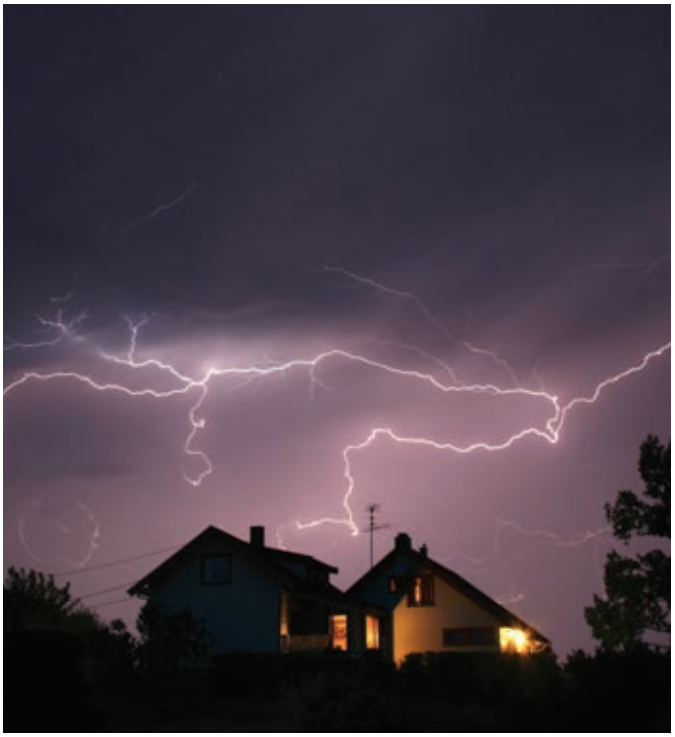
Why The Lights Go Off and On

MESSAGE FROM
GENERAL MANAGER AND CEO JERRY D. WILLIAMS

SPRING TIME WILL TYPICALLY bring "Spring Showers". Those afternoon thunderclouds often bring lightening with the rain. The lightening is nothing more than the discharge of negative charged electrons that have accumulated in a cloud due to friction between the cloud and the surrounding air as the cloud is blown across the sky. As a child, you may have accumulated electrons in your body by scooting your shoes across the shag carpet and then touching sister on the ear. The static spark between your finger and the ear is the same static electricity discharge seen in the sky. Of course, God's display is always bigger and louder.



STÅLE EDSTRØM | DREAMSTIME.COM

When a storm cloud has accumulated enough electrons we see a flash of lightening as the electrons connect between the earth and the cloud. Sometimes the electrons will jump from one cloud to another cloud with a mighty flash. Often the tallest tree or building provides the shortest path to the ground. The electric lines alongside the road make good conductors of electricity and the lightening seems to be attracted to these wires 30 feet above the ground. When this occurs, the voltage on the wire will increase by as much as 1,000 times. This lightening surge of power heads down the power line in both directions.

We anticipate this will happen many times during a rain storm. Lightening arrestors have been installed at various intervals up and down the power lines, but the ultimate device is a breaker. There are devices on the main power lines that look like slender gray five gallon buckets, called Oil Circuit Breakers or OCB's. These breakers perform some of the same function as the breakers in your home breaker box; they turn the power off when something happens. In our case, the device will sense increased electrical current on the line and temporarily disconnect the wires. This disconnection takes place inside the bucket of oil to prevent an electrical arc.

The OCB does something your household breaker will not do; it will reclose after a couple seconds. The result is a momentary interruption of power flowing to your house, which allows the lightening to find the ground wire on each pole and dissipate into the ground. Most OCB's will turn the power off and on three times before tripping completely out on the fourth attempt. Once it trips the fourth time, it has to be manually reset by one of our linemen.

There are also state-of-the art lightening arrestors located on the top of every transformer. Because of these devices, very seldom will lightening get into your house through the main electric lines. Of course lightening could strike the wires between your transformer and your house or directly strike the roof. Even a nearby tree hit by lightning will have enough discharge to affect some items in the house.

These main line breakers help with more than just lightning. When a tree limb breaks out of a tree, it will often momentarily short out the main line before falling to the ground. If the tree limb has cleared the line by the time the breaker turns everything back on for the third time, your electricity will stay on. Most folks would prefer a few flickers when a tree limb falls compared to sitting in the dark till a fuse is replaced. For this reason, breakers protect the main lines which lead to short taps to individual houses. The short taps are also protected by main line fuses.

The next time your lights flicker off a few times in the middle of a rain storm, this may be an indication the protection equipment is working exactly as it should. We don't want your power to ever go off, but figure you would prefer a few flickers compared to a surge of lightening into the house.

SAVE THE DATE!

LAMAR ELECTRIC ANNUAL MEETING

APRIL 16

THE ANNUAL MEMBERSHIP MEETING of Lamar Electric Cooperative will be Saturday, April 16, at Love Civic Center, 2025 S. Collegiate Drive in Paris. Registration opens at 9 a.m. The business session begins at 10 a.m. and includes any necessary reports of the officers, board members and committees, as well as the election of directors in districts 2, 3 and 4, each for a three-year term. You do not have to be present at the meeting to vote in the director election. Before the meeting, ballots will be mailed to members who reside in those districts. If you reside in one of the districts holding an election, you may vote either by mail or in person at the meeting.

Each member in attendance at the meeting will receive a registration gift, and drawings for other prizes will be held. You must be present at the time of the drawing to be eligible to win a prize.

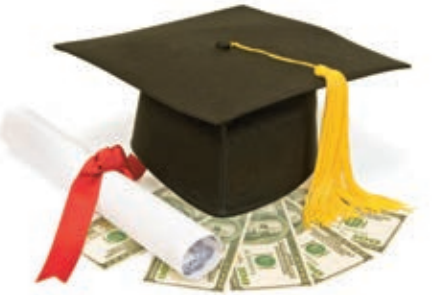
Six $1,000 scholarships will be awarded at the meeting. Applications must be received at the cooperative office by 5 p.m., April 8. To be eligible for a scholarship, a candidate:

- Must live full time in a residence served by Lamar Electric, and
- Must be a graduating senior attending a high school or home-school program within the counties served by Lamar Electric.

Watch for additional details in the next issue of *Texas Co-op Power*.

Scholarship Deadline Approaching

THE APRIL 8 DEADLINE is approaching for high school seniors to apply for one of six scholarships that Lamar Electric will award at the annual meeting April 16. For more information and an application form, visit lamarelectric.coop and apply today. You can also email Katie Morris at katie@lamarelectric.coop for an application and more information.



CALENDAR: TAPHOUSE_STUDIOS | ISTOCK.COM. SCHOLARSHIP: WENDELL FRANKS | ISTOCK.COM

Lamar Electric Cooperative

1485 N. Main St. • P.O. Box 580
Paris, TX 75461

GENERAL MANAGER AND CEO

Jerry D. Williams

Member Benefits

- Level billing
- Automated meter reading
- Free bank draft service
- E-Bill
- Visa and MasterCard accepted

Your Local Pages

This section of *Texas Co-op Power* is produced by LEC each month to provide you with information about current events, safety, special programs and other activities of the cooperative. If you have any comments or suggestions, please contact the local office.

CONTACT US

CALL US

(903) 784-4303 local or
1-800-782-9010 toll-free

FIND US ON THE WEB

www.lamarelectric.coop

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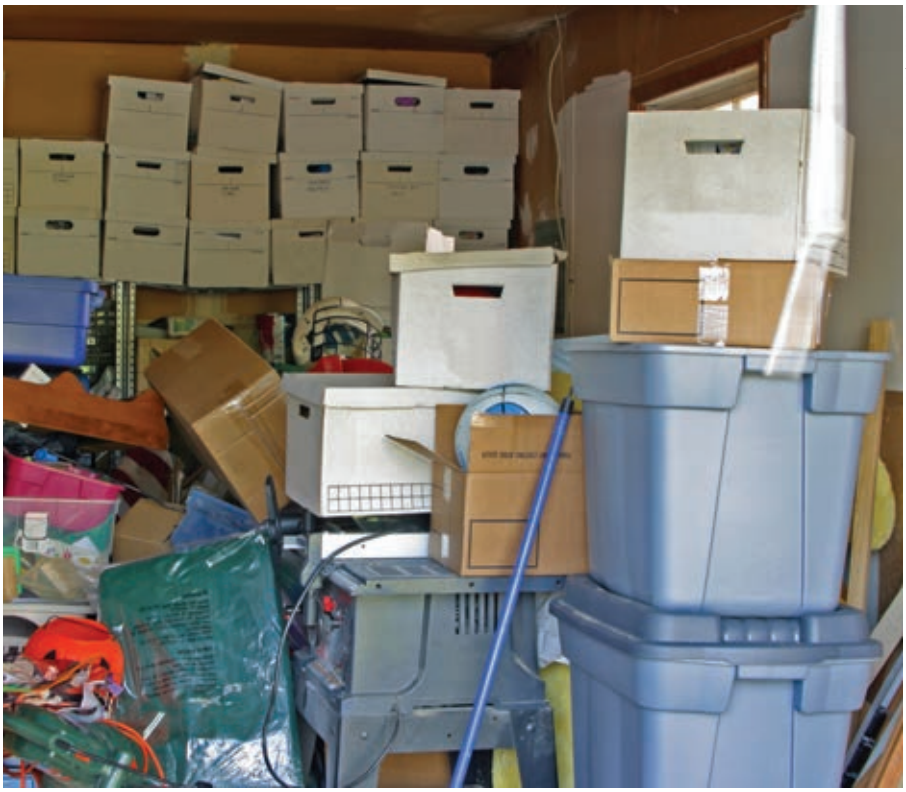
Add Electrical Jobs to Spring-Cleaning List

HERE ARE A FEW ITEMS to add to your spring-cleaning checklist:

While cleaning windows, check for loose or cracked glass panes and for peeling caulk around them. Either one is a path for your conditioned air to escape outdoors, and for winter cold and summer heat to waft into the house. Replace broken windows and caulk that's past its prime.



JOHN ARCHER | ISTOCK.COM

Don't forget to put the garage on your spring-cleaning list.

Compact fluorescent lightbulbs and light-emitting diodes last a lot longer than the traditional incandescent bulbs everybody grew up with. Instead of replacing them regularly, start dusting them. Unplug the light, then use a soft cloth to remove excess dust that could leave the light looking dim.

Before the start of air-conditioning season, replace your system's dirty air filter. Then, replace it again every month during the cooling season to help your HVAC run as efficiently as possible.

Pull your refrigerator away from the wall once a year and vacuum behind it.

Check the utility closet or garage and move boxes and other items at least 5 feet away from your furnace and water heater. Appliances need air to circulate around them. While you're there, remove old cans of paint and other chemicals and debris from the vicinity of your furnace to prevent an explosion or fire.

Did You Know

The first Friday in March is the National Day of Unplugging—a 24-hour period when people unplug, talk, relax and do things besides using technology, electronics and social media. It can help reduce your electric bill, too! This year, the "holiday" begins the evening of March 4.

—nationaldayofunplugging.com

DAYLIGHT SAVING TIME

BEGINS AT 2 A.M. SUNDAY, MARCH 13. REMEMBER TO SET YOUR CLOCKS AN HOUR AHEAD.

ANTAIVANOVA | ISTOCK.COM

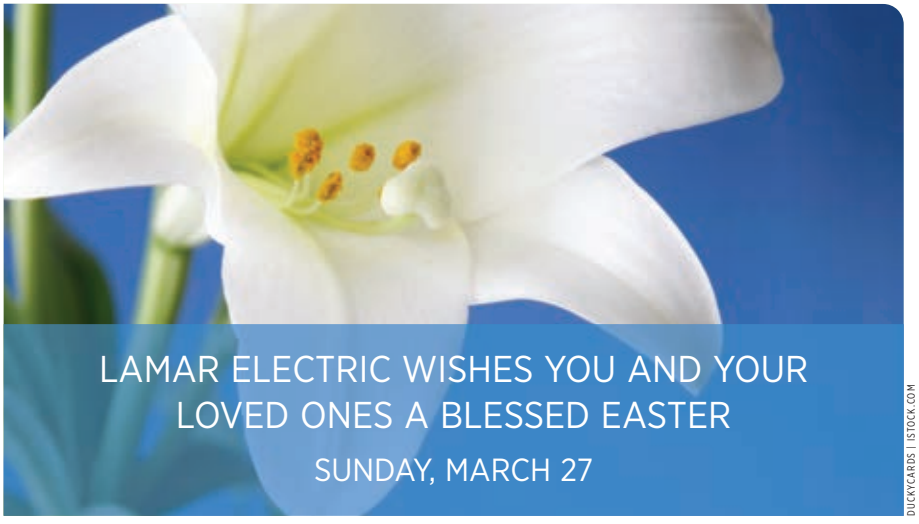
Breaker Box Safety Basics

WE USE ELECTRICITY IN OUR HOMES throughout the day, but we rarely think about how it gets to the wall outlets or switches. Distribution lines bring electricity to homes and most commonly connect to a house through a service drop. The electricity goes through the meter box to the service panel, which is typically found in a utility room or garage. The service panel, often called a breaker box, is where breakers and fuses protect the wires inside your house from electrical overload.

With electricity funneling out of the breaker box through the rest of the home to your outlets and switches, it is important to know how to use a breaker box safely. Arc-fault circuit interrupters are installed directly in the breaker box and are designed to protect against fires caused by arcing faults in home electrical wiring. Arcing faults can be triggered by overloaded circuits, damaged wires, cracked wire insulation, loose or improper connections, faulty electrical equipment or overheated electrical wires.

Ground-fault circuit-interrupters, GFCIs, are sometimes installed as a part of the breaker on the breaker box. Most people are familiar with the electrical outlets in their bathrooms that are GFCI-protected because they will have "test" and "reset" buttons. GFCIs help prevent burns, electric shocks and electrocution. A GFCI has sensors that measure the current going out and the current coming back in. Normally, the current is balanced as it goes out and comes back in. However, if the current is out of balance, something is wrong. The electric current has made contact with a human or somewhere else it should not be. The GFCI senses this and instantly shuts down the circuit, stopping the flow of electricity. Since water is an excellent electric conductor, GFCIs are important in areas where water and electricity could meet, such as bathrooms, kitchens, laundry rooms and garages. Never attempt to turn off power at the breaker box if you must stand in water to do so. If you touch the breaker box while wet or while standing in water, it could cause electric shock or death. If you cannot reach your breaker box safely, call your electric cooperative to shut off power at the meter.

If an appliance is malfunctioning, if there is another electrical malfunction in your home, or if the circuit breaker flipped during a power outage, it may be necessary to cut off or switch on the power at the breaker box. Be sure to call a qualified electrician if blowing fuses or tripping circuit breakers are a recurring problem. This means there is something wrong with your electrical system, and it needs to be inspected.



DUCKYCARDS | ISTOCK.COM

RECIPE OF THE MONTH

HHLTDAVES | ISTOCK.COM

Sweet Potato Cornbread

2 cups self-rising cornmeal mix
¼ cup sugar
1 teaspoon ground cinnamon
1 ½ cups milk
1 cup cooked mashed sweet potato
¼ cup butter, melted
1 large egg, beaten

1. Preheat oven to 425 degrees. Grease an 8-inch cast-iron skillet or 8-inch-square baking pan.
2. Combine all ingredients, whisking together just until dry ingredients are moistened. Spoon batter into skillet or pan.
3. Bake 20–25 minutes or until a wooden pick inserted in center comes out clean.

Find this and more delicious recipes online at
TEXASCOOPPOWER.COM