



# BWP Smart Grid

A New Era, the Same Commitment to You

The electric generators, poles equipment, and wires are referred to as the “electric grid.”

We can use the electricity we generate today in a smarter way, hence the name, “smart grid.”

Burbank is united with the nation to find sustainable ways to do business, lower dependence on foreign oil, develop clean renewable energy sources, and protect our water and natural resources. As BWP approaches 100 years of service to Burbank and plans for the future, our commitment to our customers remains the same as it has over the last century:

- Be accountable to you.
- Provide you and your family with safe, reliable, and affordable service.
- Be good stewards of our natural resources for the enjoyment of generations to come.

As demand for electricity continues to grow we need to plan to meet the growing demand for electricity in an environmentally responsible way.

The electric generators, poles, equipment, and wires referred to as the “electric grid” could be even more productive if we can use the electricity we generate today in a smarter way, hence the name, “smart grid.”

## What is Smart Grid?

The smart grid can be grouped into two main parts. The first is a modern electric meter system or smart meter that allows communication with the utility. Second are automated devices that monitor the miles of electric wires and equipment that deliver electricity to homes and businesses along with software programs that allow utilities to operate this system with greater efficiency.

The smart grid will give us the opportunity to fully use our electric resources and make efficiency improvements. For utilities nationwide, implementation of smart grid systems will ensure we're able to increase the use of renewable energy and be prepared for the growing use of products like electric vehicles and programmable smart appliances.

## Smart Meters

BWP has selected meters that only communicate with the utility to provide consumption information for efficient billing. As the marketplace matures, customers will have the choice and control to add more communications later to take advantage of new products and services.

## How does the meter communicate with the utility?

Throughout the city, approximately 600 small wireless repeaters will be installed on traffic signals, street lights and some power poles along Burbank streets. Smart meters will transmit information through several data collection devices and back to BWP's facilities via a secured, dedicated fiber optic network.

## Will smart grid devices interfere with other household equipment?

Smart meter interference with other home electronic devices is highly unlikely. Typically, electronic devices are designed to "share the road" and digital devices, like the electric meter, are designed to operate in this "noisy environment." BWP's communications use a higher radio frequency than most household appliances and will send information for less than one minute each day.

## Are smart grid systems secure?

All meter data and information is transmitted through BWP's dedicated, secured fiber optic network, and not the public Internet. Our network utilizes multi-layer authentication and encryption technology, consistent with the National Institute of Standards and Technology's recommendations for critical infrastructure. This same set of recommendations closely mirrors the data security levels used by the US Department of Defense.

## Will my data and privacy be protected?

**Absolutely!** No personal information is transmitted as part of the meter reading process and BWP will NEVER share your personal information with an unaffiliated third party or without your permission. Protecting your privacy and ensuring the security of your account information remains our highest priority.

## How will BWP pay for upgrades?

The total estimated cost to complete the upgrades is approximately \$60 million. BWP received a \$20 million federal grant in 2009 specifically for this initiative. We anticipate being able to pay a large portion of the remaining costs through operational efficiencies that will be enabled by the new systems. BWP will also offer new services and products to Burbank businesses and residents that will create additional revenues, which will help offset a significant portion of the costs and help keep rates low.

## Are smart meters accurate?

Yes, meter accuracy remains a primary concern for BWP. We will continue to hold our meter manufacturers to the highest quality standards and have all meters tested at the factory before they are shipped. In addition, meters are tested for accuracy by BWP technicians before they're installed. If a shipment has too many meters that fall outside BWP's guidelines, the entire order is rejected. In recent tests done in California, an independent consulting firm found smart meters to be more accurate than the mechanical meters they are replacing.

## Will smart meters make my bill go up?

In the future, the wireless technology, not the meter, will allow customers to access their own consumption data, should they choose. The usage information, more granular than the once a month data now available, will help consumers understand how they use electricity and water in their home or business. Consumers can then use this information to make more informed decisions. Research shows that this level of information consistently leads to 3% to 15% usage reductions.

## Am I required to get a new meter?

Yes, leaving the old meters in place creates four issues. BWP would need to secure consumption data from the old meters via more traditional collection methods which are not as efficient and add to staffing and costs. We'd need to maintain two separate rates and customer record systems adding further inefficiency and costs. We would not be able to detect whether an outage occurred at the property, delaying response

time to fix the problem. And, customers would not be able to take advantage of new pricing and program options in the future. Thus, leaving the existing meter is not operationally efficient, not cost effective and is contrary to BWP's commitment to keep costs down.

## How will this new system benefit me?

Longer term, the benefits of a modern infrastructure are significant. The community will benefit from increased water and energy efficiency, better utilization of resources, enhanced system efficiencies, integration of renewable energy, and faster response time in the event of an outage. Continuous improvement through modernization and enhanced operational efficiency are vital to ensure BWP's services remain affordable, reliable, and sustainable for all ratepayers.

**Choice and Control** – As the smart grid system is installed, you will be able to see your water and electric usage more than once a month. It's hard to make decisions when you don't have current and meaningful information. Ultimately, when these meters are tied to other upgraded systems, they will provide you more information and enable you to make choices and control your water and energy usage to better manage your monthly utility expenses. Should you choose, you can add communications to the meter to be able to communicate with future smart appliances giving you more opportunity to manage your lifestyle and resources.

**Efficiency** – With the smart grid systems, when you lose service we'll know without you having to call us. We can respond more quickly, analyze the problem, and restore your service faster. With this increased knowledge BWP will also be able to better predict our customer's energy needs. This helps to secure only those resources necessary to provide you with the consistent, reliable service that BWP is known for. Greater efficiency helps to deliver service to you at the lowest price possible.

**Speed and Privacy**– These new meters also eliminate the need for us to come to your home or business and onto your property every month. For those of you who like to keep your gates locked or have a family pet in the back yard, this means greater safety and security for your family, including your pets!

The electric meters will also have the capability for BWP to remotely connect your service without the need to schedule a representative to visit your property. This means a faster and more efficient response when you request utility service.

## Will I be able to read my new meter?

The new meters will be easier to read than ever! No more confusing clock dials that rotate in different directions! The meter will feature a LCD digital display which will display usage information.

## How will you read my meter?

The new meters allow us to get meter readings without having to be on your property at all. Your electric and water consumption data will be sent through our secure wireless network to BWP's offices. BWP may still come by occasionally to verify that all meters are functioning properly and that your utility service remains reliable and safe.

## What does a smart meter look like anyway?

Our new meters look very much the same as the old ones. If you still have an older meter with the clock-dials on the face, your meter will now have a new digital face on it. Some of the water meters will need to be fitted with an additional antenna on the lid of the meter box to help get a clear signal out. These antennas are very flat, thin, durable and similar to a lane marker on the freeway. These durable antennas are safe to run your lawn mower, edger, or other yard equipment over.

