

## **LaGrange County REMC**

### **General Policy G-20**

#### **Network Management Policy**

LaGrange County Rural Electric Membership Corporation (“LCREMC” or “Company”) provides this Policy in order to disclose its network management practices in accordance with the FCC’s Open Internet Rules. Additional Information about LCREMC’s other policies and practices concerning broadband service are also available at [www.lagrangeremc.com](http://www.lagrangeremc.com) under the Rates & Policies section.

LCREMC manages its network to ensure that all its customers experience a safe and secure broadband internet environment that is fast, reliable and affordable. LCREMC manages its network for several reasons, including optimization, as well as congestion and security protocol management. Such practices are consistent with reasonable network management actions and are intended to improve the overall performance for customers.

#### **LCREMC’s Network Management Practices**

LCREMC uses various tools and industry standard techniques to manage its network and deliver fast, secure and reliable Internet service. Such management tools and practices include the following:

#### **Managing Congestion**

LCREMC periodically monitors the connections on its network in the aggregate to determine the rate of utilization. LCREMC has deployed a non-blocking Internet architecture in the majority of its network. Except for the facilities closest to the customer, the network has redundant facilities on separate links. LCREMC adds capacity when it finds the current facilities are nearing capacity. The facilities closest to the customer are sized to fully meet the advertised bandwidth sold to the customer. LCREMC may increase capacity by adding FTTH nodes, transport, Internet aggregation routers and bandwidth, as needed to accommodate additional services and increased speeds.

On LCREMC’s network, all customers have access to all legal services, applications and content online and, in the unlikely event of congestion, most internet activities will be unaffected. Some customers, however, may experience longer download or upload times, or slower surf speeds on the web if instances of congestion occur on LCREMC’s network. When congestion occurs, only traffic that exceeds the capacity limitation based on time of access will be impacted. LCREMC has experienced congestion when one of its providers loses access, and outage times vary and are out of LCREMC’s control.

Use or conduct that abuses or threatens the LCREMC network or which violates LCREMC’s Broadband Service Agreement, Acceptable Use Policy, Copyright Infringement Policy or other applicable policies is not permitted and customers engaging in such use or conduct will be asked to stop any such use immediately. A failure to respond or to cease any such conduct could result in service suspension or termination.

LCREMC’s network and congestion management practices are ‘application-agnostic’, based on current network conditions, and are not implemented on the basis of customers’ online activities, protocols or applications or user or user groups. LCREMC does not favor certain traffic over other traffic. LCREMC’s network management practices do not relate to any particular customer’s aggregate monthly data usage. Except for specialized networks, LCREMC does not prioritize or discriminate against any applications or protocols and does not honor quality of service indicators from other carriers.

## *Network Security*

LCREMC knows the importance of securing its network and customers from network threats and annoyances. The company promotes the security of its network and patrons by offering resources to its customers for identifying and reporting such threats as viruses and firewall issues.

As its normal practice, LCREMC does not block any protocols, content or traffic for purposes of network management except that the company may block or limit such traffic as spam, viruses, malware, or denial of service attacks to protect network integrity and the security of our customers. LCREMC does filter ports to reduce the spread of computer-related viruses and protect your computer from intruder access. If LCREMC suspects traffic originated by its customers is related to denial of service attacks, LCREMC will contact the suspected party. If there is no response, the customer's service will be suspended until the issue can be resolved.

### *Monitoring Schedule*

LCREMC has software that monitors the network for performance and provides performance results regularly. Alarms or alerts are generated if the performance is degraded. In addition, traffic is analyzed and trended to insure peak performance. When utilization nears capacity LCREMC adds additional bandwidth or reroutes traffic to relieve congestion. LCREMC also uses industry standard software tools to check for abnormal traffic flows, network security breaches, malware, loss, and damage to the network. If a breach is detected or high-volume users are brought to light by complaint, LCREMC provides notification to the customer via email or phone.

LCREMC does not inspect individual network traffic information, nor does it store such information, provide it to third parties, or use the information for non-network management purposes.

## *Network Management Technology*

LCREMC employs a variety of industry-standard tools, applications and devices to monitor, secure and maintain its network, including the following:

- network graphing solutions;
- latency measurement software; and
- bandwidth and performance measurement platforms.

## *Service Descriptions*

LCREMC offers broadband service over fiber optic facilities. LCREMC offers several different service tiers ranging from 100 Mbps to 1 Gbps. LCREMC reserves the right to change service tiers at any time. Not all service tiers are offered on all technologies. Service offerings are detailed in the Pricing & Packages section of the website [broadband.lagrangremc.com](http://broadband.lagrangremc.com).

## *Network Performance*

LCREMC broadband services are best effort performance. The customer's bandwidth is limited to the maximum of the service tier purchased. Since the network is fiber optic and the links are non-blocking, LCREMC expects their network to deliver, and the majority of time it does deliver the advertised speeds. If the customer does not receive their advertised speeds LCREMC will dispatch repair technicians to customer sites to perform speed tests as needed to troubleshoot and resolve speed and application performance issues that are caused by LCREMC's network. LCREMC measures availability, latency, and aggregate utilization on the network and strives to meet internal service level targets in its network.

However, the customer's performance is also affected by the particular website being accessed, capacity in the public Internet beyond the LCREMC network and the customer's computer, inside wiring, wireless router, and other customer equipment.

### *Specialized Services*

LCREMC offers customers the ability to purchase third-party Filtering/Whitelisting services. LCREMC will only provide network management on the traffic between the customer's location and the handoff to the third-party provider in our headend.

LCREMC offers voice-over-internet-protocol (VOIP) service to our customers through Momentum, a nationwide provider. VOIP service may be managed differently from internet traffic for the purposes of maintaining call quality, which may impact broadband services.

### *Device Attachment Rules*

LCREMC customers may attach any device to the network that meets consumer electronics standards and is not harmful to the network.

### *Other Notices*

In addition to this Network Management Policy, other policies and practices concerning broadband service are available at [www.lagrangeremc.com](http://www.lagrangeremc.com) under the Rates & Policies section.

For questions, complaints or requests for additional information, please contact LCREMC at 877-463-7165.