

Advanced Metering Infrastructure (AMI) Factsheet

Appalachian Electric Cooperative uses AMI technology to provide our members with better service through greater reliability, improved efficiency, and reduced operational costs—which enhances our ability to keep electric rates steady. AMI is safe, secure, and the only data it records is related to electrical use.

Why did AEC decide to convert to AMI?

Quite simply, because it allows us to provide better service to our members. AMI offers several distinct advantages over the old electro-mechanical meters. It results in fewer estimated readings, and thus more accurate billing. It allows us to monitor power quality, so we are able to respond more quickly to outage situations, and it gives us additional options to work with the individual member towards energy efficiency. As the electric utility industry moves toward retail “time-of-use” rates, having this technology in place positions us for that eventuality.

How common is the use of AMI among utilities?

AMI is quickly becoming the standard for electric utilities not just here in East Tennessee, but across the nation. Many systems neighboring AEC’s service area are currently using this technology, and virtually every utility will eventually follow suit.

Do I have a choice as to which type of meter is attached to my home or place of business?

No. AMI is the only metering system we use throughout our entire 45,000-meter service area.

How reliable are readings obtained through AMI?

Because there are no moving parts to wear out, the digital meters are substantially more accurate than the old electro-mechanical meters. AEC requires testing on every meter for accuracy, before it’s put into service.

I have heard that there are health risks associated with AMI. Should I be worried?

Numerous studies have been conducted by reputable sources concluding that AMI presents no measurable health effects. Radio frequency (RF) emissions produced by these meters are minimal compared to cell phones, microwaves, wireless routers, laptops and other commonly used devices. RF emissions only occur when data is being transmitted to and from your meter. The average meters’ total transmit time is approximately seven seconds per day.

My main concern is privacy. How is my data being used?

AMI meters monitor voltage and current *only*. Privacy may actually be enhanced through the use of AMI, by reducing the likelihood that an AEC employee will need to visit your home or business. AEC will not share your energy use data, nor will we sell it to a third party.

What is AEC doing to keep my information secure?

AEC engages in cyber insurance and protects its data with numerous safeguards. All data is password protected. AEC’s “Red Flag Policy” (3150) and “Privacy Policy” (3160) outline procedures in place to prevent identity theft and protect electronic data.

Since AMI readings are obtained remotely, is meter access still an issue?

Yes. When you signed a service agreement with AEC, you granted us access to the metering equipment on your property. Though they are attached to the exterior of your home or place of business, the meters themselves belong to the Co-op. We must have safe and unobstructed access to our equipment, 24/7—for purposes of making repairs or conducting maintenance.

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- By Action of the Board of Directors and in accordance with Cooperative By-laws, Appalachian Electric Cooperative utilizes an Advanced Metering Infrastructure (AMI) system, for the purpose of billing and power quality operations.
- The Cooperative's AMI system was completely deployed as of March 2013. This metering system serves all 45,000 plus electric services in the AEC service area.

What AMI Metering can do?

- AMI brings rapid and reliable two-way communications to electric meters for residential, commercial and industrial metering.
- AMI enables AEC to automatically receive interval consumption data, precisely monitor power quality and voltages, and instantly detect outages and verify power restorations.
- Two-way communication allows the Co-op to drive down costs, by reading consumer meters from the operations center. It also allows personnel to troubleshoot problems more efficiently.
- AMI provides AEC with better information, which leads to more accurate billing, greater reliability and more cost effective operations.
- AMI results in improved 24/7 operational performance, elimination of estimated bills, and superior service on every front, whether it's for settling disputes or providing members with up-to-the-minute consumption data for better energy management.

What AMI Metering can't do:

- Increase or decrease the amount of electricity that you consume.
- Detect or record verbal, telephone or internet conversations.
- Record photographic images of people or household activities.
- Function as a surveillance system or monitor personal activity.
- Verify home occupancy or identify vehicle activity.
- Control or operate your household appliances.

The electric meter, located on the property of Cooperative members, is a piece of equipment owned by AEC. Its purpose is to verify electric consumption and review power quality. Access to metering equipment by AEC must be maintained at all times. There is no "opt-out" option for metering. Energy data is transferred through a secure network. Advanced Metering Infrastructure poses no measurable health risks.

