PowerLines

YOUR CENTRAL ELECTRIC COOPERATIVE NEWS CONNECTION

Central Electric Cooperative

A Touchstone Energy[®]
Cooperative



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Electricity 101BY MATTHEW BOSHAW

CEO & General Manager

As I write this at the end of September, Hurricane Helene made landfall just last night, leaving over four million meters out of service across five states. This was a category four hurricane—the most powerful to hit the United States so far in 2024. Fortunately, it appears that our area will not be significantly impacted by this catastrophic weather, at least as of now.

I bring up this event because it presents an opportunity to discuss both the electric system and storm safety. I often describe myself as an electricity enthusiast, or more broadly, a utility industry buff. While this has served me well in my chosen career, I sometimes assume that everyone shares my interests in the electric industry. However, I've realized through conversations that this isn't the case. If you've seen the movie "Airplane," picture Ted Striker sharing his backstory with fellow passengers; that's often the reaction I get. Some of the most intelligent people I have met know very little about electricity because they simply prioritize other, more important matters.

Since storm safety is more pressing,

let's address that first. Electricity is an amazing resource, but when equipment is subjected to 130 mph winds and debris, it can become dangerous and even life-threatening. While movies often dramatize electrical hazards with explosions and sparks, the reality of them can be much harder to detect. Electricity is colorless, odorless, and usually silent. It always seeks a path to the ground, and you are an excellent conductor, so if you come between it and that path, it can pass through you to get there. The best practice is to assume that all electrical wires and equipment are energized until qualified professionals confirm they are not. Even the most experienced workers in this business treat any potentially energized equipment with caution—if it's not visibly open, we test and ground it.

Our members tend to be community-minded people that look for ways to help those around them. Following storms, they are ready to assist in clearing debris from roadways or offer help to first responders in a number of ways. My best advice for those wishing to help around electrical facilities is to follow a few simple guidelines: keep a safe distance, contact the cooperative or emergency services, and, if necessary secure, the scene so that others are not in harm's way. Storms can introduce many

hazards beyond electricity, so it's always good to stay alert of hazards and take precautions. Remember, the first rule for any first responder is to avoid becoming a victim themselves.

A widespread storm like Helene provides a unique opportunity to explain the broader electric system and its vulnerabilities. The electric grid can be divided into three parts: generators, transmission lines, and distribution facilities. Generators, as the name implies, generate electricity. They can utilize various sources—nuclear, natural gas, coal, solar, hydro, and more—gathering electrons and using voltage to create flow (current) into the transmission system. This transmission network, consisting of large structures and high-capacity wires, transmits power to the distribution system, which includes the poles and transformers you're likely familiar with. The distribution system then supplies power to homes and businesses. There are substations and large transformers connecting each segment of this system allowing us to transform the power to the most efficient and usable level for each area. I apologize for the oversimplification, but as Albert Einstein said, "If you can't explain it simply, you don't understand it well enough."

A storm, especially one as powerful as Helene, can damage or disrupt service across any segment of the grid, leading to various hazards and can compound restoration efforts. As the most visible restoration efforts are being completed in the distribution system, there may be repairs needed at both the transmission and generation level too.

The hard-working men and women restoring outages at each level of the system are dedicated to restoring this essential service as quickly and safely as possible. Hopefully, this brief overview of electricity will help you better understand the process and stay safer in the event of storm damage.

MANAGEMENT **TEAM**

Matthew P. Boshaw

CEO & General Manager

Chester Conti

Director of Finance and Accounting/CFO

Lisa A. Hoover

Director of Member Services *

Christopher W. Kossman

Director of Information Technology

Fred E. Terwilliger

Assistant General Manager/COO

HAPPY THANKSGIVING

From Central Electric Cooperative

CEC Holiday Closures:

Nov. 28 for Thanksgiving (normal business hours resume Nov. 29)

Dec. 24 at noon in observance of Christmas Eve

Dec. 25 for Christmas Day (normal business hours resume Dec. 26)



Dec. 31 at noon in observance of New Year's Eve

Jan. 1 for New Year's Day (normal business hours resume Jan. 2)





Youth Tour **Applications are Open!**

High school juniors: join students from across the country for a FREE week-long trip to Washington, D.C.! Youth Tour applications are now open and we are looking for students to participate in this leadership-focused, once-in-a-lifetime, all-expenses paid trip. CEC will sponsor students to participate in Youth Tour from June 16-21, 2025. This fun, and educational trip will provide students with resume-building skills and activities. Visit www.central.coop for more information and to apply!





LEARN

Students will get to immerse themselves in our nation's history and discover their place in our democracy.

Youth Tour students have the opportunity to visit the Capitol Building and participate in a meeting with their elected representative where they can ask questions, and learn about the work done on Capitol Hill.

They'll also learn about co-ops, our nation, and the impact they have on their community and country!



EXPLORE

Students will explore D.C.'s many museums, monuments, and memorials. They'll experience sights honoring figures such as Martin Luther King, Jr., and Abraham Lincoln, and explore memorials dedicated to American conflicts like WWII, as well as Arlington National Cemetary.

They will experience sights like the Air & Space Museum, the Holocaust museum and events such as a dinner cruise on the Potomac and live theater at the Kennedy Center.



CONNECT

Students will experience the excitement of Youth Tour alongside students from all over the country! Lifelong friendships have begun from sharing Youth Tour experiences.

You'll join a network of Youth Tour alumni that includes senators and CEOs. Youth Tour opens students up to networking connections, valuable experiences, and exclusive scholarships, as well as an amazing trip they'll never forget!



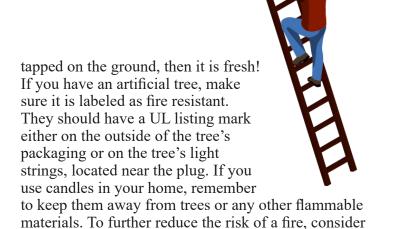
Deck the Halls with Safety

by Kayla Clark, Training and Events Specialist

he holiday season fills our service territory with festive decorations, lights, and music! We see all types of décor, from twinkling lights to inflatable Santas! While decorating is usually a fun-filled activity with family, accidents happen, and it is important to prevent them by keeping safety in mind.

Before transforming your house with festivities, a plan should be created. When purchasing lights, buy lights that are tested for safety by the Underwriters Lab (UL). A red UL tag certifies that the lights are safe for both indoor and outdoor use. A green UL tag certifies that the lights are for indoor use only. Consider where your decorations will go and how much power will be needed to safely operate them. If you are replacing a bulb or repairing a light, unplug the lights prior to the repair. Before decorating, be sure to check over all items for damage or faults. Avoid overloading outlets – follow the manufacturer's instructions for stringing together lights and using power strips. Using a power strip with built in surge protection is a simple way to protect an outlet.

Christmas trees can be a fire hazard if not inspected and maintained correctly. When choosing a live tree, check its freshness by testing the needles. If they are difficult to pull off and if the tree only drops a few when



When putting up lights, a ladder is usually involved. Before using a ladder, be sure to inspect it – read the safety information labels, check for loose or missing parts, and always use three points of contact. Be sure to stay away from power lines or other electrical equipment.

including battery powered LED candles in your holiday

After the holiday season is over and you are tearing down, inspect all items again. Discard any that are damaged or a safety concern. Make sure to store them in a dry place and are out of reach until next use. Taking these simple precautions can help keep your family safe!



Role: GIS/ Engineering Analyst

Employee Since: 2006

Employee Spotlight: **Josh Wallin**

collection instead.



What do you do at CEC? I maintain a digital map of our electric system and identify problems between data systems in CIS, ABS, and OMS.



Why did you choose a career in Engineering? I enjoy problem solving and GIS is all about finding out how to get the information you wanted from different types of data.



What is a unique experience you have had while working at CEC? I watched our off road digger bury itself to the hood in mud during the Thanksgiving ice storm at Alum Rock and witnessed the methods used to get it out again.



What is a fun fact about yourself? I am scuba certified.



What is something you are most proud of? I hiked the entire Appalachian Trail (2,190 miles).

Power Protection: The UPS Advantage

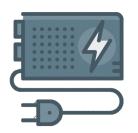
By: Izzy Cellucci, Communication Representative

et's talk about the UPS, or uninterruptible power supply, and why you should have one. In short, a UPS is a battery powered source that protects your devices from electrical disturbances and instability as it is designed to instantly supply power to devices when the power fails.

When an outage occurs, a UPS bridges the gap between lost power and the activation of a backup power source such as a generator, allowing you time to turn off your devices. When your power is on, the UPS also has built in surge protection to protect your devices. Many have their UPS connected to computers or Wi-Fi routers due to those devices being more sensitive to fluctuations in their electrical supply and susceptibility to lightning. Additionally, a UPS can be utilized for any electronics such as televisions, security systems, mobile devices, fish tanks, and more! In fact, CEC's Senior System Engineer, Bill Fesenmyer, states, "I highly recommend that everyone should have at least one UPS. I have several for my devices at home."

There are different types of UPS systems, each with their own capabilities and characteristics. A standby (offline) UPS is a system that waits until there is a power failure to switch to its battery's power. This one tends to be the most cost-effective model available and is the most common for households in need of basic backup power. Next, is the line-interactive UPS, usually found in small businesses. This and the standby are almost identical but a line-interactive is for more sensitive equipment. This means it can correct problems in the power supply when needed, however this ability causes it to carry a higher price tag. The double conversion (online) UPS model provides the best level of protection as it is constantly using its battery power instead

of switching. These models are often utilized for critical applications such as at a data center and are the highest price option.



When considering purchasing a UPS, the point you need to address is how long you want the backup power to last. The amount of time that the UPS can sustain a device depends on the size of it, but with research and planning for your needs, the proper model should allow enough time for an issue or concern to be resolved.

In the digitally connected world we live in today, whether you are in a home or a business, having stable and reliable power is more important than ever. For all the power outages and fluctuations that occur at, what seems to be, the most inconvenient times, an uninterruptible power supply is great to have to protect your devices. Your electronics will thank you and you can have peace of mind by becoming an owner of your very own UPS.





Shine Bright, Save Big: Ways to Cut Costs for the Holidays

by Connie Long, Member Energy Specialist

nce again, the year has flown by as we approach the holiday season. For some of you, this means decorating with lights and inflatable figures while others might prefer a simpler approach with gatherings of family and friends. Let me give you some tips that may help keep your energy costs down while you do your holiday planning.

Let's start with the lights. While they may look nice turned on it is always a good idea to set them on a timer. I love to drive at night and see all the lights, but during the day they are less noticeable. By using a timer, you can conserve energy by having the lights on only during evening hours when they are the most visible. Late at night is also a good time to turn them off, as no one is typically awake to enjoy them. If you prefer not to use a timer, you can plug your lights into a surge protector power strip and switch it off when the

lights are not in use to avoid phantom energy consumption.

As always, I recommend making the switch to LED lights. Not only are they brighter and long-lasting but also use less energy. LED lighting stays cooler to the touch than the old incandescent lighting which makes LEDs safer too. There is also the option of decorating without electricity. If you have children at home this would be a good time to spend quality time together and make homemade decorations. Anything from popcorn strings to colorful paper chains or wreaths. Using tinsel or metallic items helps reflect light, making your decorations stand out even during the day while conserving energy.

So, as you prepare for the holiday season, remember to balance festive cheer with energy conservation to keep both your spirits and energy usage in check.

Enter the CEC Christmas Lights Contest



ne of the best parts of the holiday season is seeing the glowing displays of lights strung across houses and yards all around. Twinkle lights, candy canes, reindeer, you name it! Many express their joy of the holidays with these kinds of festivities and we at Central Electric Cooperative love to see it all. With that in mind, it is time to unleash your creative and competitive spirits for the annual CEC Christmas Lights Contest!

The Contest is open to all commercial and residential CEC members. A photo or video of your display must be submitted by December 8th to participate. All participating members have the chance to win a prize upon entry. First place, also known as the Griswold Award, will receive a \$500 bill credit and \$500 donation to a charity of your choice. Second place will be given a \$250 bill credit, and third place will receive a \$100 bill credit.

Voting for the contest's winners is open to all CEC members and can be found on our website at www. central.coop. You can check out each entry and vote for your three favorites until voting closes on Dec. 20th. The winners will be announced on Dec. 23 on our website and in February's Power Lines Newsletter.

There are no limits to your creativity, number of lights, or novelties so don't hold back, however, do prioritize safety! Do not overload your outlets, check your wires and cords for any damage, and be mindful of ladder safety as you deck the halls.

Remember, this contest is not just an opportunity to showcase your Christmas spirit; it is a chance to bring our communities together in celebration. We encourage everyone to join in, both by creating your displays and by voting for your favorites. We can't wait to see this year's entries and celebrate the holiday season together. Have fun, be safe, and good luck!











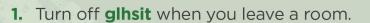


Do you have what it takes to be the energy efficiency MVP (most valuable player) in your home? When you take proactive steps to save energy at home, you can help your family save on monthly energy bills and help the environment—that's a win-win!

Read the sentences below and unscramble the bolded letters to complete the energy efficiency tips.

Check your work in the answer key.





- 2. Unplug smaller electronic devices like phone reahgesr when you're not using them.
- **3.** Reduce your **nesecr** time to save energy and spend more time outdoors.
- 4. Turn off the **reatw** while brushing your teeth.
- **5.** Keep doors and **swdwnio** closed when your home's heating/cooling system is running.
- **6.** When it's cold, wear an extra layer of **tohgncil** inside instead of adjusting the thermostat.

Answer Key: 1. lights 2. chargers 3. screen 4. water 5. windows 6. clothing



From the Kitchen of. Alison Butler

RECIPE: PUMPKIN CHOCOLATE CHIP COOKIES

INGREDIENTS:

3 C. sugar

Chocolate Chips (≈15 oz.)

1 1/2 C. Crisco shortening

2 eggs

1 large can of pumpkin puree

5 C. flour

3 tsp. baking powder

3 tsp. baking soda

3 tsp. cinnamon

3 tsp. vanilla

Instructions:

- Mix sugar, shortening, eggs, & pumpkin until smooth. Gradually add in flour, baking powder, baking soda, cinnamon, and vanilla. Add a pinch of salt.
 If dough is too sticky, add a bit more flour. Stir in chocolate chips.
- 2. Drop by rounded table spoon onto greased baking sheet. Make sure they are evenly placed.
- 3. Bake at 350° for 12-14 minutes. Let cool on baking sheet for 2 minutes. Cool on wire racks and enjoy!





Your Board of Directors

From left (back row): Robert Smith, President, Butler County; Jody Weaver, Vice President, Clarion County; Kenneth Durrett, Butler County; Richard Weaver, Clarion County; (front) Ken Etzel, Venango County; Althea Smith, Secretary/ Treasurer, Venango County; and Nancy Lendyak, Armstrong County.

central.coop/meet-your-directors

MISSION: CEC safely provides reliable and competitively priced electricity to our consumer-members and was established by and is committed to the communities we serve.



Member Services: 800-521-0570

Outages: 800-282-8610

Newsletter Editor: Izzy Cellucci

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