Pitt and Greene EMC JULY 2023 11

JULY23

12

13

Where customers have a choice

Pitt and Greene Electric Membership Corporation

A Touchstone Energy® Cooperative 🔨

A MESSAGE FOR YOU

EVP and General Manager

The Short Story On...

Summer Electric Bills

Avoid High



Safety Above All Else

"Safety" is a universal word that is mentioned often and used loosely. Communities large and small as well as companies across all industries are committed to safety. Unfortunately, when it really counts, steps to keep the public, workers, athletes and loved ones safe are often ianored in the interest of expediency or convenience.

However, safety is a serious issue, especially when it comes to electrical safety. For Pitt and Greene EMC it's a number one priority. Over time, Pitt and Greene EMC has created a culture of safety by putting our employees' safety and that of the community above all else. We strive to deliver affordable and reliable electricity to our members but equally important, we want to return our workers home safely to their loved ones. To do this requires ongoing focus, dedication and vigilance.

Following leading national safety standards

Working with electricity is an inherently dangerous job, especially for lineworkers. We establish and follow safety protocols based on leading national safety practices for the utility industry. We require our lineworkers to wear specialized equipment when working next to or with power lines. There are specific protocols that our lineworkers fol-



low when dealing with electricity. Our safety team has regular meetings where they discuss upcoming projects from a safety perspective. They monitor and track near-misses of accidents in order to understand them, share "lessons learned" and improve in the future.

We encourage all of our crews to speak up and hold each other accountable for safety. By cultivating a culture of openness, we promote problem-solving with regard to safety, rather than defaulting to a blame game. We examine the information and data gathered from near-misses and accident reports to discern patterns and use safety metrics to improve in those areas where we have fallen short. As appropriate, we brief contractors on our safety protocols and set expectations for their engagement.

Keeping the community safe

Each year thousands of people in the United States are critically injured and electrocuted as a result of electrical fires, accidents and electrocution in their own homes. Many of these accidents are preventable. Keep yourself and your community safe around electricity.

Don't attempt electrical DIY projects or overload your outlets. Report downed power lines, and report anything that may look suspicious near substations and padmount transformers. Be mindful when it comes to electrical safety. Pause and take the extra time to plug into safety.



The Short Story on...

Solar Panels

Solar panels contain photovoltaic cells that convert sunlight into electricity. Sunlight hits the solar panels and generates a direct current. The direct current flows to an inverter, which converts it to an alternating current. The alternating current flows from the inverter to the home's breaker box, where it's used to power appliances and electrical devices in your home.

Solar panels do not store "energy" sunlight. Therefore, if the sun is not shining, they are of no assistance.

Solar power disappears completely every night and drops 50 percent or more during cloudy days and rainy days.

With this being said, to have reliable and continual electricity, conventional power stations will still be needed to backup solar when solar is not available.

Existing power stations are designed to operate continuously. When solar is online, these power stations have to follow the fluctuations in solar power, resulting in an increase in operating and maintenance cost. Efficient combined-cycle gas turbines, such as we have now, can be replaced by open-cycle ones because they can be throttled up and down easily to back up the rapidly changing output of solar farms. But open-cycle gas turbines burn about twice as much fuel as combined cycle gas turbines. So how is switching to high-emission machinery as part of an effort to reduce emissions going to reduce emissions, the answer is it's not.

The US has committed to "net zero" emissions of carbon by 2050 and our legislature has enacted legislation forcing utility companies to comply. In order to achieve this goal many coal plants have been shut down; nuclear power plants are in question as well as natural gas. Building more renewables such as solar will not replace fossil fuels alone. And on a cold winter night or hot humid summer night, well, solar isn't going to do anything at all.

In 2007, coal supplied about half of all generation on the U.S. power grid. In 2022, that figure dropped to 20 percent, behind natural gas and renewables when combining the generation shares from hydroelectricity, wind, solar, geothermal and biomass.

Coal and nuclear, if available today as it was in 2007, would continue to offer affordable and dependable electricity for years to come. There will never be enough solar, battery storge or wind to fill the gap that has been created. Reliable resources have been decreased as the population and the need for more reliable energy increase. This will have an inevitable effect—power prices will increase, making everything more expensive and there will likely be frequent blackouts in our future.

Battery Storage

Will this keep everything running in your home during a power outage. The answer is NO. They may run your appliances for a few hours at best. Heat and Air systems require high capacity energy to start the system. Battery storage units may fail to start that AC unit.

Electric Vehicles

Pros of Electric Vehicles

- Energy efficiency.
- Reduce emissions.
- Lower maintenance.

...continued on next page

Cons of Electric Vehicles

- Can't travel as far.
- "Fueling" charging takes longer and varies with the charging outlet.
- The vehicle as well as upfront cost can be more expensive.

Charging outlets needed for Electric Vehicles

Several are available. What are the differences in the charging outlets?

Level 1-Standard Outlet

- Plug into a standard 120V wall outlet.
- **** Charges 3 to 5 miles per hour.
- 8 to 10 hours of charge to drive up to 40 miles.

Level 2–240 Volt Outlet

- 4 to 8 hours to receive a full charge in an electric vehicle.
- 1 to 2 hours to full charge in an electric and gas vehicle.
- **2**5 miles of range per hour of charge.

DC Fast Charge

These chargers are located at public locations and have a much faster charging time. There are 3 types of connectors that can be used at a DC Fast Charge and depends on the vehicle.

- CCS Combo—charges up to 160 miles in 20 minutes.
- CHAdeMO—charges up to 67 miles in 30 minutes.
- Tesla Supercharger—charges up to 200 miles in 20 minutes.

It does cost to drive electric vehicles. Infrastructure such as charging stations need to be put in place along roads and at businesses. Consumers will need to have the appropriate plugs in place at their residence for charging. The power pulled to charge that vehicle will be reflected on the consumers utility bill.



Energy Efficiency TIP OF THE MONTH

This planting season, include energy efficiency in your landscaping plans. Adding shade trees around your home can reduce surrounding air temperatures by as much as 6 degrees. To block heat from the sun, plant deciduous trees around the south side of your home. Deciduous



trees provide excellent shade during the summer and lose their leaves in the fall and winter months, allowing sunlight to warm your home.

Source: energy.gov

Avoid High Summer Electric Bills

Don't let warmer weather turn into "summertime blues" when your monthly electric bill arrives. Following are some energy-saving tips.

- Adjust the thermostat. During warmer months, raising the thermostat a few degrees can save money. Set the temperature between 78-80 degrees Fahrenheit, and you could save up to 8 percent on monthly cooling bills. Programmable thermostats make it easy to save by offering four pre-programmed settings to regulate a home's temperature throughout the year.
- Be a "fan-atic." While they don't replace air conditioners or heat pumps, fans move air and help you feel more comfortable. On milder days, fans can save as much as 60 percent on electric bills. Fans cool people, not rooms, so turn them off when you leave.

Regular maintenance is essential. Have your HVAC systems serviced annually by a NATE (North American Technician Excellence)certified technician. This HVAC professional will check your entire system to make sure it runs efficiently. This will help extend the life of the system and save money.

Time to replace your cooling system? TogetherWeSave.com recommends replacing it with an ENERGY STAR- qualified model. Doing so will reduce your energy costs. Bigger isn't always better. Too often, cooling equipment isn't sized properly and leads to higher electric bills. A unit that's too large for your home will not cool evenly and might produce higher humidity indoors. Avoid getting burned this summer by high energy bills. Visit energysavers.gov OR Touchstone Energy® Cooperatives energy-saving website, TogetherWeSave.com, for more money-saving ideas.

How Americans Use Electricity

The latest data from the U.S. Energy Information Administration shows the combined use of clothes washers and dryers, dishwashers, small appliances and other electrical equipment (noted as "all other uses" below) accounts for the largest percentage of electricity consumption in American homes.



Pitt & Greene EMC will be closed Tuesday, July 4, in observance of Independence Day.



Published monthly by Pitt and Greene EMC

Co-op Office Hours

Monday–Friday, 8 a.m.–5 p.m. 252-753-3128 | 1-800-622-1362 | 252-747-7600

POWER OUTAGES & EMERGENCIES

During weekends, holidays and after office hours: 252-753-8778

De lunes a viernes de 8 a.m. – 5 p.m. 252-753-3128 | 1-800-622-1362 | 252-747-7600

CORTES DE SUMINISTRO ELÉCTRICO Y EMERGENCIAS:

Durante fines de semana, días festivos y después del horario de oficina: 252-753-8778