

## SHELD's Meter Upgrade Program

Q. Why is SHELD undertaking a program to replace all electric meters?

A. Our current meters are nearly 20 years old, and like most electronics, they are reaching the end of their life.

Q. Will the same type of meter be installed?

A. The current meters are based upon a technology that is more than 35 years old and has limitations for the grid of the future. The new meters have features that will allow SHELD and its customers face these changes with confidence.

Q. How will the new meters be read?

A. The old, existing meters transmit their readings constantly every 7 to 30 seconds. These transmitted readings are received by our mobile unit (van) when it drives around town once a month. Since the existing meters do not know when the van is driving by, they must always transmit their readings. The new meters are programmed to send their readings every 6 hours to permanently installed receivers located on SHELD facilities and then onto SHELD's fiber optic network and back to our offices. This greatly reduces the number of radio transmissions.

Q. What are some of the new features that can benefit SHELD and its customers?

A. Since the founding of SHELD more than 100 years ago, outages were reported by customers, either in person or by telephone. This clearly is a less than optimum system, and technology has advanced greatly in the past century. The new meters will be able to automatically alert SHELD about an outage before we even receive the first phone call. This will allow us to respond and restore power quicker.

Q. Are there any other new features?

A. Yes, the new meters will also record the voltage levels at each home. These levels will be reviewed for proper values. If they are found to be outside of normal ranges, SHELD will correct them. The new meters will also provide interval data, the amount of power for a specific time. This information will be used to help manage the amount of load on individual transformers, with the goal of avoiding overloads and failures. The interval data will also be useful to gauge the impact of electric vehicle chargers, PV solar systems, batteries, and demand response programs.

Q. Will there be a power outage when the meter is replaced?

A. Depending upon the age of the customer's meter socket, some customers will have a short outage (1 or 2 minutes) as the meters are upgraded. Customers with meter sockets greater than 20 years old will most likely have an outage, and those with newer meter sockets will likely not have any interruption of service. If an outage is required, our technicians will try to contact someone in the house before the outage happens, or to reschedule a better time with them. If no one is home, we will leave a notice for when we will return.

Q. Will any SHELD employees lose their jobs because of upgrading the meters?

A. No SHELD employees will lose their job due to the meter upgrade program.

Q. Will SHELD use contractors for this work, and how many years will it take to upgrade the entire town?

A. It is expected that the process will take 2-3 years, and SHELD employees will perform the work. Our employees will be using SHELD vehicles, and they all have SHELD IDs.