

Bolton Point Water Meter Upgrade Project Update November 30, 2016

The Bolton Point water meter upgrade project is nearing completion. Saks Metering installers have replaced 97% of the total meters. All meters must be upgraded by December 1, 2016 to avoid paying a quarterly fee.

Customers who have not yet upgraded their meter can call the Bolton Point Water System office at 607-277-0660 Extension 231 to schedule an appointment.

Our Automatic Metering Infrastructure (AMI) system is a complete metering program which will bring many benefits to the Commission and customers. The AMI system will allow Bolton Point staff to manage the entire water system by comparing weekly or monthly master meter readings with weekly or monthly customer meter readings for a particular tank zone. This would allow staff to determine how much nonrevenue water is lost in each tank zone. Staff will be able to offer improved customer service to customers by informing them of high demand on their account before bills are generated. Accounts are flagged daily when usage is constant or if usage occurs in a specific number of hourly meter readings. With the ability to detect leaks in a timely manner, staff can call or be dispatched to investigate water loss and prevent high water bills due to high usage. Customers will also not be required to read water meters. An AMI system will allow Bolton Point staff to provide monthly, weekly and hourly usage information to assist in billing disputes. These events may include lawn irrigation, filling a swimming pool, extra house guests and leaking toilets.

Water bills are now being sent out using the new meter readings. Your bill will show your old meter reading for the beginning of the billing period and at the time of the upgrade, along with the usage from the new meter. Meter read cards are no longer being mailed to customers who have upgraded their meters.

It is important to upgrade all water meters in order to achieve our goals of water system management and improved customer service.

Please contact Bolton Point to schedule your appointment for your meter upgrade. Appointments available during regular business hours Monday-Friday from 8:00 am to 3:00 pm. Customers with any questions about the AMI project are invited to contact Bolton Point General Manager Joan Foote at 607-277-0660 Extension 229

Bolton Point Water Meter Upgrade Project Update

The Bolton Point water meter upgrade project is now underway. Saks Metering have replaced over 6,600 of the 6,800 total meters. Reminder letters will soon be sent out to customers who have not yet contacted Saks Metering to set up an appointment. Thanks to all customers who have set up appointments!

Several questions have been asked about our project:

- Does the water meter upgrade cost me anything extra? – This project is part of our Capital Replacement/Improvement Program. A very small portion of the water rate is reserved for capital projects, which have included transmission water main, pump, motor, and filter replacements in our Bolton Point distribution system and water treatment plant. The water meter upgrade project is being funded as a capital replacement/improvement and there is no additional cost to the customer to upgrade their meter.
- How do I set up an appointment? – You can make an appointment by calling the Bolton Point office at 607-277-0660 Extension 231.
- What is Automated Metering Infrastructure (AMI) system? - An AMI system is a complete metering program which includes upgrading current water meters with a smart meter and endpoints which will transmit four meter reads per day. A Sensus FlexNet AMI system infrastructure includes base station data collectors and antennas which collect meter reads and send them to servers hosted by Sensus. Billing software allows our staff to print bills based on actual meter reads and also flags high demand. Our staff can notify customers to check for possible leaks soon after high demand is flagged, preventing high quarterly demand and high water bills.
- Are there any health concerns due to the radio frequencies (RF) produced by the meter or radio transmitter? - The new meter will replace your existing water meter inside your residence. The meter has no radio technology in the meter itself. A thin two-strand wire connects the water meter to a 901 MHz transmitter that is placed on the outside of your residence. The transmitter only produces RF when data is being sent. This occurs six times per day and each transmission lasts 107 milliseconds (or .1 second). The transmitter produces a power flux of 0.000015 mW/cm² at one yard away from the radio. In comparison to other typical power levels, a Wi-Fi Signal is 0.001 mW/cm² (67 times greater), a microwave is 0.0047 mW/cm² (313 times greater) and a cell phone is 0.19 mW/cm² (12,667 times greater) (Comparison data based on FCC average exposure standards which average exposure over 30 minutes of usage, information provided by Sensus Meters). The transmitter is powered by its own battery, which is expected to function for twenty years, so in order to conserve energy the RF is only produced when sending data. Total time for RF transmission is less than one-half second per day.
- What RF does the radio transmit signals at, what power level and how often is RF produced? - The RF is 901 MHz, transmitted at 2 watts of power every four hours.
- What information is sent from the meter and radio transmitter? The only information transmitted to the centralized database is hourly meter readings, meter ID number, Radio ID number and Latitude/Longitude location of meter.
- Does the water meter contain any additional technology such as microphones, pressure, humidity or temperature sensors? – No, the only information transmitted to the centralized database is hourly meter readings, meter ID number, Radio ID number and Latitude/Longitude location of meter.

- How often are meter readings taken and sent from the radio transmitter? - The transmitter is powered by its own battery (which is expected to function for twenty years), so in order to conserve energy RF is only produced when sending data. Hourly meter readings are taken and sent to the centralized database once every four hours (or six times per day). This is the only time RF is produced and extends battery life. This differs from smart electric meters which can send information every minute due to its connection to an electric power source.
- How can I be assured that the database used to store customer information is secure? - The database is hosted by Sensus Meters and is operated in a tier 4 data storage and security environment. A Virtual Private Network or VPN is also used for added security. A VPN is a method used to add security and privacy to private and public networks, like Wi-Fi Hotspots and the Internet. VPNs are most often used by corporations to protect sensitive data. The only information transmitted to the centralized database is hourly meter readings, meter ID number, Radio ID number and Latitude/Longitude location of meter.
- Can I still read my water meter on site? - Yes, the new water meters have a digital LCD readout where a manual reading can be taken.
- Can the new water meters be configured to send quarterly readings instead of hourly reading? - No, the main purpose of the Automated Metering Infrastructure system is to supply daily readings from all Bolton Point customer meters. Each water meter will be placed into a tank grid and the total number of gallons used will be compared to the total number of gallons supplied to each tank grid. This will allow for accurate accounting of water produced, water used by customers and unaccounted for water (water lost to leakage in the distribution system, firefighting, etc.) Currently, Bolton Point operates 23 water storage tank grids for 5 municipalities. Most water storage tank grids serve 2 or 3 municipalities and the municipalities may be on different quarterly billing cycles. This makes accurate accounting of water produced vs. water used vs. unaccounted for water impossible with our current metering and billing system. The secondary reason for the AMI system is to obtain automatic quarterly reads for billing all of our customers.
- What are the new water meters made of? – The new water meters are constructed of a composite material that does not contain lead. Most of the water meters currently in use are constructed with brass (low lead) bases or entirely plastic

Please contact Bolton Point within the next few weeks to schedule your appointment for your meter upgrade. There are appointments available during regular business hours, Monday through Friday, 8:00 am - 3:00 pm. Customers with any questions about the AMI project are invited to contact Bolton Point General Manager Joan Foote at 607-277-0660 x229

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