

## MIDWEST ENERGY & COMMUNICATIONS

### Transparency Disclosure

#### Overview:

Beginning June 11, 2018, all internet service providers (“ISPs”) are required to publicly disclose information about the network management practices, performance characteristics, and commercial terms of their broadband Internet services in one of two ways:

- By providing disclosures on publicly available, easily accessible websites of their choosing
- By submitting them to the Federal Communications Commission (“FCC”) for posting.

Midwest Energy & Communications (“MEC”) has elected to post our Internet Transparency Disclosure on our website at [www.teammidwest.com/internet/resources](http://www.teammidwest.com/internet/resources).

#### Required Public Disclosures:

##### **NETWORK MANAGEMENT PRACTICES**

Additional network management practices can be found under Internet Policies on our website at [www.teammidwest.com/internet/resources](http://www.teammidwest.com/internet/resources).

##### **Blocking**

Any practice (other than reasonable network management elsewhere disclosed) that blocks or otherwise prevents end user access to lawful content, applications, service, or non-harmful devices, including a description of what is blocked.

**MEC does not block access to lawful content.**

##### **Throttling**

Any practice (other than reasonable network management elsewhere disclosed) that degrades or impairs access to lawful internet traffic on the basis of content, application, service, user, or use of a non-harmful device, including a description of what is throttled.

**MEC does not intentionally degrade or impair access to lawful internet traffic.**

##### **Affiliated Prioritization**

Any practice that directly or indirectly favors some traffic over other traffic, including through use of techniques such as traffic shaping, prioritization, or resource reservation, to benefit an affiliate, including identification of the affiliate.

**MEC does not favor any traffic over other traffic.**

### **Paid Prioritization**

Any practice that directly or indirectly favors some traffic over other traffic, including through use of techniques such as traffic shaping, prioritization, or resource reservation, in exchange for consideration, monetary or otherwise.

**MEC does not engage in paid prioritization.**

### **Congestion Management**

This section describes any congestion management practices undertaken by MEC. These descriptions include types of traffic subject to the practices; the purposes served by the practices; the practices' effects on the end users' experience; criteria used in practices, such as indicators of congestion that trigger a practice, including any usage limits triggering the practice, and the typical frequency of congestion; usage limits and the consequences of exceeding them; and references to engineering standards, where appropriate.

**MEC monitors and proactively reinforces our network with additional capacity in areas where growth trends identify a need. If network congestion occurs, MEC employs various techniques to ensure a positive customer experience and fair distribution of network resources.**

### **Application Specific Behavior**

In this section, we are asked whether and why we might block or rate-control specific protocols or protocol ports, modify protocol fields in ways not prescribed by the protocol standard, or otherwise inhibit or favor certain applications or classes of applications.

**MEC Internet customers receive full access to all of the lawful content, services, and applications that the internet has to offer.**

**MEC does not otherwise block, prioritize, or degrade any internet sourced or destined traffic based on application, source, destination, protocol, or port unless it does so in connection with a security practice described in the Terms of Service and Acceptable Use Policy.**

### **Device Attachment Rules**

MEC is asked to detail any restrictions on the types of devices and any approval procedures for devices to connect to the network.

**MEC customers may attach devices of their choice to the MEC provided Optical Network Terminal. Any attached devices must be used in a manner consistent with our Terms of Service and Acceptable Use Policy. This can be found under Internet Policies on our website at [www.teammidwest.com/internet/resources](http://www.teammidwest.com/internet/resources).**

## **Security**

Any practices used to ensure end-user security or security of the network, including types of triggering conditions that cause a mechanism to be invoked (but excluding information that could reasonably be used to circumvent network security).

**MEC engineers are dedicated to managing our network to ensure that all customers receive the most secure online experience.**

**When malicious behavior is identified, MEC engineers employ various techniques to help provide a positive customer experience. Our security management techniques include ensuring that customer systems are not propagating viruses, distributing spam email, or engaging in other malicious behavior.**

**For more information related to network security, please review our “Acceptable Internet Use Policy” found under Internet Policies on our website at**

**[www.teammidwest.com/internet/resources](http://www.teammidwest.com/internet/resources).**

## **PERFORMANCE CHARACTERISTICS**

### **Service Description**

A general description of the service, including the service technology, expected and actual access speed and latency, and the suitability of the service for real-time applications.

**High speed internet service is provided via multiple 10 gigabit, geographically diversified, fiber connections to Tier 1 and Tier 2 backbone providers. Latency to MEC backbone providers are between 4ms and 9ms.**

**G-PON Fiber-To-The-Home/Premise technologies are utilized to deliver service to the end user premise (customer). MEC provisions the Optical Network equipment to account for approximately 5% of overhead on the customer’s fiber in order to achieve the published Tier-Speed with the exception of 1Gbps services. Under normal circumstances, a customer should expect to receive the speed of the service-tier purchased. Latency on MEC’s network is less than 4ms.**

**The "actual" speed that a customer will experience while using the Internet depends upon a variety of conditions, many of which are beyond the control of an ISP such as MEC. These conditions include:**

- 1. Performance of a customer's computer, including its age, processing capability, operating system, the number of applications running simultaneously, and the presence of any adware and viruses.**

2. **Type of connection between a customer's computer and modem.** For example, wireless connections may be slower than direct connections into a router or modem. Wireless connections also may be subject to greater fluctuations, interference and congestion. MEC does not recommend wireless modem connections for use with its higher speed tiers as many wireless connections do not perform at the speeds delivered by these tiers.
3. **The distance packets travel (round trip time of packets) between a customer's computer and its final destination on the internet, including the number and quality of the networks of various operators in the transmission path.** The internet is a "network of networks." A customer's connection may traverse the networks of multiple providers before reaching its destination, and the limitations of those networks will most likely affect the overall speed of that Internet connection.
4. **Congestion or high usage levels at the website or destination.** If a large number of visitors are accessing a site or particular destination at the same time, your connection will be affected if the site or destination does not have sufficient capacity to serve all of the visitors efficiently.
5. **Gating of speeds or access by the website or destination.** In order to control traffic or performance, many websites limit the speeds at which a visitor can download from their site. Those limitations will carry through to a customer's connection
6. **The performance of a subscriber-owned router installed.** Equipment performance may degrade over time, and certain devices are not capable of handling higher speeds.
7. **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.

#### **Impact of Non-Broadband Internet Access Service Data Services**

MEC is asked what non-broadband Internet access service data services, if any, are offered to end-users, and whether and how any non-broadband Internet access service data services may affect the last-mile capacity available for, and the performance of, broadband Internet access service.

**If a customer subscribes to MEC ViewLocal TV service, internet speed may be limited due to the bandwidth utilized.**

**If a customer subscribes to MEC phone service, internet speed will not be limited.**

## COMMERCIAL TERMS

### Price

Information as to pricing may be found under Our Services at [www.teammidwest.com/internet](http://www.teammidwest.com/internet). MEC has no usage fees. Additional information can be found on under Internet Policies on our website at [www.teammidwest.com/internet/resources](http://www.teammidwest.com/internet/resources).

### Privacy Policies

Our privacy policy can be found at [www.teammidwest.com/about/corporate-information/](http://www.teammidwest.com/about/corporate-information/)

### Redress Options

Please contact Midwest Energy & Communications at 800-492-5989 to discuss any issues or concerns. Our technical and account staff is available for questions 24 hours-a-day.