New Enterprise Rural Electric Cooperative, Inc.

A Touchstone Energy® Cooperative

One of 14 electric cooperatives serving Pennsylvania and New Jersey

3596 Brumbaugh Road
New Enterprise, PA 16664-8814
814-766-3221 • 1-800-270-3177
FAX: 814-766-3319
Website: www.newenterpriserec.com

Office Hours
Monday through Friday
7 a.m. - 3:30 p.m.

Emergency Outage Number
814-766-3221
1-800-270-3177

From the General Manager/CEO

Cooperative development

By Mark Morrison

EARLY in the spring of 1975, New Enterprise Rural Electric Cooperative (REC) purchased a parcel of land in the town of Waterfall. This location would be the home of our Waterfall substation and serve cooperative members in Huntingdon and Fulton counties. That was 47 years ago.

The original supporting structure was built using utility poles and wooden crossarms with wire conductor strung to create a path to the distribution system. The use of wooden structures was common back then. Construction and maintenance could be done quickly with materials often kept on hand at the cooperative. Over time, however, weather and the elements would take its toll on this type of construction.

Fast forward to the fall of 2020 when we began planning a makeover of the Waterfall substation. We had several things we wanted to change with the old structure. The biggest challenge for our line crews was having enough work space to operate the equipment that had been added over the life of the substation. We also wanted a station that would require less maintenance and serve the membership for the next 50 to 60 years.

Over the winter months, we worked with our engineers on a general site design, necessary equipment and electrical requirements for a new structure. In early spring, we decided on a two-bay steel structure that would increase station capacity and provide redundancy in case of equipment failure. While this was a good first step, we realized that a temporary substation would make the construction site safer because we could remove some of the distribution equipment from within the fence to speed up the timelines. A site was chosen for the temporary substation, and its construction was completed by the second quarter of 2020.

In the fall of 2021, the first bay of the new substation was tested and put into service. The second bay was constructed and placed into service in the second quarter of 2022. The new substation is constructed of a steel supporting structure that sits on concrete piers. Aluminum bus bar carries electricity in the substation to distribution circuit protective devices. The upgraded Waterfall substation is a welcome addition to our plant and will serve the membership for decades.

New Enterprise REC upgrades Waterfall substation

TRANSFORMER ARRIVES: Crews direct the placement of the Bay 2 transformer at the site of the new Waterfall substation.

A WATCHFUL EYE: Crews set the Bay 1 transformer in place at the new substation site.

NEW AND IMPROVED: The new Waterfall substation is a two-bay steel structure that will increase capacity and provide redundancy in case of equipment failure.

OUT WITH THE OLD: The wooden Waterfall substation, above, served cooperative members in Huntingdon and Fulton counties since 1975. It was recently replaced with a new steel substation at the site.

ALMOST THERE: Construction nears completion at the new Waterfall substation, which is a welcome addition to the cooperative's plant.

WORKING SMARTER: A temporary substation was brought online during the Waterfall project to increase safety and efficiency.

Before you jump in: Consider potential electrical hazards

IF YOU own a pool or hot tub, you know there are several steps required to keep it clean and well maintained. One aspect of owning a hot tub or pool that homeowners often overlook is the electrical system, which can pose a significant and potentially deadly hazard.

When wet skin and surfaces are prevalent, the chance of electrocution increases.

The U.S. Consumer Product Safety Commission (CPSC) points out electricity powers underwater lights, pool equipment (e.g., pumps, filters, vacuums), extension and power cords, outlets and switches, devices, such as TVs, and overhead power lines.

To keep swimmers and hot tubbers as safe as possible, be sure to have the electrical system inspected, repaired and upgraded to local and National Electrical Code standards by a licensed contractor. Also, do not set up a pool (temporary or permanent) where power lines are overhead or within 25 feet of the water.

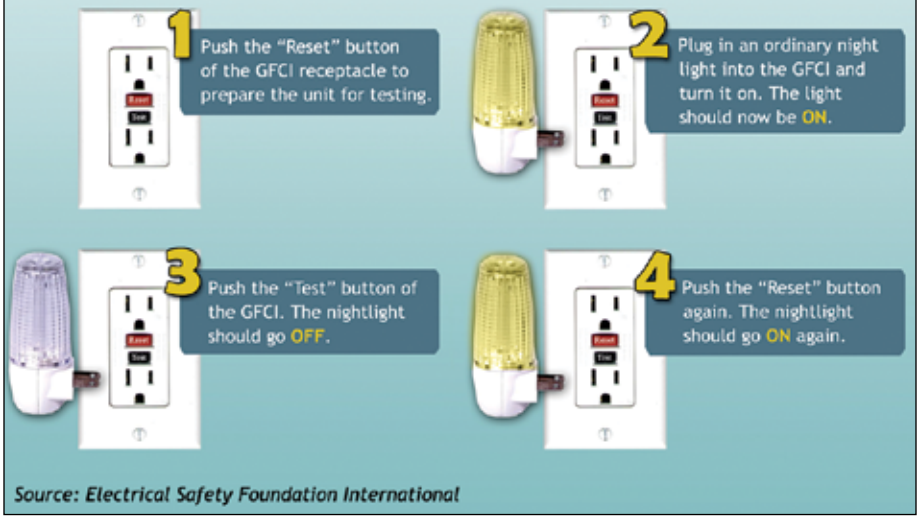
Electrical safety also includes:

- Making sure ground-fault circuit interrupters (GFCIs) are installed on the following locations:
  - underwater lighting circuits operating at 15 volts or more;
  - all electrical equipment, including 120- and 240-volt heaters close to the pool; and
  - all outdoor receptacles (outlets) within 20 feet of the water's edge.
- Testing permanently installed GFCIs monthly. Also, test those that are portable or connected to a cord before each use.
- Looking for signs of mold or other growth on the inside lenses of lights, which can indicate water leakage.
- Ensuring the power switch and GFCI for underwater lights are clearly marked and easily accessible in an emergency.
- Labeling power switches for pool, hot tub and spa equipment and lighting.
- Using battery-operated electronics whenever possible.
- Ensuring that hands and feet are dry while using electrical devices.
- Keeping long-handled tools and poles away from nearby power lines, including the drop-down lines to your home.
- Holding pool skimmers and other long-handled tools as low as possible to the ground.
- Keeping electrical cords, wires and devices out of reach and at least 5 feet from the water.
- Unplugging a device that has fallen into the water before touching it. Even submersible pumps designed to run under water may not be safe to use when someone is in the water.

How to test electrical outlets

Since the 1970s ground fault circuit interrupters (GFCIs) have saved thousands of lives, helping cut the number of home electrocutions in half. The safety devices prevent deadly shock by quickly shutting off power to the circuit if the electricity flowing into the circuit differs from the amount returning. The safety devices should be used in any indoor or outdoor area where water may come into contact with electrical products.

GFCIs should be tested once a month to make sure they're working properly. To test a device, follow these four steps:



Source: Electrical Safety Foundation International

What to look for

When shocked, swimmers may feel a tingle or other odd sensations, experience muscle cramps or may not be able to move. You might also notice that underwater lights are not working properly.

If you think you are being shocked while in the water, move away from the source of the shock and get out of the water. If possible, exit without using a metal ladder; touching metal may increase the risk of shock.

If you think someone in the water is experiencing an electric shock, immediately turn off all power. If the power is not turned off, rescuers can also be shocked or electrocuted. After the power is disconnected, call 911 or have someone else make the call.

For more about electrical safety, visit SafeElectricity.org.