Class Code: 2027 Effective: 10/02/23 Revised: 9/12/24

#### COMMUNICATIONS NETWORK SPECIALIST III

### PURPOSE AND NATURE OF WORK

Position is responsible for designing, implementing, troubleshooting, and maintaining fiber networks and services. Incumbents work under the general direction of the Communications Architecture and Engineering Manager and have no supervisory responsibilities, but may serve as a lead to other specialists (including assigning related tasks) and assisting with performance reviews of specialists.

<u>ILLUSTRATIVE EXAMPLES OF WORK</u> (Note: These examples are intended only to illustrate the various types of work performed by incumbents in this class. All of the duties performed by any one incumbent may not be listed, nor does any incumbent necessarily perform all of these duties.)

The Communications Network Specialist III may be required to perform all duties of the Communications Network Specialist II plus:

- Development of data and video system products and features
- Coordinates with sales and marketing team for implementation and sales support
- Designs and implements security necessary for all services
- Meets with IT managers to determine the company's networking needs
- Analyzes and upgrades network security systems and protocols
- Adds network users and manages company permissions
- Optimizes network installations for future expansion
- Trains staff on network and system protocols
- VoIP Headend Management:
  - o VoIP products and feature development
  - o Assists business regulatory personnel to ensure compliance with local, state and federal requirements
  - o Analyzes existing VoIP networks and computer systems
  - o Develops architecture plans for voice and data services
  - o Installs network hardware modules including IP and PBX communication servers
  - Designs and implements Cisco Unity systems or equivalent telephone systems
  - o Troubleshooting VoIP network issues
- Supports and designs wireless for large venues which support multiple vendor payment capabilities (RFID and Wifi) combined with high capacity WiFi design (crowd connectivity).
- Monitors and balances Internet traffic using advanced routing protocols such as BGP, OSPF, etc.
- Supports phone trunk connectivity to ILEC.
- Routes multicast and unicast video for advanced IPTV system.
- Supports virtual machine host and servers.
- Supports and maintains cybersecurity measures for delivering internet, phone, and video service.
- Performs related work as required.

### NECESSARY KNOWLEDGE, ABILITIES AND SKILLS

Knowledge of and ability to apply the following appropriate to the level of work in a communications system providing telephone, television and data communications to homes, government, and businesses:

- All knowledge, abilities, and skills of the Communications Network Specialist II
- NCIA/JNCIS/JNCIP and/or CCNP/CCIP/CCDP
- Ability to form and maintain effective working relationships with other LUS Fiber personnel, customers, elected officials, and general public.
- Ability to communicate clearly, verbally and in writing.

# **DESIREABLE QUALIFICATIONS**

Bachelor of Science or Applied Science in Computer Science, Electrical Engineering, Telecommunications Engineering, or closely related field.

## Experience in:

- Network operations, including multi-gigabit transport networks
- MPLS and commercial networks and the various components
- Network engineering and architecture
- Evaluating, configuring, and troubleshooting a variety of network equipment, especially Juniper, Cisco, Brocade, and Alcatel-Lucent