, and coordinates complex network augments and rearrangements to the existing network.
- Responsible for maintaining spares inventory, network redundancy and sufficient capacity in voice network systems
- Responsible for working on facilities, utilities, infrastructure, and related systems
- Network Planning – responsible for long term planning, assistance with budget preparation.
- Capacity planning - Develop documentation and rules surrounding augments to voice/data network and critical infrastructure
- Focus on product roadmaps to constantly improve the value of our service offerings for our customers and hold vendors accountable for deliverables, including by not limited to technical specifications, implementation specifications and service delivery standards
- Vendor selection – equipment, 3rd party circuits
- Document OTELCO's standards around hardware deployment – consistent hardware, software and configurations across the footprint
- Provide recommendations to optimize network operation and performance and automate repetitive activities
- Develop and document standards for OTELCO service deployments from A to Z
- Assist during outages as escalation point to NOC, Voice Engineering & ISP Engineering
- Work with internal technical teams for product placement and feature improvements for reliability, availability and serviceability
- Audit and assess network against customer requirements and best practice
- Network design, IP design, remote access design, network security design
- Provide technical assistance and support to other teams for major systems improvements.
- Mentor and train team members and coworkers in new technology
- Responsible for loading and maintaining inside plant records into B/OSS
- May assist with numbering inventory and reporting, NPA/NXX updates.

- May work with IXCs to interconnect with network.
- May assist with complex translations (HPNA, NXX, COS, Prefix, address, orig tables, AMA, LNP, etc.)
- Participate in safety program and in ongoing development of company-wide policy.
- Responsible for performing central office installation and repair work.
- Work with customers with complex services, troubleshooting, and interoperability testing.
- Participate in an on call rotation
- 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 rural and competitive telephone operations and subscriber services preferred.
  - Expertise in IP voice systems and SIP required
  - Experience with equal-access and presubscription process.
  - Experience with complex translations
- Experience with central office installation, maintenance, and repair work
  - Experience managing and installing DC power systems
  - Experience managing and installing SONET network systems
  - Experience managing and installing DSL and Fiber Access equipment
  - Experience with DWDM, OTN, and Carrier Ethernet technologies
- Experience with Cable TV and DOCSIS technologies preferred
- Experience with design, planning, installation and maintenance of IP Networking and Routing solutions in a service provider environment required
- Experience with design, planning, installation and maintenance of Carrier Ethernet solutions in a service provider environment required
- Knowledge of industry standards and best common procedures
- Knowledge of company products and services.
- Knowledge of company policies and procedures.
- Knowledge of general office procedures.
- Skill in operating various office equipment such as personal computer, copier, fax, two-way radio and telephone systems.
- Problem solving and network troubleshooting skills
- Ability to communicate with customers, co-workers, and various business contacts in a professional and courteous manner.
- Ability to follow written and oral instructions.
- Ability to work with numbers and calculations and create budgets and forecasts.
- Ability to pay close attention to detail and schedules.
- Ability to effectively function as a team player.
- Ability to work nights and weekends when required
- Travel throughout the northeast frequently required
- Occasional travel beyond the northeast required

### **Education and Experience:**

Education: 2 or 4 year technical degree preferred, high school diploma required.

Experience: Minimum of five years of relevant technical experience.

**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 business contacts.				X
Standing/Walking:		X		
Climbing/Stooping/Kneeling:		X		
Lifting/Pulling/Pushing:		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.

Typical office environment the majority of time: exposure to outside conditions as necessary to support network recovery efforts.

**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.

**OTELCO is an equal opportunity employer and does not discriminate on the basis of age, sex, gender identity, color, race, creed, national origin, religious persuasion, marital status, political belief, or disability.**