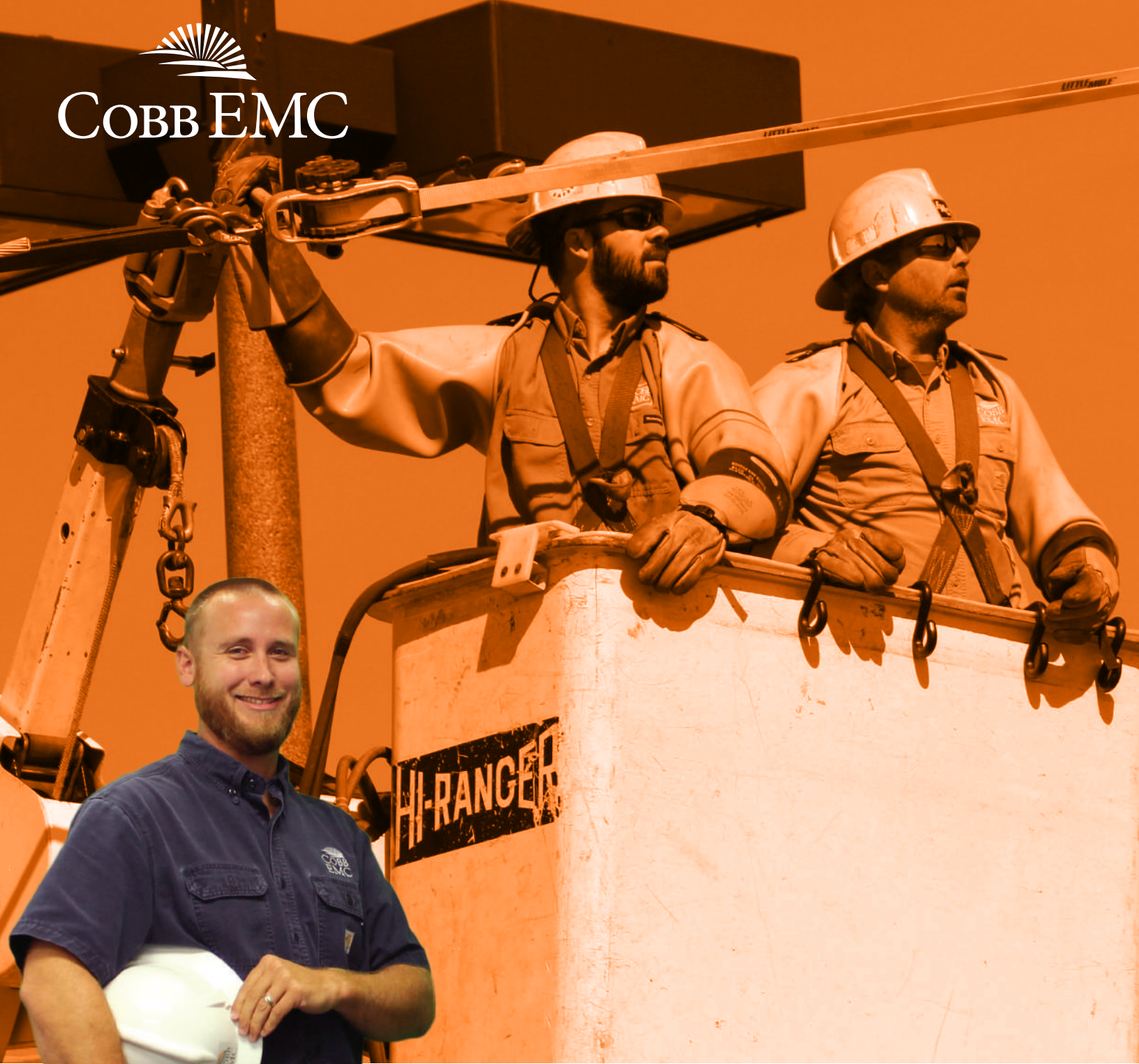




COBB EMC



WE ARE ALWAYS HERE FOR YOU

storm

SAFETY GUIDE

COBB EMC STORM GUIDE

CONTENTS

Before a storm strikes	3
Outage management	5
Steps to restoring power	7
Prepare for a storm	9
Storm watch	11
During an outage	13
Staying safe after a severe storm	17
The path of electricity	21

CONTACT US

www.cobbemc.com

Email: memberservices@cobbemc.com

Phone: 770-429-2100

Report an outage: 770-429-2100

Fax: 678-355-3330

In person: 1000 EMC Parkway, Marietta, GA 30060

Walk-in hours:

Monday – Friday (8 a.m. – 5 p.m.)

Drive-through hours:

Monday – Friday (7 a.m. – 5 p.m.)

Member Care Center hours:

Monday – Friday (7 a.m. – 6 p.m.)

Express Pay drop box is available for non-cash payments 24/7

Download the Cobb EMC app available for Apple and Android devices.

LEADERSHIP

President and CEO

Kevan Espy

Board of directors

Kelly Bodner

Bryan Boyd

Eric Broadwell

Edward Crowell

David McClellan

Tripper Sharp

Malcolm Swanson

David Tennant

Rudy Underwood

EMERGENCY NUMBERS

Cobb County

Fire: 770-528-8000

Police: 770-499-3900

Red Cross, Atlanta

Metropolitan Chapter

404-876-3302

www.redcross.org/ga/atlanta

Bartow County

Fire: 770-387-5151

Sheriff's office: 770-382-5050

Report a gas leak:

Atlanta Gas Light 877-427-4321

Fulton County

Fire: 404-612-5700

Police: 404-613-5711

Georgia 811

811 or 800-282-7411

www.gaupc.com

Cherokee County

Fire: 678-493-4000

Sheriff's office: 678-493-4100

FEMA

800-621-FEMA (3362)

Paulding County

Fire: 770-222-1160

Sheriff's office: 770-445-2117

GEMA

404-635-7000 www.ready.ga.gov

BEFORE A STORM STRIKES

At Cobb EMC, our goal is simple: To bring you safe, reliable power 24/7. This guide is just one more step toward bringing safety to our members. When severe weather is predicted, our trucks are stocked and our crews are ready to mobilize if an outage occurs. Back at headquarters, our power control team monitors our system 24/7. So, if your power goes out, we can start working immediately to get you back up-and-running. Our outage map and storm center, www.cobbemc.com/outagecenter, keeps you up-to-date on current outages.

Thanks to our new smart grid system, you enjoy increased service reliability through minimized impacts from system outages. In fact, outage duration times have been reduced to an average of less than 90 seconds for 64 percent of members who are impacted by an outage. That average will improve as our team deploys additional technologies.

Cobb EMC's system also allows us to automatically restore power from our state-of-the-art power control center, when possible, rather than sending out our service trucks.

This automation reduces the time your lights are off, lowers operating expenses and cuts down on fuel emissions by having fewer trucks on the road.

Sign up for our emails

At Cobb EMC, we know the importance of keeping you informed. With our e-newsletters, you will receive the latest important Cobb EMC news and helpful energy-related information. Visit www.cobbemc.com/e-newsletters to subscribe.

Follow us on social media

We often post information during a major outage on our Twitter (@cobbemc), Instagram (@cobbemc) and Facebook (Cobb EMC) pages. For all-weather fun, follow our YouTube (cobbemctv) channel for electrical safety and energy efficiency tips.

Life support

If you or a family member requires life-support equipment such as a respirator, make sure Cobb EMC knows about these needs. Have a backup source of power ready if the power does go out.

Basics to keep in your car in case you get stranded

Storms can come up quickly and with little warning. Keep a storm prep kit in case you

ever get stranded. Pack comfy waterproof shoes, a flashlight (crank flashlights mean you'll never run out of batteries), bottles of water, non-perishable snacks, a blanket, flares and a whistle.

Protect important documents

Vital documents such as birth and marriage certificates, tax and financial records, wills and trusts should be protected. Make copies and keep one in a safe place in your home such as in a fireproof safe or a waterproof container. Give the



second copy to someone not living in your home, and keep the originals in a safe deposit box.

Protect your pets

For many, pets are like members of the family. Cats, dogs, parrots and hamsters can provide an indescribable companionship for pet owners. Regardless of how large or small a pet may be, there are always potential electrical hazards around the corner.

Keep in mind that a pet will play with anything, including electrical cords or plugs. It may only take one bite with sharp teeth to create a shock or start a fire. Provide your pet with new and different chew toys to keep them entertained so electrical cords do not become a dangerous replacement. If a pet should receive a shock, never touch the animal until you know it is away from the power source or the electric current is shut off in order to prevent injury to yourself. Once it is clear to approach the pet, give it medical treatment immediately.

Educate your children

Teach children storm basics, like the difference between a thunderstorm and tornado, and how to react when the weather turns bad. Storm fronts can move rapidly, and lightning can strike 10 miles in advance of a storm. Remind them the rule of thumb from the National Weather Service, “when thunder roars, go indoors.” Because storms can arrive at night, have a family meeting to discuss where to go to take shelter during a severe storm and emergency evacuation plans.

Charge your appliances

You don’t want to be left completely in the dark during the midst of a storm, so before the storm comes, charge cell phones, tablets, laptops and other devices that run on batteries. Electrical current from lightning can enter your home through phone lines, so using a cell phone indoors is safer. Remember, although power strips with built-in surge protectors do guard against storm-induced power surges, you should not depend on them to absorb a lightning strike.



Our member care team is ready to respond if you have an outage

Prep your pool

If you have ever played baseball or spent time in a ball park, you have probably heard the phrase “Heads up!” hollered to give you advanced warning of a baseball that is coming your way. We suggest that “heads up” might be a good phrase to use around swimming pools too.

Check your local pool supply store, and you will find that many of those aluminum and fiberglass poles to which cleaning equipment can be attached will extend to 16 feet or more. Poles that long can easily connect you with

WE ARE ALWAYS HERE FOR YOU



Our trucks are stocked and our crews are ready. Our power control center team monitors our system 24/7, so if your power goes out, we can start working immediately to get you back up-and-running.



OUTAGE MANAGEMENT

Cobb EMC works year-round to make sure we're ready to respond to outages. When severe weather is predicted, our trucks are stocked and our crews are ready to mobilize if an outage occurs. Back at headquarters, our power control center team monitors our system 24/7, so if your power goes out, we can start working immediately to get you back up-and-running.

To keep you up-to-date at home, we launched our outage and storm center, which is available at www.cobbemc.com/outagecenter on both computers and mobile devices. The map keeps you informed before, during and after an outage.

- **Before:** Check local weather, learn how to prepare for storms in advance and sign up for Cobb EMC's e-newsletter for updates from the co-op.
- **During:** View current outages on our outage map, report an outage and learn how power is restored. Follow the page's links to our social media sites, as we often post information during a major outage on our Twitter (@cobbemc), Instagram (@cobbemc) and Facebook (Cobb EMC) pages.
- **After:** Watch as your outage is removed from the map and check weather forecasts.

Our outage map shows outages our crews are already aware of, and it is based on outages that have been reported to our outage management system. If your outage isn't on the map, it may not have been reported yet. If you lose power, call 770-429-2100 to report an outage.

The outage system looks at all reported information and finds where the trouble originated. A crew is then dispatched directly to the outage to size up the extent of repairs needed.

Our crews have extensive experience in restoring power following destruction from a variety of weather events. Following a storm that results in a major outage, Cobb EMC officials can't say specifically in what order power will be restored, but like many utilities, we follow a standard industry practice to repair and energize lines. First, feeder and primary lines are repaired, then secondary and service lines. This method restores power to the greatest number of people in the shortest amount of time. The more severe a storm, the longer it could take. If main lines are down, they have to be repaired first, and then crews work their way out to neighborhoods and individual homes.



Powering Up After an Outage

When the power goes out, we expect it to be restored within a few hours. But when a major storm or natural disaster causes widespread damage, extended outages may result. Our line crews work long, hard hours to restore service safely to the greatest number of consumers in the shortest time possible. Here's what's going on if you find yourself in the dark:



AMERICA'S ELECTRIC
COOPERATIVES

3. Main Distribution Lines:

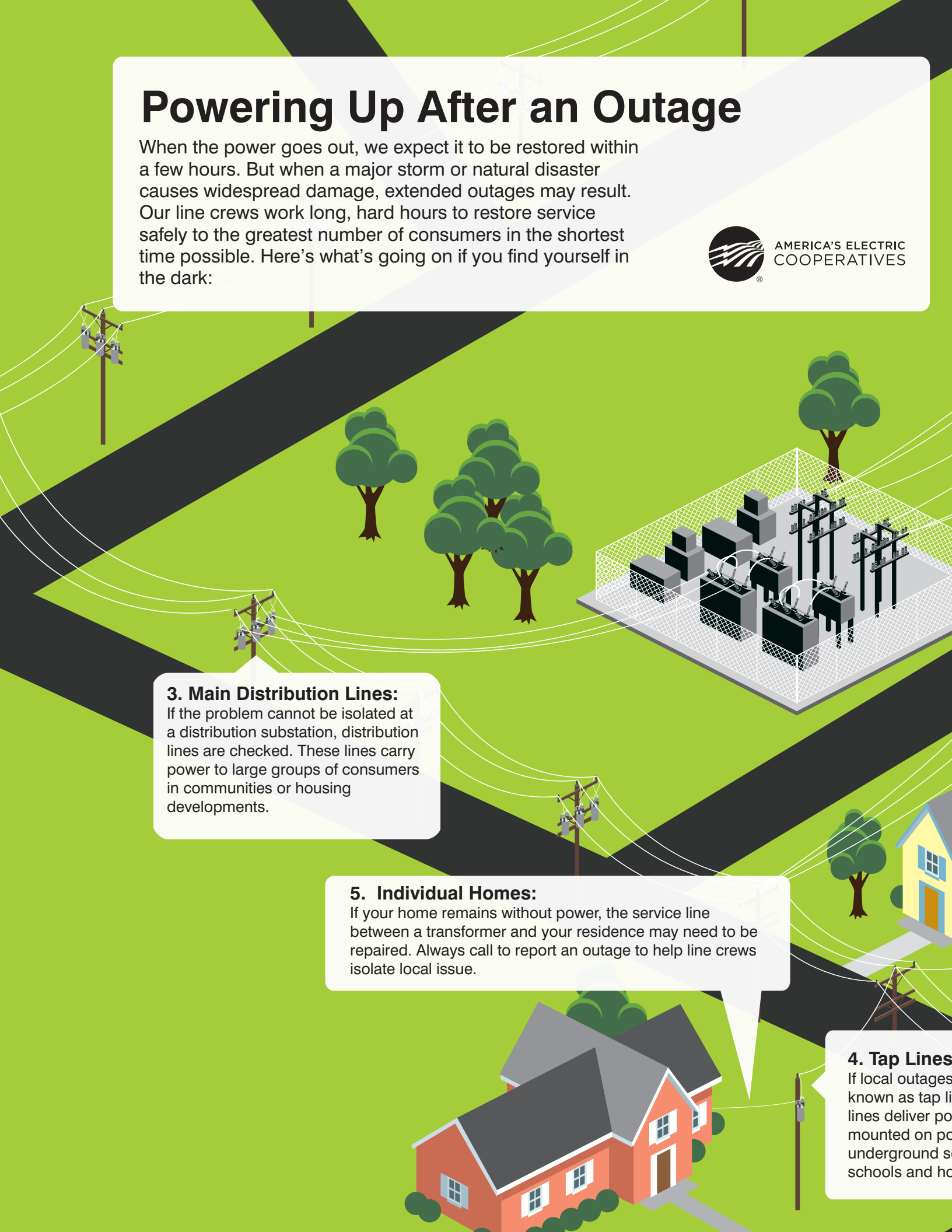
If the problem cannot be isolated at a distribution substation, distribution lines are checked. These lines carry power to large groups of consumers in communities or housing developments.

5. Individual Homes:

If your home remains without power, the service line between a transformer and your residence may need to be repaired. Always call to report an outage to help line crews isolate local issue.

4. Tap Lines

If local outages known as tap lines deliver power to homes, tap lines are mounted on poles or underground service lines to schools and homes.





1. High-Voltage Transmission Lines:

Transmission towers and cables that supply power to transmission substations (and thousands of members) rarely fail. But when damaged, these facilities must be repaired before other parts of the system can operate.

2. Distribution Substation:

A substation can serve hundreds or thousands of consumers. When a major outage occurs, line crews inspect substations to determine if problems stem from transmission lines feeding into the substation, the substation itself or if problems exist further down the line.

... persist, supply lines (also
... lines) are inspected. These
... power to transformers, either
... poles or placed on pads for
... service, outside businesses,
... homes.

WE ARE ALWAYS HERE FOR YOU



When storms are on the horizon, we keep additional employees on call so we're here when you need us most.

PREPARE FOR A STORM

A number of circumstances can cause power interruptions, and damage from severe weather can cause outages that last for days. Making plans now can make riding out a prolonged power outage safer and more comfortable.

Take the time to make plans with your family so you're ready for any foul weather that might come your way. On the following pages are some tips for preparing your family before severe weather strikes, along with suggestions on creating an emergency preparedness kit. Your kit should include items such as water, food, flashlight, batteries, blankets and a first aid kit. A full list of suggested items can be found at www.ready.ga.gov/prepare. The National Weather Service also recommends that you:

- Know the county in which you are located and nearby towns and cities. Warnings are issued by county and reference major cities.
- Know the difference between a severe thunderstorm watch and warning. A *watch* means there is the possibility of storms in your area. A *warning* means a storm has been reported or is imminent and you should take cover.
- Check the forecast and the hazardous weather outlook.
- Watch for signs of an approaching storm.
- Turn on a weather radio or an AM/FM radio for information if a storm is approaching.
- Stay inside if you know a storm is headed your way.

The best policy is to plan ahead so you do not get caught outside in a storm. Lightning can strike up to 10 miles from the area in which it is raining, even if you do not see clouds. This means that if you can hear thunder, you are within striking distance.

Keep the following safety tips in mind when lightning strikes:

- If you are outside during a lightning storm, move to a low area away from water and trees and crouch as low as possible. Lightning typically hits the tallest object available.
- Take shelter in a building or an enclosed vehicle with a hard-top roof—not an open-frame vehicle like a convertible or golf cart.
- Ironically, there's not safety in numbers. If you are with a group and stuck outside during a lightning storm, don't stand close together.



Make plans with your family to be ready for any type of emergency

- If you're playing outdoors and see lightning, set down metal items like baseball bats, golf clubs or fishing rods.
- Stay away from windows and doors in your house while it's storming.
- Avoid water and electronics in your home during storms. Unplug electronics to protect them, and wait until the storm stops before hopping in the shower.
- Cell phones and cordless phones are perfectly safe during a lightning storm, but only use phones with cords in an emergency.
- If you have outdoor dogs, bring them inside during storms. Metal chains and doghouses can attract lightning.

Storm Watch

How to prepare your family and property for severe weather

Outside

1. Trim dead or weak branches from surrounding trees. Do not leave them for curbside pickup during a storm watch.
2. Moor boat securely, store it upside down against a wall or move it to a safer place. Remove canvas. Anchor a boat trailer with strong rope.
3. Protect your windows with custom-fit shutters or 5/8-inch plywood. Check with your local building inspector.
4. Keep roof drains clear.
5. If you live in a flood-prone area, elevate or move structures to higher ground.
6. Bring indoors objects that may be blown or swept away, such as lawn furniture, trash cans, children's toys, garden equipment, clotheslines and hanging plants.
7. Lower water level in pool 6 inches. Add extra chlorine. Turn off electricity to pool equipment and wrap up any exposed filter pumps with a waterproof covering.
8. Plan how to take care of your pets. Leave them with a friend. If you must evacuate, it is best to take your pets with you, but most shelters will not allow them. Large animals in barns should have plenty of food and water.

9. If a storm is pending, fuel your vehicle.
10. Keep a smaller Disaster Supplies Kit (see next page) in the trunk of each car.
11. Keep sliding glass doors wedged shut in high wind.
12. If you use a portable generator, make sure you know what loads it can handle, including start-up wattage. If you connect the generator to household circuit, you must have a double-pole, double-throw transfer switch installed between the generator and outside power, or the "back-feed" could seriously harm or kill utility line workers.
13. Take down outdoor antennas, after unplugging televisions.

Inside

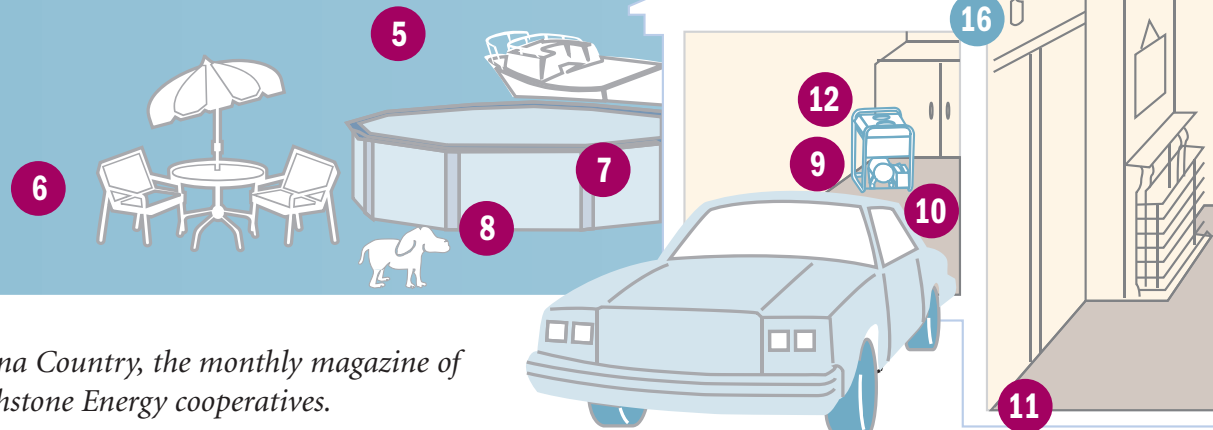
14. Store valuables in a waterproof container at the highest point in your home.
15. Make two photocopies of vital documents and keep the originals in a safe deposit box. Keep one copy in a safe place in the house, and give the second copy to someone out-of-town. Vital documents include birth and marriage certificates, tax records, credit card numbers, financial records, wills and trusts.
16. Install smoke alarms on each level of your home, especially near bedrooms. Use the test button to test them once a month. Replace batteries at least once a year.
17. If a family member relies on life-support equipment, make sure your electric cooperative knows ahead of time.
18. Fill bathtubs, sinks, and jugs with clean water in case water becomes contaminated.

19. Pick a "safe" room in the house, usually a first-floor interior hallway, room or closet without windows.

Resource information

Federal Emergency Management Agency (FEMA)
500 C Street, SW
Washington, D.C. 20472
Phone: (800) 480-2520
www.fema.gov

American Red Cross
Attn: Public Inquiry Office
431 18th Street, NW
Washington, D.C. 20006
Phone: (202) 639-3520
www.redcross.org



Reprinted from *Carolina Country*, the monthly magazine of North Carolina's Touchstone Energy cooperatives.

20. Plan home escape routes. Find two ways out of each room.

21. Check and protect objects that could cause harm during a bad storm: bookshelf, hanging pictures, gas appliances, chemicals.

22. Write and videotape an inventory of your home, garage, and surrounding property. Include information such as serial numbers, make and model numbers, physical descriptions, and price of purchases (receipts, if possible). Store a copy somewhere away from home, such as in a safe deposit box.

23. Keep a portable, battery-operated radio or television and extra batteries.

24. Post emergency telephone numbers.

25. Show adult family members where your fire extinguishers are and how they work.

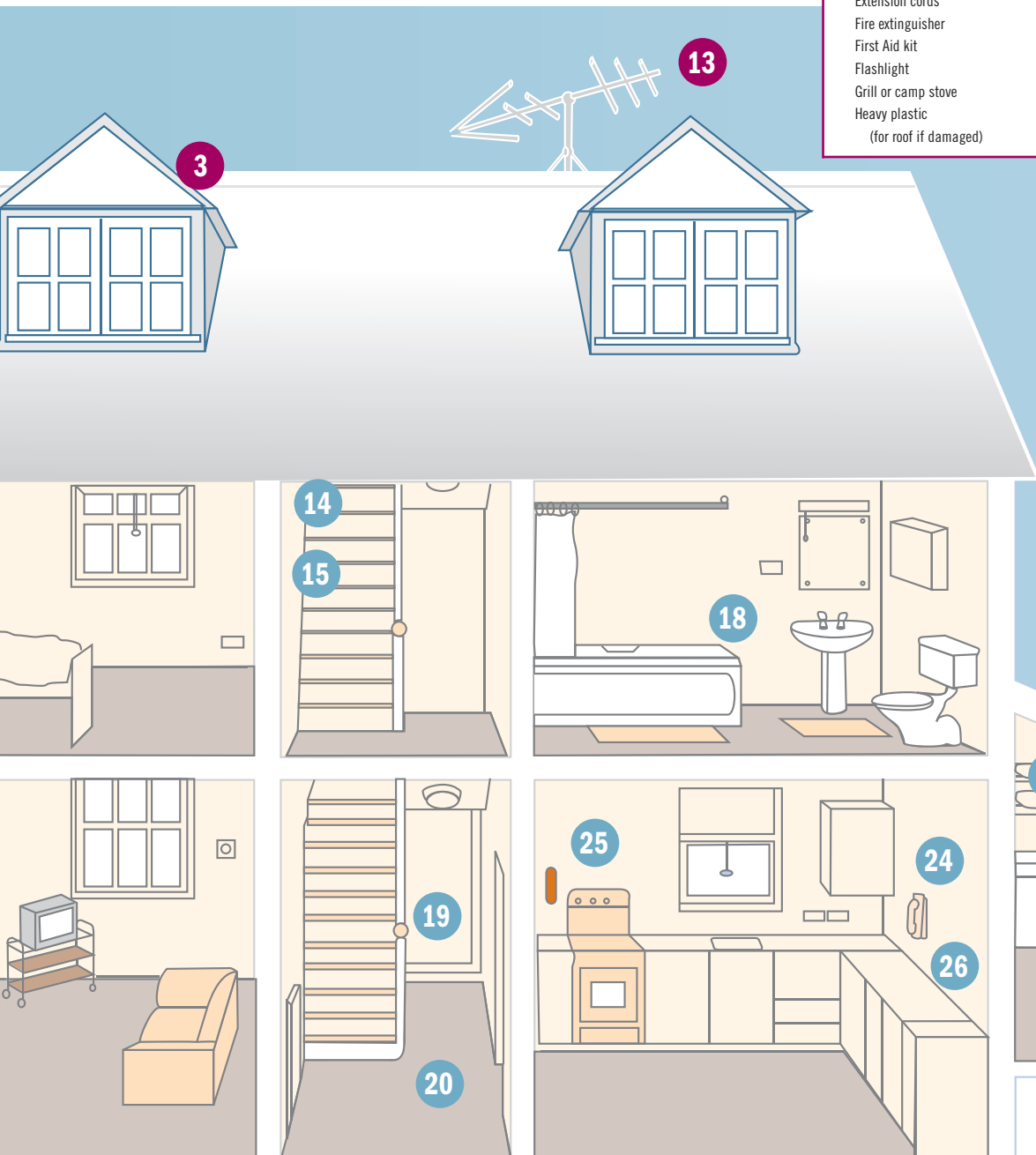
26. Make a plan for family members to reunite if separated (if children are at school and adults are at work). Designate an out-of-state relative or friend as a contact person and make sure everybody in the family knows how to reach the person.

27. Teach all responsible family members how and when to turn off the water, gas, and electricity at the main switches or valves. Keep a wrench near gas and water shut-off valves. Turn off utilities only if you suspect a leak or damaged lines, or if you are instructed to do so by authorities.

A Disaster Supply Kit (recommended by the American Red Cross)

Have enough disaster supplies for 2 weeks ready. Keep items in airtight plastic bags. Replace stored food and water every six months. Rethink your kit and family needs at least once a year. (Replace batteries, update clothes, etc.) Ask your physician or pharmacist about storing prescription medications.

- | | |
|-------------------------------------|--|
| Emergency food & drinking water | Lantern with extra fuel |
| At least one change of clothes | Manual can opener |
| Baby food, diapers & formula | Matches |
| Batteries | Medicines, glasses or contact lens supplies |
| Bleach (without lemon or additives) | Mosquito repellent |
| Books, magazines, cards & games | Personal identification |
| Butane lighters | Pet food |
| Cash & credit cards | Phone numbers of places you could go. |
| Camera & film | Plastic trash bags |
| Car keys | Radio (battery-operated) or TV |
| Charcoal & lighter fluid | Rope (100 ft.) |
| Clock (non-electric) | Sleeping bags, pillows & blankets |
| Cooler (with ice) | Soap & shampoo |
| Duct & masking tape | Sturdy shoes |
| Extension cords | Toilet paper & towelettes |
| Fire extinguisher | Tool kit including hammer, crowbar, nails, saw, gloves, etc. |
| First Aid kit | Water purification tablets |
| Flashlight | |
| Grill or camp stove | |
| Heavy plastic (for roof if damaged) | |



If you must evacuate leave as quickly as possible. Unplug your appliances, but leave on your refrigerator. Turn off the main water valve. If time allows, move furniture to a higher place. Take sleeping bags, blankets, warm protective clothing, emergency supplies, eating utensils and identification showing proof of residency. Tell somebody where you are going.

WE ARE ALWAYS HERE FOR YOU

We know what to do. We've been through it over and over. We know what we've got to do to prepare for it and keep our members safe.



DURING AN OUTAGE

Weather, accidents and storms can disrupt the electricity we are so used to having. Sometimes electricity flickers momentarily then comes back. Serious damage to power lines and the electrical grid can cause outages for days or weeks. We have valuable information to keep you safe and comfortable during a power outage of any length.

Short-term power failures

Don't panic! Check to see if your neighbors still have electricity. If they do, the problem could be inside your home. Check your main fuses or circuit breakers to see if they have blown or tripped. Replacing a fuse or resetting a circuit breaker may restore your electricity.

If the problem is not in your home, call us and we will dispatch someone as quickly as possible.

Unplug appliances with electronic components, such as microwaves, televisions and computers. This will help to eliminate damage to your appliances from voltage surges when the electricity is restored. Wait a few minutes before turning on these appliances when the electricity is restored. This will reduce demand on Cobb EMC's electrical system.



Our crews are always ready to respond to outages.

Long-term power failures

If you use a standby generator, be sure it has been installed and wired properly. If improperly installed, a generator could seriously injure our employees working to restore your power. Your generator could also be damaged when the power is restored if a double throw disconnect is not used and properly installed.

Of course, it is also important to be sure that a fresh supply of fuel to power the generator is on hand and stored properly.

Never go near downed power lines; let our qualified employees handle these situations.

DURING AN OUTAGE

BE PREPARED YEAR-ROUND

Flooding during an outage

Check your basement periodically for flooding. You can use a portable, gasoline-powered pump to pump out a basement or crawl space when the power is interrupted to an electric sump pump. Never wade into a flooded basement unless electricity supplying sump pumps, freezers, etc. has been disconnected. The power may be restored while you are in the flooded basement, and the motors on these appliances may be submerged.

Summer power outages

Keep freezers and refrigerators closed to keep food fresh. Frozen food is generally safe to eat if there are still ice crystals on it. Wrap blankets around the appliances to provide extra insulation. Bottled water, canned soda and juices eliminate dependence on the refrigerator if stored in a cool place.

Turn off air conditioners during power outages. Do not turn them back on for several minutes after the power has been restored.

Dress comfortably and use natural ventilation to keep your home cool.

If the health of family members is a concern, consider staying with friends or in a community center where electricity is available.

Winter power outages

Dress warmly. Several layers of clothing provide better insulation than a single layer of heavy clothing.

Move to a single room, preferably one with few windows. Ideally, this room should be on the south side of the home for maximum heat gain in the daytime. The room should be shut off from the rest of the house and ideally would be one with a fireplace, wood stove or other alternate heat source. If you use an alternate heat source, be sure and follow operating instructions. For example, if you use a kerosene heater, adequate ventilation is a must. All fuels should be stored outside of the home for safety reasons. Wood stoves and fireplaces should be maintained properly throughout the year to prevent problems when they are needed in an emergency.

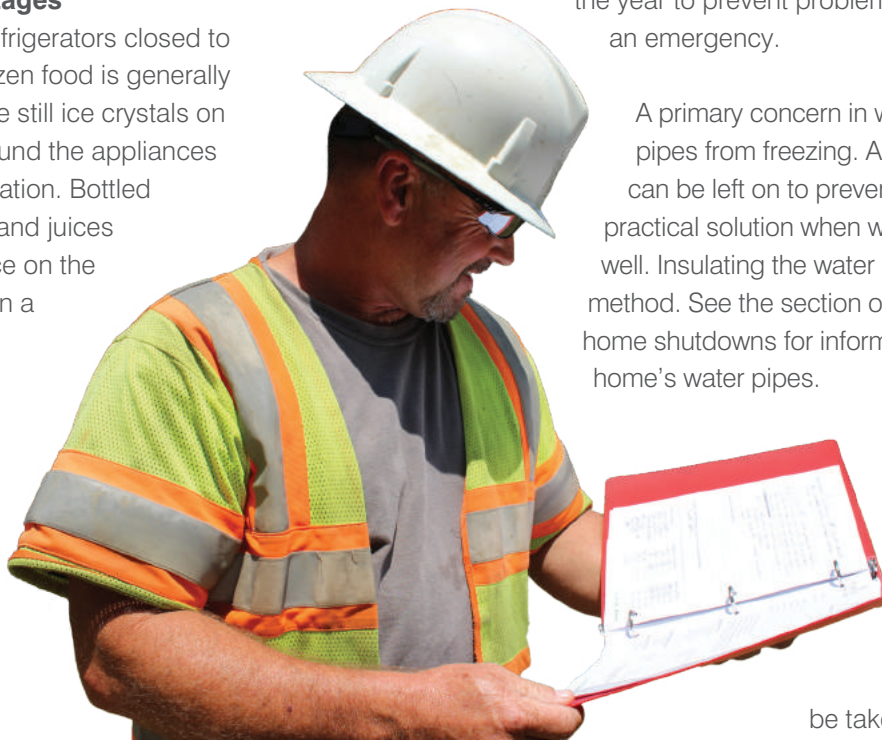
A primary concern in winter is keeping water pipes from freezing. A small stream of water can be left on to prevent this. This is not a practical solution when water is supplied from a well. Insulating the water pipes is a more permanent method. See the section on extended outages and home shutdowns for information on how to drain your home's water pipes.

Consolidate your resources with neighbors. They might have heat and electricity in their homes. People with health problems should be taken to a church, community agency or other location where their needs can be met.

Extended power outage/home shutdown

Unplug everything in your home. Turn off breakers or remove fuses. If there is an extended power outage, you may want to leave one lighting circuit turned on so you will know when the electricity comes back on.

Winterize your water supply system completely. Be sure to disconnect the electrical supply to the water heater before



DURING AN OUTAGE

draining. If the power is not off, there can be damage to the elements in the heater. Drain the water system from the lowest possible point so there will be as little water as possible left in the pipes.

Water heating systems should be drained unless filled with a nonfreezing solution. A call to your dealer or installer will tell you if it should be drained.

The drainage system in the home also needs to be winterized. This is done by pouring antifreeze into the traps in the drains below the sinks, toilets, washing machines, etc. Recreational vehicle antifreeze is recommended, because it is less toxic. Empty all food from freezers and refrigerators and leave the doors open. The food could be taken to neighbors that have electricity or to a food locker. Dry ice could also be used for a short period of time. The easiest solution may be to take the food outside if the temperature is cold enough.

If your home is equipped with an electric heat pump, special care is needed when turning the unit on after an extended outage. It takes a period of time for the lubricant in the refrigerant to warm-up. This is approximately one and one-half hours per ton of cooling capacity. This could vary from brand to brand, and a call to your dealer could prevent problems. During this compressor warm up time you should use the supplemental or emergency resistance heating elements of the heat pump to heat the home.

Keep curtains closed except on south facing windows in the winter when the sun is shining. This will supply some passive solar heat in the daytime hours. Draperies should always be closed at night.



Never go near downed power lines. Let our qualified employees handle these situations.

Following these suggestions will make it easier to cope with a power outage. Think ahead and be prepared for an emergency by having a plan for your household.

Remember to stay calm. The electricity will be back on as quickly as possible. Our crews and staff work around the clock to restore your service and ensure you stay informed.

WE ARE ALWAYS HERE FOR YOU



We don't go home after the storm's over. We're still working to keep your homes and families safe.



STAY SAFE AFTER A STORM

There may be a mess in your yard and your home may have been damaged, but safety remains our top priority in the wake of a severe storm. Make sure you and your family are aware of hazards that could be hidden by tree limbs and debris, such as downed power lines or electrical equipment in contact with the wet ground.

Stay away from and report any downed or sagging lines. They should be considered energized and dangerous, until our linemen can assure they are de-energized and the area is safe.

A downed power line that's energized can cause other things around it to become potentially hazardous. A fence or guardrail touching a downed line can be energized for several thousand yards, and it poses a threat to anyone coming into contact with it. Also, stay away from puddles of water that could be in contact with downed lines. Encountering these can be as hazardous as coming into contact with the downed power line itself.

If you are driving and come upon a downed power line, stay in your vehicle, warn others to stay away, and call 911. Also when driving, be careful at intersections where traffic lights



Stay alert to potential hazards when cleaning up after a storm.

may be out. Stop at all railroad crossings, and treat road intersections with traffic signals as four-way stops before proceeding with caution.

Stay safe during an outage

During an outage, turn off electrical appliances and unplug major equipment, computers and televisions. This will help protect equipment that could be damaged by electrical surges, and prevent circuit overloads when power is restored. Leave one light on to indicate that power has been restored. Wait a few minutes then turn on other appliances and equipment one at a time.

STAY SAFE AFTER A STORM

Stay safe inside your home

Most severe storms do not last more than 30 minutes. However, once the storm has passed, it does not mean that the danger has. There could be a variety of hazards left behind.

Inside your home, never step in to a flooded area if water is covering electrical outlets, appliances or cords. Be alert to any electrical equipment that could be energized and in contact with water. Never touch electrical appliances, cords or wires while you are wet or standing in water.

Before re-entering storm-damaged buildings or rooms, be sure all electric and gas services are turned off. Never attempt to turn off power at the breaker box if you must stand in water to do so. If you can't reach your breaker box safely, call us to shut off power at the meter.

If you are inspecting your home in the dark, use a flashlight rather than a candle or some other open flame to avoid the risk of fire or explosion due to a gas leak.

If you see frayed wiring or sparks or if there is an odor of something burning, shut off the electrical system at the main circuit breaker if you know how and can do so safely.

If you smell gas, or suspect a leak, get out of the house. Call 911, and notify your gas utility immediately.

Take the time to prepare now, and pay attention to weather alerts to keep your family safe.

Stay safe during clean up efforts outside your home

Cleaning up and using water-damaged appliances carries safety risks. Electric motors in appliances that have been drenched or submerged should be thoroughly cleaned and reconditioned before they are put back into service. It

may be necessary to repair or replace electrical appliances or tools that have been in contact with water. Do not use any water-damaged appliance until a professional has checked it out.

Be alert to potential hazards from flooding or standing water. If using electric yard tools in clean-up efforts, do not operate them if it's raining, the ground is wet, or while you are wet or standing in water. Keep all electric tools and equipment at least 10 feet away from wet surfaces. Make sure outdoor tools are plugged into outlets with ground fault circuit interrupter (GFCI) protection. If your outdoor outlets don't have GFCIs, use a portable GFCI cord.

Ladders put home owners and construction workers closer to important tasks on which they need to work, but they also put people closer to overhead power lines. Many of these power lines carry 7,200 volts of electricity. To put that in perspective, the 120 volts of electricity in your home can be fatal. The overhead lines carry 60 times that. While raising and working on ladders, it is easy to focus on the task at hand and the risks of being at elevated heights. Remember the electrical dangers of overhead power lines when using a ladder.

Overhead power lines are responsible for more fatal electrical accidents at work than any other type of electrical accident. Fortunately, contact with overhead power lines can be avoided with the proper precautions.



Take proper powerline precautions

- Look up and look out for power lines.
- Keep equipment and yourself at least 10 feet from power lines.
- Work only when weather permits. Wind could blow a ladder out of control and into a power line. Rain is a good conductor of electricity.
- Never trim near power lines. Call professional tree trimmers to do the job.
- Never use water or blower extensions to clean gutters near electric lines. Contact a professional maintenance contractor.
- Follow safety guidelines whether you use an aluminum, wooden or fiberglass ladder. Although some materials are better conductors than others, all ladders require the same precautions.

Food safety

A prolonged outage can wreak havoc with your refrigerator and freezer, ruining your food. The American Red Cross offers the following food safety tips:

Protecting food during a power outage

- Keep refrigerator and freezer doors closed as much as possible. First use perishable food from the refrigerator. An unopened refrigerator will keep foods cold for about 4 hours.
- Use food from the freezer second. A full freezer will keep the temperature for about 48 hours (24 hours if it is half full) if the door remains closed.
- Use your non-perishable foods and staples after using food from the refrigerator and freezer.
- If it looks like the power outage will continue beyond a day, prepare a cooler with ice for your freezer items.
- Keep food in a dry, cool spot and keep it covered at all times.

Throw out unsafe food

- Throw away any food that has been exposed to temperatures 40° F (4° C) for 2 hours or more or that has an unusual odor, color or texture. When in doubt, throw it out!
- Never taste food or rely on appearance or odor to determine its safety. Some foods may look and smell fine, but if they have been at room temperature too long, bacteria causing food-borne illnesses can start growing quickly. Some types of bacteria produce toxins that cannot be destroyed by cooking.
- If food in the freezer is colder than 40° F and has ice crystals on it, you can refreeze it.
- If you are not sure food is cold enough, take its temperature with a food thermometer.

For the entire American Red Cross power outage checklist, visit www.redcross.org.

The Business of
ELECTRIC COOPERATIVES

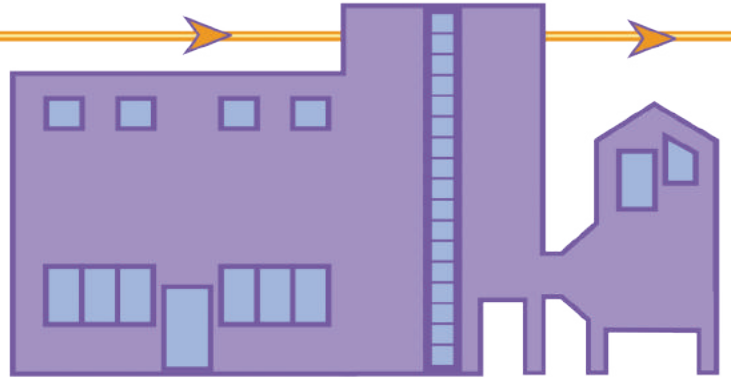
The Path of electricity

Electricity often travels long distances before reaching your home or business. Your electric cooperative buys wholesale power produced at generating facilities and distributes it through substations and power lines to consumer-members in its system.

Illustration by Katherine Fowler

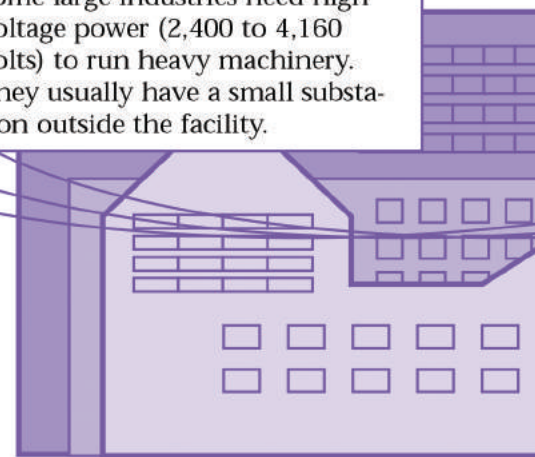
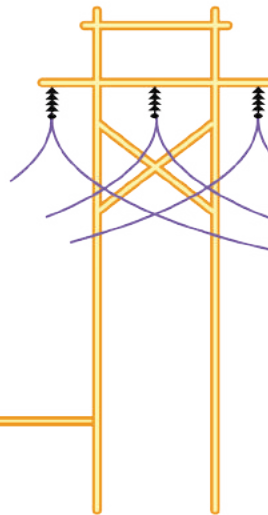
Power Plant

Inside a generating plant, water is heated to steam by nuclear reaction or fuels such as natural gas, oil and coal. Steam turns turbines and magnets to produce electric energy. Water at hydroelectric dams also can turn turbines.



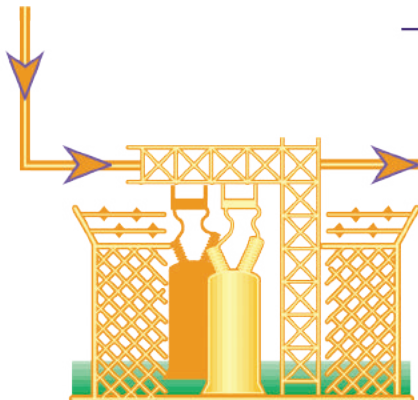
Large Industrial User

Some large industries need high voltage power (2,400 to 4,160 volts) to run heavy machinery. They usually have a small substation outside the facility.

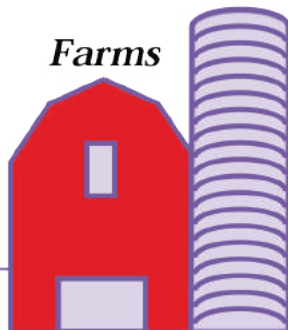


Local Substation

Transformers in medium-voltage neighborhood substations reduce the voltage even more to be distributed to homes and businesses. Your electric cooperative operates several of these substations.



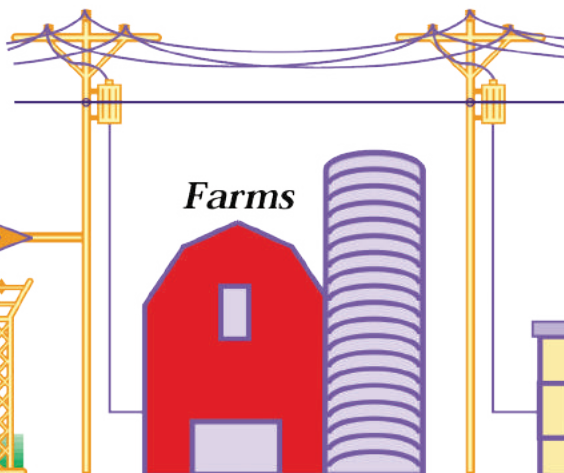
Farms



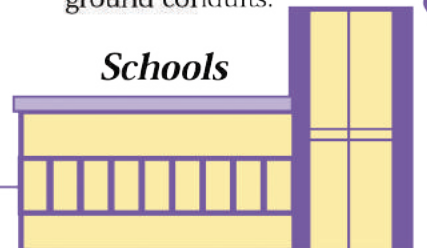
Distribution Lines

Your cooperative's distribution lines carry 7,200 to 14,400 volts of power.

These poles may also hold telephone and cable TV lines. In some areas, distribution lines are in underground conduits.

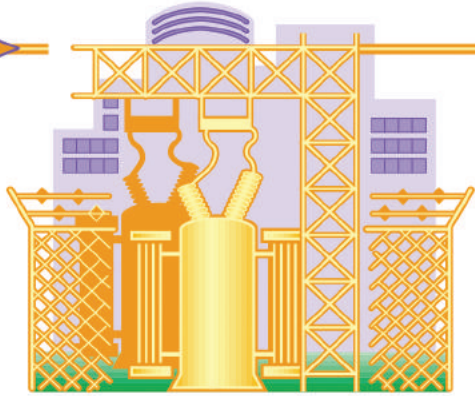


Schools



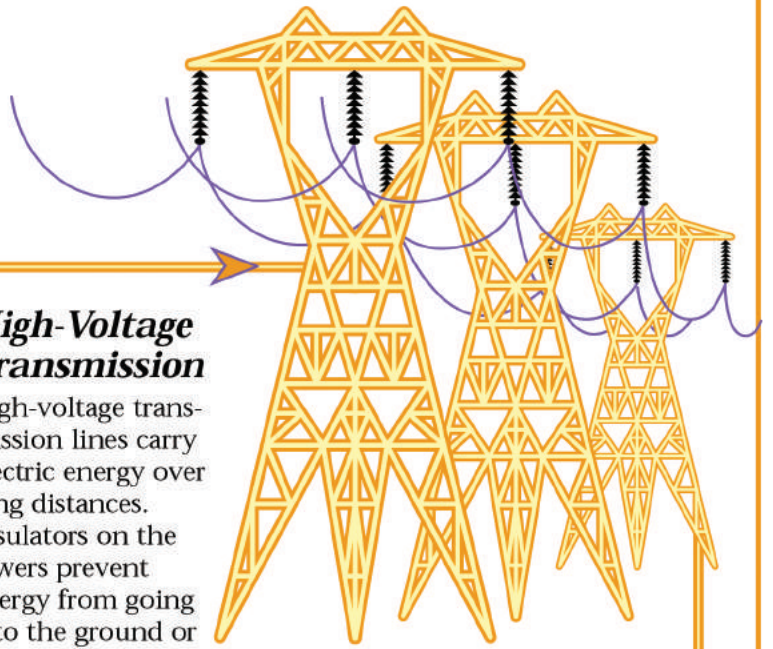
Step-Up Substation

Substation transformers at generating plants increase electric energy's pressure (voltage) so it can move long distances over power lines that transmit up to 500,000 volts.



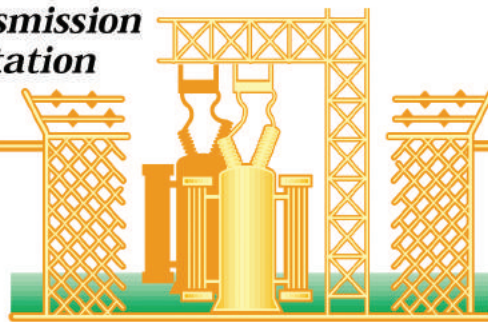
High-Voltage Transmission

High-voltage transmission lines carry electric energy over long distances. Insulators on the towers prevent energy from going into the ground or on the structure.



Transmission Substation

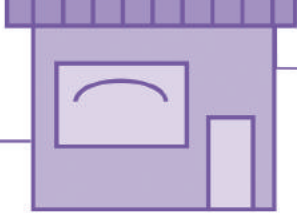
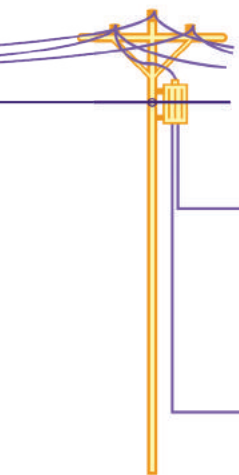
Transformers at high-voltage substations reduce voltage to a lower level (46,000 to 115,000 volts) suitable for local use.



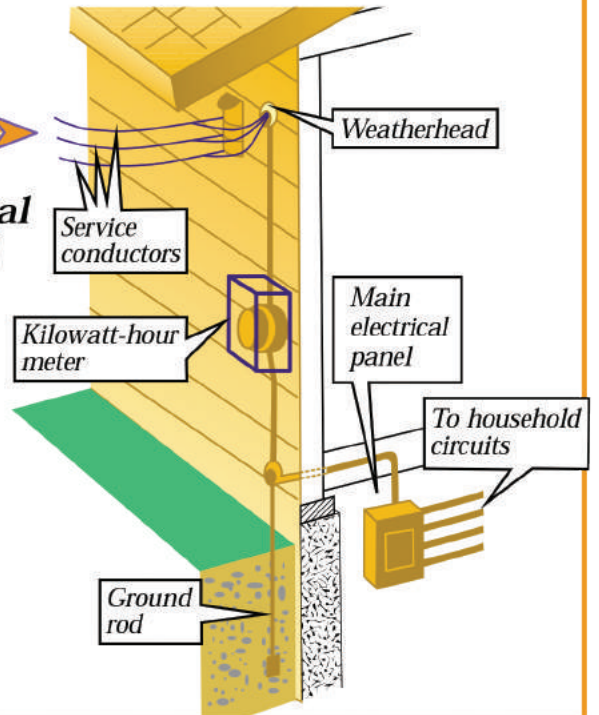
Electric power passes through transformers on poles to reduce voltage to levels for use inside farms, schools, small businesses and homes (120/240 volts).

Small Businesses

Homes



Residential Electrical Delivery





Cobb Electric Membership Corporation

Post Office Box 369 | Marietta, GA 30061

phone: 770-429-2100

cobbemc.com