A Touchstone Energy® Cooperative

P.O. Box B
1564 S. 1000 Rd., Council Grove, KS 66846
620-767-5144
www.flinthillsrec.com

FLINT HILLS RURAL ELECTRIC COOPERATIVE
NEWS

Flint Hills RECA

Board of Trustees

Shawn Potts
President

James Witt
Vice President

Korby Effland
Secretary/Treasurer

Dale Andres
Trustee

Cary Granzow
Trustee

Trey Hinkson
Trustee

Terry Olsen
Trustee

Roger Zimmerman
Trustee

Staff

Chuck Goeckel
General Manager

Member Services

- Viasat Internet Services
- Online Payment Options
- Outside Security Lighting
- Power Surge Protection
- Rebate Programs

For more information, call us at 620-767-5144 or visit our website at www.flinthillsrec.com.

This institution is an equal opportunity provider and employer.

FROM THE MANAGER

Serving up Savings

The holiday season is just around the corner and soon, festive music will flood the airwaves, sparkling lights and decorations will adorn homes and businesses, and good tidings will abound.

The holidays also bring a frenzy of decorating, cooking and family gatherings, and amid the hectic hustle and bustle, you may receive higher-than-usual energy bills.

Keeping this in mind, I thought this month would be a good time to remind Flint Hills REC members of a few programs and efficiency tips to help lower your monthly energy use.

Programs Designed to Help You Save

Winter months typically bring some of the highest energy bills of the year. Making minor, low-cost improvements, like weatherstripping exterior doors and caulking around old, drafty windows, can positively impact energy bills. If you're not sure where to start, visit our website at www.flinthillsrec.com/together-we-save to learn more about what you can do.


Chuck Goeckel

Our member services team is available to help, so I encourage you to give us a call if you'd like to learn about specific programs and services that can lower your bills.

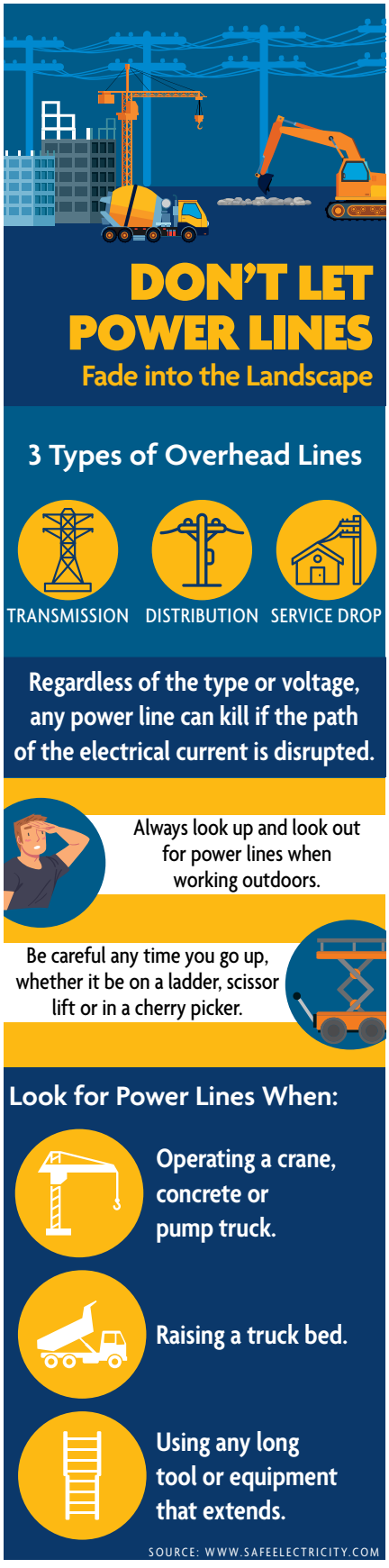
Be Festive Without Breaking the Bank

Each year, often as soon as we finish the Thanksgiving turkey, we begin preparing and placing our favorite

Continued on page 12B ▶

Offices Closed for Thanksgiving

Our offices will be closed Thursday, Nov. 23, and Friday, Nov. 24, in observance of the holiday. From our co-op family to yours, Happy Thanksgiving!



Serving up Savings

Continued from page 12A ▶

Christmas decorations. With holiday lights adorning our home for well over a month, we switched to LEDs to save energy.

LED holiday lights use 88% less energy than incandescent holiday lights. To put that into perspective, the Department of Energy estimates that with standard holiday decorations, LED lights typically increase energy bills by about $5 to $7. But with incandescent lights, energy bills will typically increase by $33 or more. For homes that go above and beyond with incandescent holiday lighting (think Clark Griswold), energy bills could increase by as much as $350. Beyond energy savings, LEDs provide additional benefits, such as being shock-resistant, shatterproof and cool to the touch, making them safer for the home.

You can also lower energy use by conveniently managing holiday lighting. Smart light timers can help you save energy by connecting to a smartphone app or voice assistant to program lights to turn on and off at set times. If you don't use smart home technology, you can still save energy by using traditional timers.

Additional easy ways to save during the holiday season include turning off overhead lights and using your Christmas tree to illuminate your home. If you have a fireplace, remember to close the flue when you're not burning a fire to ensure heat doesn't escape through the chimney.

Cook Up Energy Savings in the Kitchen

If you plan to have family and friends over this holiday season, cook up energy savings by using small countertop appliances like microwaves, air fryers and slow cookers when possible, as they use much less energy than the stovetop or oven.

When using the oven, bake multiple dishes at once for maximum efficiency. After all, it takes as much energy to cook one dish as it does to cook several. Turn the oven off a few minutes before the recipe's end time and allow the residual heat to finish baking the dish. Once the food is done, leave the stove door ajar to allow the residual heat to warm the room. When using the stove top, match the pan size to the burner to maximize the stove top's efficiency.

I hope a few of these tips will be helpful as we approach the holiday season. Remember, we're here to answer any questions you have about managing energy use or your monthly bills. With a little planning up front, you can find efficient ways to save on everything from holiday décor to your favorite soup recipes.

From your friends at Flint Hills REC, we hope you have a wonderful holiday season.

ENERGY EFFICIENCY Tip of the Month

The holiday season is upon us, and that means we'll be using more energy in the kitchen. When possible, cook with smaller countertop appliances instead of the stovetop or oven. Smaller appliances like slow cookers, air fryers and pressure cookers consume less energy. When using the oven or stovetop, match the size of the pot to the heating element and place a lid over the pot while cooking. The food will cook faster, and you'll use less energy. **SOURCE: WWW.ENERGY.GOV**

A LINEWORKER'S TIMELINE:

Restoring a Power Outage

BY JAMES BLUE, OPERATIONS MANAGER

"How long is it going to take?" Those are familiar words to all who work in the electric industry. It's a phrase I've been asked thousands of times in my career. It's the first thing people think when the lights go out. It doesn't take long sitting in the dark to realize how dependent we are on electricity and how much it makes our lives better and easier.

As a lineworker, it's always a good feeling to help people get their lights back on. I can remember times when I've been on storm or extended outages re-energizing neighborhoods and heard people in their homes cheering as their lights came on for the first time in days. No matter how tired I am or how long I've been working, that feeling will always make it worthwhile.

But what does it take to get those lights back on? Why does it sometimes take so long? We want to provide you with a better understanding of the process and the work Flint Hills REC line crews are doing to restore your power.

The electricity you use travels a great distance and goes through several steps to get to your home. It starts with a power plant that typically produces voltages of less than 30,000 volts. That voltage needs to be "stepped up" so it can travel long distances. That process starts in the power plant's substation and switchyard where a transformer will step up the voltage to 345,000 volts, or sometimes higher, and send it out on transmission lines to another substation.

At the next substation, a transformer steps down the voltage to 34,500 volts and sends it out to smaller, local substations.

Local substations are the final destination before the electricity reaches your home. Here electricity is stepped down to 7,200 volts that can then be delivered to the poles outside your home. Once it arrives outside your home, it is stepped down a final time to 120/240 volts that operate all the devices that power your life.

James Blue

What I just described is hundreds of miles of line and thousands of poles. That's a lot of exposure for something to happen and cause an outage. Just like your home, our system has breakers. Our breakers help us reduce the exposure of the line and allow us to split our system into sections. Doing so helps limit the size of the outages and allows us to keep as many people on as possible. Breakers also help protect equipment on the line. Ever wonder why your lights blink a few times before going off? That's the breaker trying to give the fault a chance to clear the line before they open for good, the power is off, and your local electric lineworker gets to work.

OUTAGE TIMELINE

LINEWORKER IS NOTIFIED
They ask questions to determine if it's an individual or section outage and its location.

CAUSE LOCATED — SAFETY FIRST
Once the cause is located, a safety briefing takes place, identifying hazards and locations of lineworkers and equipment. Lineworkers then isolate and ground the line to prevent backfeed.

REPAIRS COMPLETE
The lineworkers contact dispatch to get clearance to re-energize the line. Once dispatch confirms no one else is working on the line, the breaker is closed restoring power.

THE DRIVE
A crew is dispatched to the outage site. If after hours, lineworkers must travel from their homes, which often adds additional travel time.

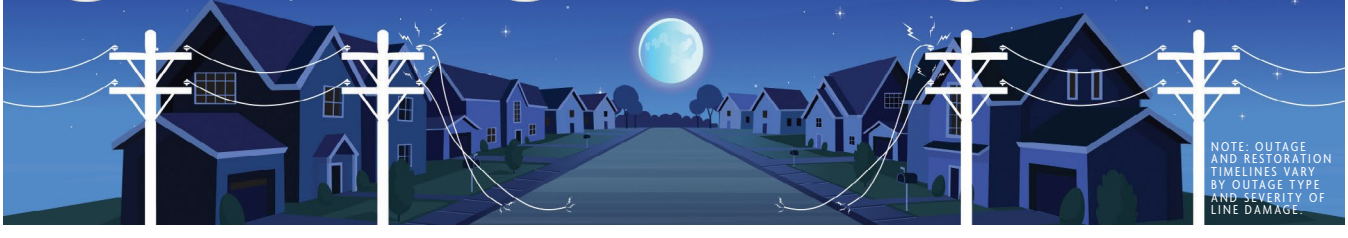
WORK BEGINS
Lineworkers take special care and awareness to remove objects causing the outage. While crews work to clear the line, materials required for repairs are located and in transit.

POWER RESTORED — OUTAGE OVER
Restoration time varies by outage depending on the cause, location and materials needed for repair.

ARRIVAL AND INSPECTION
Crews visually inspect the line for open breakers and cause of outage. Evaluating the outage is time consuming but one of the most important steps of restoration.

MATERIALS ARRIVE
Materials and equipment arrive onsite to make the repair. Broken material is removed, inspections performed and repairs made.

CREWS RETURN SAFELY HOME
Our goal is to restore power safely and efficiently and ensure co-op employees go home safe after work is complete.



NOTE: OUTAGE AND RESTORATION TIMELINES VARY BY OUTAGE TYPE AND SEVERITY OF LINE DAMAGE.

THE STEPS TO RESTORING POWER

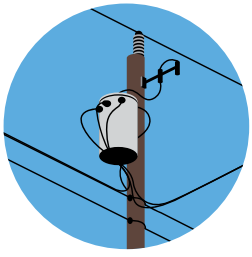
When the power goes out, line crews work hard to restore electricity as quickly and safely as possible. To ensure the process is done efficiently, line crews follow specific steps to restore power. Can you order the steps below to match how power is restored?

Hint: *Check your work in the answer key.*

Energy Explorers

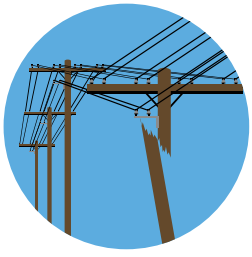
STEP # _____

Tap lines are inspected. These lines deliver power to transformers that are either mounted on utility poles or placed on pads for underground electric service.



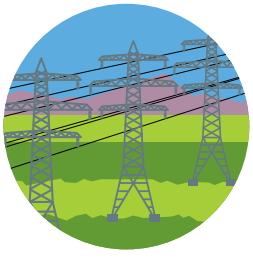
STEP # _____

Distribution power lines are inspected. These are the lines you typically see on the side of the road that deliver power to communities.



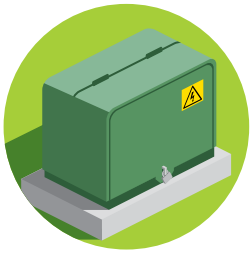
STEP # _____

Large, high-voltage transmission lines are inspected for damage. These power lines deliver large amounts of electricity over great distances.



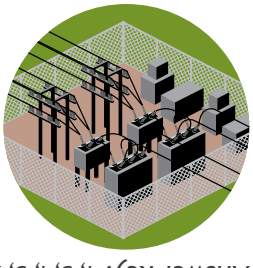
STEP # _____

Service lines are inspected. These are the power lines that run **between the transformer and your home.**



STEP # _____

Distribution substations are inspected. These facilities lower the voltage of power, then send power to distribution lines.



Answer Key: 4, 3, 1, 5, 2