



WHAT TO KNOW ABOUT ADVANCED METERS

You may have heard information recently about advanced meters – sometimes referred to as “smart meters.” Many electric and water utilities, including your own Columbus Water & Light (CW&L) are making use of this technology. Are you wondering what this industry shift means to you in Columbus? Read on for answers to some frequently asked questions.

Q. Is CW&L using advanced meters?

A. Yes. Following years of careful research and consideration, the Utility Commission approved a plan to transition to advanced water meters. Currently, CW&L is making use of advanced metering with all of our electric customers.

Q. How do advanced meters work?

A. Advanced meters use a safe, secure, and effective two-way radio frequency (RF) communications link that allows CW&L to provide proactive customer service, improve system reliability, and operate more efficiently.

Q. Why are these meters being installed?

A. These meters will allow our utility to operate in a more efficient and cost-effective manner, while providing a more proactive and reliable service to our customers. Additionally, CW&L’s current metering system is aging. Transitioning to new meters helps ensure that our water systems will stay in good working order for years to come.

Q. How is this advanced meter different from what we currently use?

A. The new meters are much more efficient when compared to the old meters. The new meters use cutting-edge technology to capture and automatically transmit time of day usage, negating the need for CW&L staff to read the meters manually every month. This allows CW&L staff to better utilize their time by providing other high value services for our customers.

Q. Will my privacy be compromised?

A. No. As always, CW&L takes seriously our obligation to protect your privacy. That commitment will not change with the use of advanced meters.

Q. What assurance do I have that my privacy is protected?

A. Wisconsin utilities are required to strictly protect customer billing information and CW&L works diligently to safeguard this data.

Q. Will the advanced meter make it possible to know what I am doing inside my home?

A. No. The only information collected by an advanced meter is how much water is consumed based on time of day, not how the water is used. Simply put, the information collected by an advanced meter will be used for the same purpose as the data from the old meters, measuring consumption and preparing a bill. In the future, advanced metering will allow customers to access and analyze their electric and water consumption online.

Q. How can advanced meters provide savings?

A. CW&L’s use of advanced meters will allow us to operate more cost-effectively. CW&L currently meters over 2,200 water services and our old system required sending workers out in trucks and on foot to complete monthly readings.

Advanced meters can also quickly alert us to problems that drive up costs for the Utility and our customers. CW&L will be able to quickly alert customers to costly water leaks and advanced meters will allow faster detection of theft and meter tampering. Advanced meter data will enable our customers to analyze their energy and water consumption, allowing them more control over their usage and bills.

Q. What has CW&L done to help keep down the costs of this initiative?

A. CW&L is saving significantly by joining with the other 50 locally owned, not-for-profit utilities served by our power supplier, WPPI Energy. WPPI Energy’s members are working together to cost-effectively share data management systems, expertise, support, and licensing for our advanced metering systems and software.

Q. How will advanced meters improve my utility service?

A. Advanced metering will enable CW&L staff to provide proactive customer service. Advanced metering allows faster detection of service related problems such as water leaks. The transition to advanced meters also helps ensure that our water systems will stay in good working order for years to come.

Q. Are advanced meters safe?

A. Yes. While advanced meters have become the subject of attention for their use of low-level RF, in-depth reviews of scientific literature by the World Health Organization confirmed that the small amount of RF energy produced by smart meters is not harmful to human health. (<http://www.who.int/peh-emf/about/WhatisEMF/en/index1.html>)

In the U.S., the Federal Communications Commission establishes the requirements for the use of the RF spectrum and acceptable exposure limits for the public. CW&L's advanced meters, which are manufactured by Elster/Honeywell, comply with and are far below these requirements, as well as international requirements, set by global bodies. CW&L takes your health and safety seriously and will never install equipment that would jeopardize the safety and well-being of our customers. Our relationship with you is our top priority.

Q. How significant is the RF signal from an advanced meter?

A. The low level of RF emissions associated with advanced meters is far smaller than that of other common household items. (<http://www.who.int/peh-emf/about/WhatisEMF/en/index1.html>) In fact, everyday devices such as cellular phones and microwave ovens typically cause far greater RF exposure than advanced meters. In terms of RF output, CW&L's advanced meters (900 MHz) typically compare as follows to other common household wireless devices:

- Baby Monitor – 7X Greater
- Wii Remote Controller – 30X Greater
- Nintendo DS w/ Wi-Fi – 180X Greater
- Wi-Fi Access Point – 400X Greater
- Cordless Phone – 1,000X Greater
- Cell Phone – 10,000X Greater

(RF output is based on FCC47CFR1.1310, which averages exposure over 30 minutes of usage)

Furthermore, RF exposure decreases with distance from the device. CW&L's meters are typically in the basement, where higher-emitting devices such as a cell phone or microwaves are often operated in close proximity to the user. In addition, while other common household devices emit RF signals far more frequently, or constantly, CW&L's advanced meters typically will only transmit a signal four times per day and each transmission lasts for approximately one second.

Q. What is the timeframe for the CW&L metering conversion?

A. CW&L has already installed advanced meters in many of the larger commercial businesses. This has verified the technology and processes that will be utilized during full implementation. CW&L has completed the full implementation of the electric meters. The implementation of the water meters is expected to be completed over a four-year time period, as individual appointments with customers will be necessary to gain access to the water meter inside the residence. In an effort to save time and resources, we ask that customers cooperate with CW&L staff to schedule appointments in a timely manner.

Q. What if I have questions or want more info?

A. Please call 920-623-5912.