



Nueces Electric Cooperative

2020 Hurricane Preparedness Guide



Hurricane Season 2020, NEC is Ready

Every year at this time, people in South Texas brace themselves for another potentially destructive hurricane season.

Hurricane season began June 1 and continues through Nov. 30. Since we can't stop hurricanes, the only thing we can do is work on being better prepared and know what to do in case one hits.

NEC crews work all hours to ensure members' electricity remains on or is restored as quickly as possible. Currently, the Co-op has twenty-four employees on the line-crew. With eight counties to cover and over 3,300 miles of lines, the crew is often stretched thin. During a major outage, all crews are called in and work in sixteen-hour shifts. They go on "sleep-time" for eight hours and then return to work for another sixteen. This will continue until all services are restored. Outage response includes everything from a simple line fix that could take twenty minutes, to a major pole reconstruction project that could take ten workers up to twelve hours to repair.

In the event of a hurricane or other disaster, phone service may be interrupted, or you may receive a busy signal when you try to obtain or report information to us. Please recognize that NEC does have 24-hour outage service and all available phone lines are monitored 24-hours a day. If lines are busy, please be patient and continue trying to call us. Nueces Electric Cooperative provides regular updates on outages and power restoration efforts to area media until all power has been restored.

NEC has a dedicated Storm Center which is accessible 24-7 via www.nueceselectric.org. You, or an out-of-town family member, can access the NEC website for regular updates and view outages through the NEC Outage Viewer. If you have an emergency, please contact your local law enforcement officials.

Whatever this hurricane season may bring, your local electric cooperative is here for you just as we have been for more than 80-years.



Hurricane Command Center

The NEC command center: It's high tech. It's encased in eighteen inches of concrete. It has seating for three employees and eight senior staff. It is where the magic will happen in the event of a category three, four or five hurricane. It is definitely the coolest room in the entire cooperative. It is definitely the coolest room in the entire cooperative.

When building the new headquarters, durability and longevity were on the top of the long list of concerns. Living on the coast, designers had to take into account that hurricanes can, and do, impact the area. That is why the NEC blueprints included a specially designed ("hardened") room which will withstand high force hurricane winds. The room is specially designed and outfitted with its own back-up generator and computer system. In the event of a hurricane, the coordination of restoration can be manned from one of three chairs while management coordinates department efforts and communication from the conference table in the back portion of the room.

Rest assured that in the event of a hurricane, NEC employees will work day and night until all members power is safely restored.

Report outages to:
1.800.632-9288

View outages at:
www.nuceselectric.org
Under the Storm Center menu option

Summary			
May 26, 8:39 AM			
Total Outages: 1			
Served: 19140	Out Now: 1	Restored: 35	Affected: 36
Meters Out For Last 48hrs			

NEC Outage Viewer

NEC members can now view outages 24-hours a day, seven days a week from the comfort of their office, home, car or anywhere you can access the internet.

The outage viewer can be found in the Storm Center located on the NEC website, www.nuceselectric.org.

Through the NEC website, the outage viewer page securely interfaces outage information with our dispatching personnel. As outages are repaired, the program automatically updates to reflect the progress.

Members can view the entire NEC system at a glance to determine how many folks are out in their area and how many other outages are happening at the same time. Each outage has a colored dot, and some will have a "halo" around the dot. The color of the dot represents the number of members affected. The halo represents the a larger land mass that is affected.

Bringing this technology to members is another way the Co-op is being accountable and transparent to members. Not only can members see how their area is affected, but it also allows members to see the bigger picture of what NEC crews are up against.

Be it a big storm or small rain, NEC is here for you when you need us.

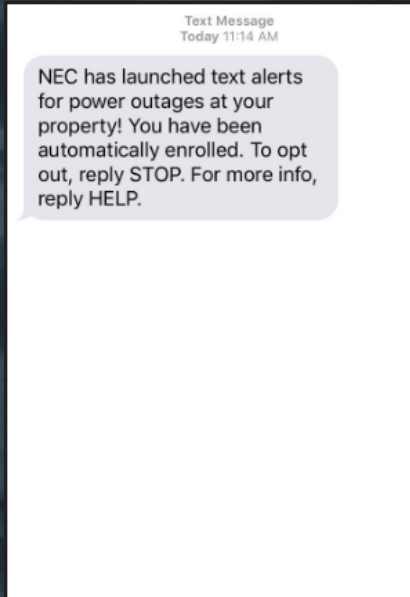
National Oceanic and Atmospheric Administration (NOAA) 2020 Atlantic Hurricane Season Outlook

“NOAA’s outlook for the 2020 Atlantic Hurricane Season indicates that an above-normal season is most likely. The outlook calls for a 60% chance of an above-normal season, followed by a 30% chance of a near-normal season and a 10% chance of a below-normal season. The Atlantic hurricane region includes the North Atlantic Ocean, Caribbean Sea, and Gulf of Mexico.

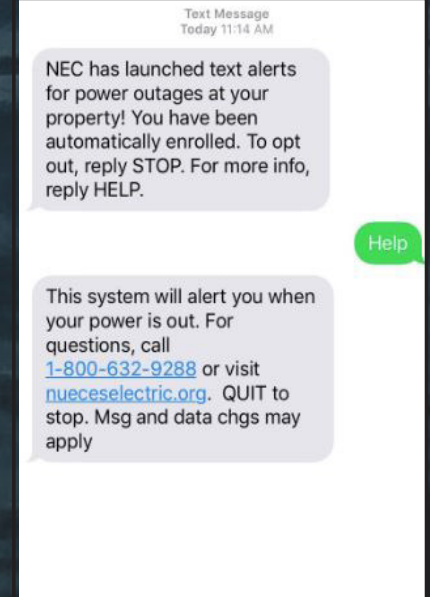
The 2020 outlook calls for a 70% probability for each of the following ranges of activity:

- * 13-19 Named Storms
- * 6-10 Hurricanes
- * 3-6 Major Hurricanes
- * Accumulated Cyclone Energy (ACE) range of 110%-190% of the media

The seasonal activity is expected to fall within these ranges in 70% of seasons with similar climate conditions and uncertainties to those expected this year. These ranges do not represent the total possible ranges of activity seen in past similar years. The predicted ranges for 2020 are centered above the 1981-2010 seasonal averages of 12 named storms, 6 hurricanes, and 3 major hurricanes. Most of the predicted activity is likely to occur during the peak months (August-October, ASO) of the hurricane season. The Atlantic hurricane season officially runs from June 1st through November 30th.”



Outage text welcome message.



NEC Outage Texting

Nueces Electric Cooperative always strives to keep up to date with member communications, especially during times of severe weather. When our member’s lights go out, there are typically two things they want to know (1) Does NEC know we are out of power? (2) How long until power can be restored? Fortunately, NEC has recently introduced a new way to be alerted of outages during a storm or severe weather.

How it works

Members will be notified when their power goes out through an outage text messaging system. It is important for our members to have an active, working phone number on file that NEC can reach in case of emergencies. The mobile phone number members have on file with NEC will receive an initial text message stating that they will begin receiving NEC outage notifications. Members will have the option to opt out of outage texting by replying “Stop”. Members can also reply “Help” and receive a text containing more information.

This service is a great resource for NEC members in the event of evacuations and when keeping track of power in the home is impossible. Now members will have an exact time the power went out, as well as when the power is restored. This allows members to be aware of how long electronics such as the refrigerator and other devices were left without power. Members will also receive an estimated time frame of when power is expected to be restored.

NEC launched its outage texting system in June 2019. NEC will continue to improve communication methods for our members to continuously fulfill our mission of providing reliable, cost-effective service in a culture where safety is a priority.

2020 NEC Hurricane Guide



NEC Requirements to Keep Lineman Safe

If you plan to purchase or install a backup generator for your home, it is ideal to plug devices or appliances directly to the generator. However, in some cases members ask to run their home central AC unit to the generator. In order to do this, you will need to tie in the generator with the main breaker. For the safety of line crews and your home, there are certain issues you must resolve with NEC before you activate your system.

NEC requires you to have an electrician safely install a “break before make” transfer switch between your meter and main breaker, and have them tie in your generator to the electric transfer switch. This way the electricity your generator produces will be isolated from the power grid. If you plug in your generator and do not have this transfer switch, you are putting line crews working to restore power at risk of electrocution due to the backfeeding of electricity through your power lines. When power is restored, simply reverse the transfer switch so the main

Generator Safety 101

source of power is coming from the power lines. Talk to your electrician to see if an automatic or manual transfer switch is right for your home.

1. Determine what lighting and appliances you will want to use and choose a generator that produces more power than will be drawn.
2. It is best to plug appliances directly into the generator using heavy duty, outdoor extension cords.
3. Every year, people die in incidents related to carbon monoxide (CO) poisoning from using portable generators. We can't say it enough: Never Use a Portable Generator Indoors! This includes inside a garage, carport, basement, crawls pace, or other enclosed or partially-enclosed area, even with ventilation. Opening doors and windows or using fans will not prevent CO buildup in the home. The CO from generators can rapidly lead to full incapacitation and death, but CO can't be seen or smelled. If you start to feel sick, dizzy, or weak while using a generator, get to fresh air RIGHT AWAY - DO NOT DELAY! Because you may have windows open to get fresh air while the power is out, be sure to place the generator away from windows, doors, and vents

Getting Started

- * Start with an easy to carry, water-tight container. A large, plastic trash can will do, or you can line a sturdy cardboard box with a couple of trash bags.
- * When storing your documents, use a portable, waterproof (airtight) bag that's brightly colored, so you can quickly find it in the dark.

Water

- * Water: 1 gallon per person per day.

First Aid

- * Band-aids
- * Gauze
- * Roller bandages
- * Antiseptic
- * Latex gloves
- * Adhesive tape, 2-inch width
- * Anti-bacterial ointment
- * Cold pack
- * Small scissors
- * Tweezers
- * Sunscreen
- * Thermometer
- * Safety Pins
- * CPR breathing barrier/ face shield
- * Non-prescription drugs (e.g., aspirin or non-aspirin pain relievers)

Food

- * Ready-to-eat, non-perishable foods, such as canned meats, granola bars, instant soup and cereals, fruits and vegetables, canned or box juices, peanut butter, jelly, crackers, granola bars, trail mix, bread and any special dietary items you and your family need.
- * Dry milk and juices
- * Manual can opener
- * Baby supplies: formula, bottle, pacifier, soap, baby powder, clothing, blankets, baby wipes, disposable diapers, canned food and juices
- * Food, water, leash and carrier for pets

Sanitary

- * Garbage bags
- * Large trash cans
- * Towelettes
- * Bar soap and liquid detergent
- * Shampoo
- * Toothpaste and toothbrushes
- * Feminine hygiene supplies
- * Toilet paper
- * Household bleach
- * Rubber gloves

Supplies

- * Paper plates & napkins
- * Duct tape
- * Matches
- * Foil
- * Tools
- * Signal Flare
- * Ponchos
- * Blanket or sleeping bag per person
- * Battery-powered, portable radio or portable TV and plenty of extra batteries
- * Flashlight and extra batteries
- * Eyeglasses
- * Games, such as cards, and quiet toys
- * Seasonal change of clothing, including sturdy shoes

Document & Finance

- * Copy of driver's license
- * Printed emergency contact list or address book (even if contacts are stored in a smartphone)
- * Insurance policies (health, home, auto)
- * Vital documents (birth certificates, passports, wills)
- * Bank account information (account numbers, passwords)
- * Cash and change
- * Photocopies of credit and debit cards (front and back)
- * Stock certificates, investment info
- * Extra keys (home, safe deposit box, office and car)

In Advance

- * Make sure you have appliance thermometers in your refrigerator and freezer.
- * Group food together in the freezer. This helps the food stay cold longer.
- * Have coolers on hand to keep refrigerated food cold if power will be out for more than 4 hours.
- * Purchase or make ice cubes in advance. Freeze gel packs ahead of time for use in coolers.
- * Know where dry ice can be purchased.
- * Store food and bottled water on high shelves.

When the Power Goes Out

Keep the refrigerator and freezer doors closed as much as possible to maintain the cold temperature. The refrigerator will keep food cold for about 4 hours if it is unopened. A full freezer will keep the temperature for approximately 48 hours (24 hours if it is half full) if the door remains closed.

- * Buy dry or block ice to keep the refrigerator as cold as possible if the power is going to be out for a prolonged period of time.
- * If you plan to eat refrigerated or frozen meat, poultry, fish or eggs while it is still at safe temperatures, it's important that each item is thoroughly cooked to the proper temperature to assure that any food borne bacteria that may be present is destroyed.
- * For infants, use prepared, canned baby formula that requires no added water. When using concentrated or powdered formulas, prepare with bottled water.

Communication is Key

During Storms

Communication during a storm can often times be difficult and frustrating. After all your power is out and thoughts immediately start racing through your mind: it's hot; the food in your fridge and freezers; no chargers or electronics work; you may have livestock water pumps; and you have no idea why your electricity is out and how long it will be out. It's stressful and we get it.

When you experience a power outage, use the information to the right to help guide you on how to work with the Co-op.

The most important step is utilizing the NEC outage viewer to see how large the outage is. The Outage Viewer provides real-time data. If you have gone to another home while your power is out, check the Viewer to know when your power is back on and you

can return home.

The Outage Viewer allows members to see the big picture and see all of the outages the Co-op is working on.

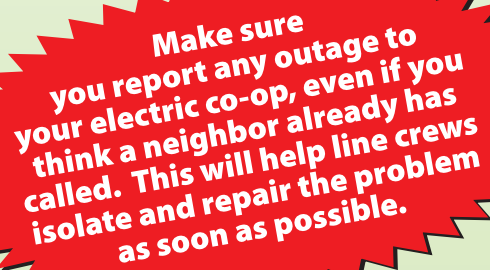
During major storms, the co-op will do our best to post updates on Facebook and our website, and will update you to the best of our ability as we receive information.

One thing is certain: crews will work tirelessly until all members have their power back on.

If Flooding Occurs Keep Food Safe

*Discard any food that is not in a waterproof container if there is any chance that it has come into contact with flood water. Food containers that are not waterproof include those with screw-caps, snap lids, pull tops, and crimped caps.

- * Discard cardboard juice/milk/baby formula boxes and home canned foods. They cannot be effectively cleaned and sanitized.
- * Undamaged, commercially prepared foods in all-metal cans and "retort pouches" (like flexible, shelf-stable juice or seafood pouches) can be saved if you follow this procedure:
 1. Remove the labels, if they are the removable kind, since they can harbor dirt and bacteria. Use a permanent marker to re-label your cans or retort pouches, including the expiration date
 2. Rinse the cans or pouches with water that is safe for drinking, if available, since dirt or residual soap will reduce the effectiveness of chlorine sanitation.
 3. Sanitize cans and retort pouches by immersion in one of the two following ways:
 4. Place in water and allow the water to come to a boil and continue boiling for 2 min., or place in a freshly-made solution consisting of 1 tablespoon of liquid chlorine bleach per gallon of drinking water (or the cleanest, clearest water available) for 15 minutes.
 5. Air dry cans or retort pouches for a minimum of 1 hour before opening or storing.
- * Thoroughly wash metal pans, ceramic dishes, and utensils (including can openers) with soap and water, using hot water if available. Rinse, and then sanitize them by immersing them for 15 minutes in a solution of 1 tablespoon of liquid chlorine bleach per gallon of clean water.
- * Thoroughly wash counter tops with soap and water, using hot water if available. Rinse, and then sanitize by applying a solution of 1 tablespoon of liquid chlorine bleach per gallon of clean water. Allow to air dry.



Make sure you report any outage to your electric co-op, even if you think a neighbor already has called. This will help line crews isolate and repair the problem as soon as possible.

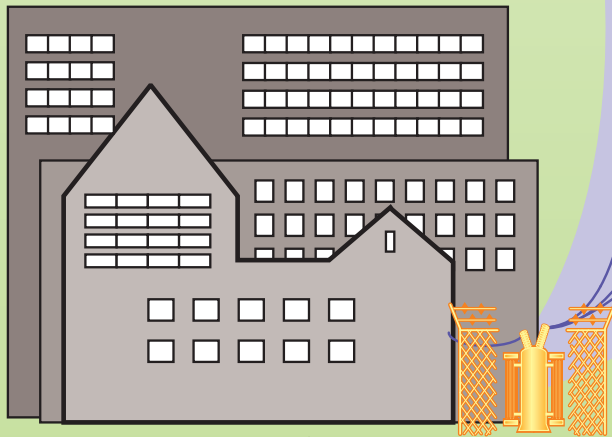


High-Voltage Transmission Lines

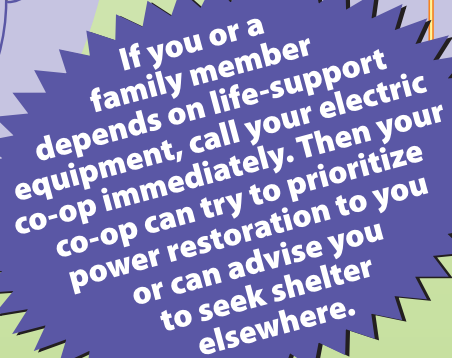
1. Transmission towers and lines that supply power to one or more transmission substations rarely fail. However, when damage does occur – usually due to high winds or ice buildup – these towers and lines must be repaired before other parts of the distribution system are inspected, because they serve thousands (or ten of thousands) of people.



Transmission Substation



Large Industrial User

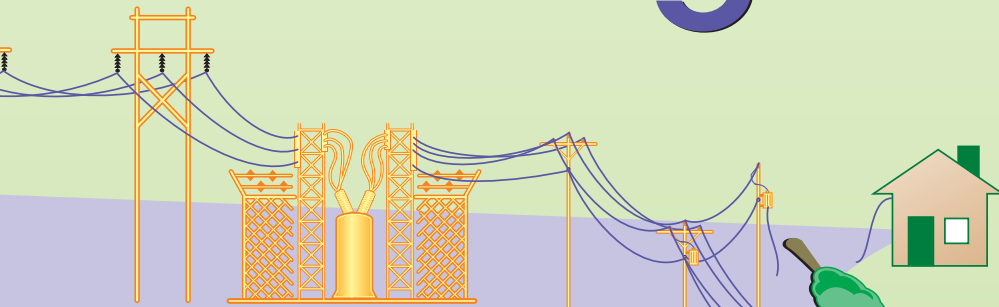


If you or a family member depends on life-support equipment, call your electric co-op immediately. Then your co-op can try to prioritize power restoration to you or can advise you to seek shelter elsewhere.

Restoring power after a severe storm involves much more than just flipping a switch at a substation or pulling a fallen tree off a down powerline. Highly trained line crews from NEC, crews from neighboring co-ops work together around the clock to restore service.

Shown here are the steps co-ops follow to restore power. At each stage, the primary goal is getting the greatest number of members online in the shortest amount of time possible.

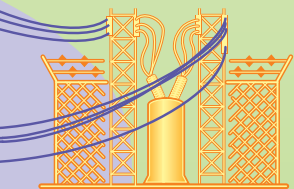
How power is restored after an outage



Local Distribution Substation 1

- 2.** A co-op usually has several local distribution substations, each serving hundreds or thousands of co-op members. When a major outage takes place, these substations usually are checked first to see if the problem is in the transmission system to the substations or the substations themselves.

- 5.** Finally, isolated outages – caused, for example, by a damaged service line between a transformer and an individual home – are repaired.



Local Distribution Substation 2

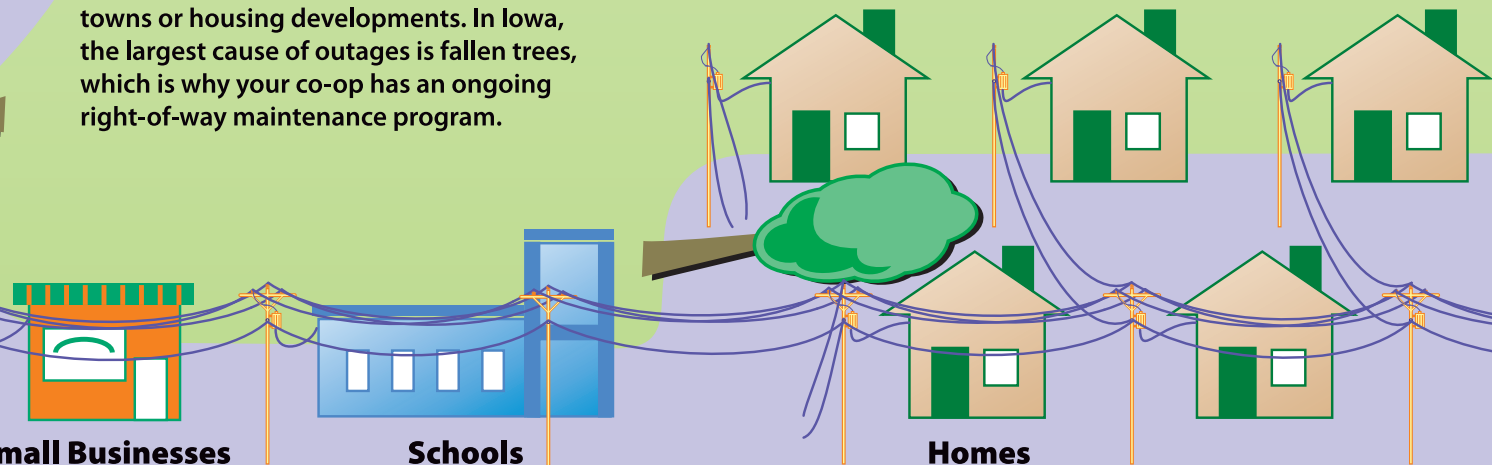
- 3.** If the problem cannot be isolated at a local distribution substation, the next step is to check the distribution lines that carry power to groups of customers such as towns or housing developments. In Iowa, the largest cause of outages is fallen trees, which is why your co-op has an ongoing right-of-way maintenance program.

Do not connect a generator directly to household wiring. The power from a generator can back-feed to power lines and injure or electrocute line workers making repairs.



Farms

- 4.** Then, the line crews work on outages that are more localized by inspecting the final supply lines – called tap lines – that carry power to utility poles or underground transformers outside small businesses, schools and homes.



Small Businesses

Schools

Homes