

JACKSON ENERGY AUTHORITY

BROADBAND INTERNET SERVICE DISCLOSURES

Updated June 11, 2018

Consistent with FCC regulations,¹ Jackson Energy Authority (“JEA”) provides this information about our broadband Internet access services. We call these services our “EPlus Broadband Service.” We welcome questions or comments about this information. You may contact us at (731) 422-7500 or visit us at

2030 Pleasant Plains Ext.
Jackson, TN 38305

351 Dr. Martin Luther King Jr. Dr.
Jackson, TN 38301

NETWORK PRACTICES

General Description. We provide a variety of Internet service offerings to our residential and business customers. We provide the service over our broadband network and through third party fiber optic lines connecting to the Internet. We monitor our network and traffic patterns and make changes we deem necessary to manage and improve overall network performance. We use reasonable, nondiscriminatory, network management practices to improve overall network performance to ensure a high-quality online experience for all users. Our network management practices do not target any specific content, application, service, or device. As network management issues arise and as technology develops, we may employ additional or new network management practices. We will update these disclosures as necessary.

Related Documents and Disclosures. Use of our Internet service is also governed by:

- EPlus Broadband Customer Information, available at <https://www.jaxenergy.com/broadband/policies/files/CUSTNOTIFY.pdf>
- EPlus Broadband Terms and Conditions of Service, available at <https://www.jaxenergy.com/broadband/policies/files/ServiceTerms.pdf>
- EPlus Broadband Acceptable Use and Privacy Policy, available at <https://www.jaxenergy.com/broadband/policies/files/AUP.pdf>

Blocking. JEA does not engage in any practice, other than reasonable network management disclosed herein, that blocks or otherwise prevents end user access to lawful content, applications, service, or non-harmful devices.

Throttling. JEA does not engage in any practice, other than reasonable network management disclosed herein, that degrades or impairs access to lawful Internet traffic on the basis of content, application, service, user, or use of a non-harmful device.

Affiliated or Paid Prioritization. JEA does not engage in any practice that directly or indirectly favors some Internet traffic over other traffic to benefit an affiliate or in exchange for consideration, monetary or otherwise.

¹ 47 C.F.R. § 8.1 and *In re: Preserving the Open Internet, Broadband Industry Practices*, Report and Order, 22 FCC Rcd 17905 (2010); *Protecting and Promoting the Open Internet*, Report and Order on Remand, Declaratory Ruling, and Order, 30 FCC Rcd 5601 (2015); *Restoring Internet Freedom*, Declaratory Ruling, Report and Order, and Order, WC Docket No. 17-108 (rel. Jan. 4, 2018).

Congestion Management. We describe in this section network management practices used to address congestion on our network.

Congestion management practices used.

Network monitoring. We monitor our network for utilization trends. We receive regular reports showing changes in network traffic and congestion. We use this information to plan increases in bandwidth available, port additions, or additional connectivity to the Internet. We place no limitations on data usage.

Types of traffic affected. Our congestion management practices do not target any specific content, application, service, or device.

Purposes of congestion management practices. Our Internet network is a shared network. This means that our customers share upstream and downstream bandwidth. The goal of our congestion management practices is to enable better network availability and speeds for all users. Our congestion management practices serve to:

- Help us adapt and upgrade our network to maintain or improve network performance as demand for our Internet service increases.
- Help us adapt and upgrade our network to maintain or improve network performance as demand for higher bandwidth applications increases. Some examples of higher bandwidth applications are gaming, streaming movies, and streaming high definition video.
- Help us identify potential bandwidth abusers.

Congestion management criteria. Our network monitoring provides data to help us plan upgrades to our network, equipment, technology, and connectivity to the Internet. As demand for our Internet service increases, and as demand for higher bandwidth applications increases, we monitor effects on network performance and plan upgrades as we deem necessary.

Effects on end user experience. Because our Internet service network is a shared network, periods of high network demand may result in Internet traffic congestion. End users may experience reduced bandwidth or speed during these times.

Typical frequency of congestion. Congestion tends to occur during periods of peak demand for higher bandwidth applications. Generally, the frequency of congestion tends to increase during 7 pm – 11 pm, especially on Friday and Saturday nights.

Application-Specific Practices. This section discloses any application-specific practices we use, if any.

Management of specific protocols or protocol ports. To protect the security of our network and our customers, we block known hostile ports.

Modification of protocol fields. Not applicable.

Applications or classes of applications inhibited or favored. Not applicable.

Device Attachment Rules. This section addresses any limitations on attaching lawful devices to our network.

General restrictions on types of devices to connect to network. While we do not have specific device restrictions, to use our Internet service a customer's computer must meet the minimum requirements set forth on our website at <https://www.jaxenergy.com/broadband/internet/specs.php>. Beyond that, our service works with most types of PCs and laptops including Macs. If a customer or potential customer believes they have an unusual configuration, our customer service department will help determine if there is a compatibility problem.

Fiber-To-The-Home Internet service. Our Fiber-To-The-Home (FTTH) service requires connection of a residential gateway device and Optical Network Terminal (ONT) to our network. We provide and install the ONT, and you can obtain a residential gateway device from us or you may purchase one from most retail electronics sellers.

Network and End User Security. This section provides a general description of the practices we use to maintain security of our network and end users, including triggering conditions.

Practices used to ensure network and end-user security, including triggering conditions. In general, we promptly address any event originated by a customer or customer equipment that negatively affects others' use of the network. Our practice is to first contact the customer causing the problem, and if we received no response, we terminate that customer's service until the problem is corrected.

Practices used to ensure network security, including triggering conditions.

Hostile port blocking. We do not block ports, unless our network comes under attack from viruses or other "malware." In such cases, we block that specific port until the attack ceases, at which time we remove the block.

Virus and Spam filtering. Our virus and spam filtering is performed by a third-party provider. Our contractor performs industry standard virus scanning and prevention techniques on our email platform for mail inbound from the public network. Should an email message be found to contain a virus or other harmful content, the message will be deleted without notification given either to the sender or the intended recipient(s).

Practices used to ensure end-user security, including triggering conditions.

Hostile port blocking. We do not block ports unless our network comes under attack from viruses or other "malware." We allow customers to manage their own connections to the Internet without interference due to port blocking by us.

Protocol limitations. The only protocol we limit is the NetBios protocol, which we block between customers to protect all users of the network. Blocking NetBios prevents customers using Microsoft networking services from viewing files on other customers' computers. There is no triggering condition for NetBios.

Virus and Spam filtering. We offer customers antivirus software and spam filtering services.

PERFORMANCE CHARACTERISTICS

General Service Description. We provide High Speed Internet service using FTTH technology. Our FTTH Internet service product includes wiring, an Optical Network Terminal (ONT) and a residential gateway device. Customers access our network using a residential gateway device. To connect from our network to the Internet, we use equipment called an ONT that acts as a gateway to the Internet for our customers' personal computer or routers. Through our Internet service products, we serve as a local Internet service provider. This is a shared network, which means that our customers share upstream and downstream bandwidth. Our Internet service products enable residential and commercial subscribers to access all lawful content, applications, and services of their choice available on the Internet.

Expected and Actual Speeds and Latency.

Expected performance. We offer customers a variety of Internet service levels. We provide a description of the expected maximum transfer speeds associated with each service level on our website, available at <https://www.jaxenergy.com/broadband/internet/>.

Speed. The speeds we identify for each Internet access service level are the maximum upload and download speeds that customers are likely to experience. We engineer our network to deliver the speeds to which our customers subscribe. However, we do not guarantee that a customer will actually achieve those speeds at all times. A variety of factors can affect upload and download speeds, including customer equipment, network equipment, congestion in our network, congestion beyond our network, performance issues with an Internet application, content, or service, and more.

Latency. Latency is another measurement of Internet performance. Latency is the time delay in transmitting or receiving packets on a network. Latency is primarily a function of the distance between two points of transmission, but also can be affected by the quality of the network or networks used in transmission. Latency is typically measured in milliseconds, and generally has no significant impact on typical everyday Internet usage. As latency varies based on any number of factors, most importantly the distance between a customer's computer and the ultimate Internet destination (as well as the number and variety of networks your packets cross), it is not possible to provide customers with a single figure that will define latency as part of a user experience.

Actual speed and Latency Performance. Actual speed and latency performance for our FTTH Internet service follows.

FTTH service. Actual speed and latency may vary depending upon network conditions and other factors. Actual performance of our FTTH Internet service in most cases will conform to national wireline broadband Internet speed and latency levels reported by the FCC.² The FCC has reported cable ISP subscribers receive mean download speeds that are 109.33% of advertised speeds, and mean upload speeds that are 115.30% of advertised speeds. The FCC has reported DSL subscribers receive mean download speeds that are 99.64% of advertised speeds, and mean upload speeds that are 97.59% of advertised speeds. The FCC has reported fiber subscribers receive mean download speeds that are 107.73% of advertised speeds, and mean upload speeds that are 149.53%

² See FCC's Office of Engineering and Technology and Consumer Affairs Bureau, *Measuring Broadband, A Report on Consumer Wireline Broadband Performance in the U.S.*, OET CGB DOC-308828A1, pp. 4-6 (Aug. 2, 2011) (available at: http://transition.fcc.gov/cgb/measuringbroadbandreport/Measuring_U.S. - Main_Report_Full.pdf).

of advertised speeds.³ In addition, the FCC has reported mean latency⁴ delays for cable ISPs at about 22.24 milliseconds and 11.07 milliseconds for DSL ISPs.⁵

Customer speed test. We provide an online speed test for our EPlus Broadband customers, available at <http://speedtest.eplus.net>.

Suitability of the service for real-time applications. Our Internet service is suitable for typical real-time applications including messaging, voice applications, video chat applications, gaming, and Internet video. If users or developers have questions about particular real-time applications, please contact us at (731) 422-7500. Because we provide service using both public and non-public IP addresses, certain real-time applications may experience problems. Customers should contact us if your real-time application is not functioning properly.

Non-Broadband Internet Access Service Data Services. We provide below information regarding our non-broadband Internet access service data services.

Non-broadband Internet access service data services offered to end users. We offer several managed services over our network, sharing network capacity with other high speed Internet services. Managed services include dedicated point-to-point connections for business users.

Effects of non-broadband Internet access service data services on availability and performance of broadband Internet access service. Our managed services have no effect on the availability and performance of our High-Speed Internet.

COMMERCIAL TERMS

Prices. Monthly prices for our Internet access service are available at <https://www.jaxenergy.com/rates/>.

Usage-based fees. Not applicable.

Fees for early termination. When early termination occurs, we generally revoke our waiver of the initial installation fee.

Fees for additional network services. We offer point-to-point connections for our business customers. Please contact our commercial sales department to obtain pricing.

³ 2016 Measuring Broadband America Report, *Validated Data, Statistical Averages, Download Sustained and Upload Sustained*, (Dec. 1, 2016) (available at <https://www.fcc.gov/reports-research/reports/measuring-broadband-america/validated-data-measuring-broadband-america-2016#block-menu-block-4>) (data presented is unweighted mean percentage of advertised speeds, taken over a 24 hour, Saturday-Sunday period).

⁴ The FCC has defined latency is the total length of time it takes a signal to travel from an origination point to the nearest server, plus the time for an acknowledgement of receipt to travel back to the origination point. The nearest server is the server providing the minimum round trip time.

⁵ 2016 Measuring Broadband America Report, *Validated Data, Statistical Averages, Latency*, (Dec. 1, 2016) (available at <https://www.fcc.gov/reports-research/reports/measuring-broadband-america/validated-data-measuring-broadband-america-2016#block-menu-block-4>) (data presented is unweighted mean latency in milliseconds, taken over a 24 hour, Saturday-Sunday period).

Privacy Policies. We reserve the right to disclose network traffic information to third parties solely for purposes of providing and maintaining our Internet service product or if required by law. For further information on our privacy policies, see our EPlus Broadband Acceptable Use and Privacy Policy, available at <https://www.jaxenergy.com/broadband/policies/files/AUP.pdf>.

Inspection of Network Traffic. We routinely monitor network and traffic patterns.

Virus and spam filtering. Our email traffic filtering is performed by a third-party provider, offered at no charge to our customers. We also make available to customers a filtering service, at their option, that is all inclusive for website protection.

Storage of network traffic information for FTTH Internet service. DHCP (Dynamic Host Configuration Protocol) information is a code included in all network traffic that associates that traffic with the particular customer equipment sending or receiving the traffic. We store DHCP information for at least 6 months.

Provision of network traffic information to third parties. We may disclose network traffic information to third parties solely for purposes of providing and maintaining our Internet service product or if required by law.

Use of network traffic information for non-network management purposes. Not applicable.

Redress Options; end-user complains and questions. End users or edge providers with complaints or questions relating to these disclosures should contact us at (731) 422-7500 or use our contact us weblink, available at <https://www.jaxenergy.com/broadband/contact/>, to submit complaints or questions. We will endeavor to answer questions promptly via email or voice. For complaints, we will provide an initial response in writing within 15 business days of receipt. We will attempt to resolve complaints informally, dispatching a Senior Network Specialist to meet with the customer if needed.