

General Information

What is AMI?

Benton PUD's Advanced Meter Infrastructure (AMI) is a state-of-the-art technology that enables utilities to read, disconnect and connect meters remotely and to detect individual customer outages quickly using a wireless communications network. Information derived from the AMI system can be used to improve electric system performance, customer service and operational efficiency.

Why is Benton PUD installing AMI?

AMI will help Benton PUD provide new and improved customer service and reduce overall costs. Benefits to our customers include quicker response to outages, more accurate bills, better energy management and utility savings are passed on to our customers.

How does AMI benefit Benton PUD?

AMI can offer applications that would ultimately enable both Benton PUD and our customers to use energy more efficiently. AMI will provide more data, giving us more information to improve the operation and maintenance of our system, as well as provide information for power supply decisions.

How does AMI benefit our customers?

Once the system is fully deployed, the meters will provide:

- Better information concerning electric usage
- Faster service for connects and disconnects, in most cases
- Automatic outage detection enabling proactive dispatch of crews
- Reduced need for Benton PUD to access customer property
- Fewer meter reading errors and fewer estimated meter reads
- Improved verification of electric service restoration

How much will this cost?

Based on initial estimates, the project cost would be approximately \$10 million, with the expectation that the new meter system would pay for itself within ten years. Once the system is fully operational, annual net savings to Benton PUD are projected to be approximately one million dollars.

What is the schedule for AMI?

Installation of the AMI system began January 2009 with completion projected for 2012.

Are other utilities going to AMI? Yes. AMI is the new direction many utilities are taking for meter reading and to improve overall system performance. Northwest utilities including Cowlitz PUD, Umatilla Electric, Grays Harbor PUD, PGE and others have implemented or are in the planning stages of AMI.

What impact will the AMI project have on staffing levels?

As AMI is deployed across our service territory, there will be a reduction in staff that currently supports manual meter reading. Benton PUD is working with these employees to find opportunities to minimize the impact on them.

How much radio frequency emissions do the new meters transmit?

Sensus FlexNet meters, installed by Benton PUD, transmit very small amounts of radio-frequency (RF) energy. The smart meters use wireless communications to transmit data on electricity use, report outages and enable connection and disconnection of service. Radio-frequency exposure levels from the new smart meters, even at a close range, fall substantially below the guidelines set by the Federal Communications Commission (FCC) for the general public.

The new meters are programmed to transmit data once every four hours for a fraction of a second with a power of two watts resulting in RF energy that is less than what results from typical cell phone use.

A recent study (Radio-Frequency Exposure Levels from Smart Meters: A Case Study of One Model - Feb. 2011) by the Electric Power Research Institute is available. The report includes the EPRI research that addressed RF measurements conducted at a manufacturer's test facility, detailed characterization of RF emissions from individual meters under laboratory conditions, analysis of individual smart meter activity from more than 53,000 meters deployed in the Southern California area and measurements of RF in a variety of ambient residential and community environments.

Are the electromagnetic fields produced by Benton PUD's wireless smart meters harmful to my health?

The National Council on Radiation Protection and Measurements (NCRP Report No. 86) and the Institute for Electrical and Electronic Engineers (IEEE C95.1 1991) are two entities referenced by the Federal Communications Commission in setting their radio-frequency energy exposure limits. NCRP and IEEE have extensively reviewed the biological and health literature related to radio frequency electromagnetic fields (EMF) and have concluded there are no confirmed effects below heating thresholds. Like many of the wireless communication devices we enjoy every day, the smart meters the District is deploying operate in a frequency band and at a power level that does not begin to approach the energy needed to produce tissue heating. So short of heating effects which occur with some types of EMF generating devices (microwave ovens for example), there are no confirmed biological effects in humans.

Questions Regarding Installation

How will I know when I will I get a new meter? All customers will be notified by mail prior to the installation of a new meter. After the meter is installed, a notification will be left at your door.

Installation will take place Monday through Friday, 8:00 a.m. to 4:30 p.m.

What will happen when my meter is installed? Benton PUD installers will come to your door prior to installation. They will drive clearly marked Benton PUD vehicles and carry photo ID. If no one is home, they will complete the work and leave a notice on your door.

Once the new meter is installed and operating, meter readers will no longer visit customers' property to read meters; however, personnel may visit the meter periodically to perform safety inspections, routine maintenance, or meter testing. Meter locations will not change and need to remain in an open, easily accessible location.

Will my power go out when the meter is installed?

When the meter is installed at a residence, the power will normally be interrupted a very short time (approximately five minutes).

Not all commercial/businesses will experience an outage during installation but if an outage is needed, Benton PUD will set an appointment with the customer for meter installation to minimize business interruption.

Will the new meter change my bill? Because the new meters replace aging electromechanical meters which tend to slow down as they get older, customers may see a slight increase in usage on their monthly.

What type of information is being transmitted by the new meter? Energy usage is transmitted to Benton PUD through encrypted secure signals. Personal data will not be transmitted so customer information will remain private and secure.

Can I set an appointment for the meter installation? To install the meters as efficiently as possible, the meters will be installed using meter reader routes enabling installers to quickly move from location to location. The routes where meters will be installed will be identified several weeks in advance and notification letters sent to each customer.

I had a note [green door-hanger] on my door with the box checked....

- **“We were unable to complete the installation and will return on ____.”** This notice is to let you know Benton PUD staff was at your property and that they need to return to complete their work. The notice is a courtesy to let you know they were there and will return.
- **“Please contact us so that we complete the installation”. Why?** The installation crew was unable to complete the installation and needs to make contact with you. Please call the number indicated on the note (585-5381).

With the new meter, can I build around it or conceal it? No. The meters still need to remain in an easily accessible and visible location to ensure accurate reads by the system. Meters will be periodically checked by Benton PUD personnel.

We have someone in our home on a life support system and are concerned about the interruption of power. What should we do? A customer with a “life support” can make an appointment for the installation of the new meter. Please call 585-5381.

I am concerned about the computers [or other power sensitive equipment] at my business will be impacted or damaged by a power outage [or surge] during the installation. The meters will be installed by appointment for businesses to minimize any impact to businesses. All customers are encouraged use proper surge protection on sensitive equipment and to turn off computers when not in use. Also, not all commercial businesses will require an outage.

I am concerned about the computers [or other power sensitive equipment] at my home will be impacted or damaged by a power outage [or surge] during the installation. You will be notified by mail that your meter will be replaced prior to the installation team visiting their property. All customers are encouraged to use proper surge protection on sensitive equipment and to turn off computers when not in use. To be efficient, it is not possible to schedule appointments for residential installation unless extenuating circumstances exist.