

POWER & MIGHT



STORY & PHOTOS BY DONNA BUSH

As Hurricane Ida doggedly plowed her way towards southeast Louisiana, we collectively held our breath and waited. It was hauntingly reminiscent of that same day, August 29, sixteen years ago when Hurricane Katrina hit our community, changing life as we know it forever. Those of us who stayed through Katrina experienced the same anxiety and fear. Add to that the fact that Ida rapidly intensified from a Category 1 to a Category 4 in less than 24 hours and it's no wonder we all had PTSD. With the rapid intensification and fast movement, many didn't have time to evacuate. Memories of hours-long traffic jams while trying to leave ahead of Katrina caused numerous to not even attempt evacuation. No contraflow was available. For many of us, it was more prudent to prepare as much as we could and pray for the best.

For veteran hurricane survivors, the usual storm prep involves purchasing extra batteries, water and food, picking up items in the yard that could become airborne, moving plants inside, testing generators, stocking up on gasoline and topping off vehicle gas tanks. And, of course, watching intently for every storm update.

Slidell residents weren't the only ones prepping... and this group started months earlier. Cleco performs yearly drills, selecting a substation and running "what if" scenarios for a day to keep fresh in technicians' minds the necessary tasks to perform. Cleco has a 200,000 square foot central storeroom that houses materials such as poles, transformers, cable, etc. for daily operations and "storm stock." Their storm plan outlines that "employees and contract resources be close enough to the expected impact area to respond quickly after the storm passes, but distant enough to avoid unsafe situations and damage to equipment. Thus, employees and contract resources, including those who reside in the projected impact area are not deployed to a location until after the storm passes, and it is safe."

I was fortunate enough to meet with three Cleco power line technicians just over a week after the storm when most of the Slidell area was restored. They are most commonly called "linemen", although they can be male or female. Wade Singletary, Supervisor of Distribution Construction; Norbert Shiyou, Power Line Technician IV; and Ben Hirschey, Power Line Technician II met me outside Buffalo Wild Wings in Slidell as a thunderstorm brewed in the background. While the rain held off, the lightning did not, and work was halted until there was no danger. As we chatted, a Slidell lady pulled up with home-baked cookies and praise for their hard work.

The three men explained their storm strategy. First is pre-storm. Trucks are fueled and stocked. Tools are readied and stowed. Personal protection equipment (PPE) is verified. Everything needed is staged to prevent any last-minute searching for an essential item. Each crew is prepped, ready to go and a safety briefing is held. "Our plan is to be as ready as we can be, even though we don't know what we'll be dealing with."

As the storm nears, small outages begin to occur. These are handled just like any other daily outages. Shiyou shared, "This is an everyday thing for us, just on a much larger scale." I was surprised to hear that they were in the field responding to outages even as the storm approached. This would explain why my power flickered on and off numerous times from 6:30am on, before finally staying off at 7pm. As the rain got heavier and the winds got stronger, outages became more widespread and larger. "We try to get power back on, as much as we can, for as long as we can."

"As the storm approached, conditions deteriorated, and safety had to take the forefront. There's always an exception, usually for a safety reason. During Ida, a double circuit pole (meaning it has two circuits) had one pole broken

near the Slidell Cleco office, leaving the wire on the highway. We needed to get the wire off the roadway to prevent injury and/or spread further damage. The storm was pretty bad, but we were able to secure the roadway. By this time, nothing we do will keep the power on. It's time to go home and wait for the storm to pass."

Cleco power line technicians were back at work at 6am! The isolation phase begins after the storm has passed. **FIRST PRIORITY IS PUBLIC SAFETY.** As soon as conditions are safe, Cleco lines are patrolled by land and/or air to assess damages. Per Cleco, "Next, transmission and distribution lines are inspected and repaired. Transmission lines are critical to power restoration because they carry electricity from power plants to substations that deliver electricity to distribution lines which deliver electricity to homes, businesses, etc."

All power line technicians are assigned to a specific substation. Each one of the three guys I interviewed are substation team leaders; Wade – Bayou Liberty; Shiyou – Robert Road; and Ben – Bonfouca. A substation team leader is responsible for every circuit that comes out of the station and for



the safety and management of every person that works on that substation, including out-of-town contractors and tree-cutters. At this point, only Cleco employees are working the storm, as they check for station damages and damage to the power grid it supplies. Once the damage assessment is completed, a decision is made on how much assistance will be needed to fully restore power.

Approximately 2,500 contract resources from 19 states, including Louisiana, were deployed to assist with restoration after Hurricane Ida. These resources included damage assessors, distribution line technicians, transmission line technicians, tree-trimmers, substation specialists, logistical service providers and support personnel. Cleco secures these resources through a Mutual Assistance Program coordinated by the Southeast Electrical Exchange where member utilities offer restoration assistance after major weather events.

There's a hierarchy to power restoration. Critical community services, such as hospitals, nursing homes, water systems, fire and police departments, sewage treatment and pumping stations, etc. are first.

After the critical services are restored, they move to restoration of the largest number of customers in the shortest amount of time until power is restored to all who can receive power. What is meant by "all who can receive power"? Often, after a storm of this significance, there is damage to equipment required to deliver electricity. This damage must be repaired. Also, restoration may be impacted by high water. In order to turn on power, it must be safe for the technicians and tree-cutters to work in the affected areas.

At 5pm on August 30, only one day after Ida roared ashore, Cleco reported 95,487 of their total 96,974 St. Tammany Parish customers were without power, affecting approximately 40,000 in Slidell. On September 9, about 25 Slidell customers remained without power, as a result of damaged equipment and/or high-water preventing access.

The guys shared, "There's a thousand things going through your head after a storm. First and foremost is public safety and team member safety. More time than less, you are more worried about the public and your men than yourself. As power begins to turn on and areas are isolated, red danger tags are hung on switches or jumpers that are cut. This is a visual key to NOT close (restore power to) this switch because there's a problem. Information on the tag is filled out with date & time; a brief description of the problem; and TLN/ELN, a 10-digit pole identification number on their mapping system. Information is called into the Distribution Operations Center (DOC), located in Pineville Louisiana, which tracks outages, danger tags and more. Lead technicians must

contact the DOC prior to closing a circuit to verify there is no hold (danger tag).”

“It’s weird when you are in this situation. It’s a mixture of emotions and feelings that are going on all day long. You’re worried. You’re scared. You’re excited. You’re driven. When it gets to that key point - where you’ve busted ass so hard and your guys have busted ass and it’s time to make something happen - all you can think is, *Did I miss something? Did everybody do what they were supposed to do? Is everything ready?* You make that phone call to the DOC and they give you permission and you are about to push that button...It’s like pulling a trigger on a gun. Once you pull that trigger, the bullet leaves the gun and there’s no getting it back.”

Shiyou says, “It’s a scary feeling to hear those sirens about 15 minutes after you energize something, and you get that phone call, ‘House fire. Need to respond.’ You’re hauling ass and thinking, *Oh shit! Am I burning somebody’s house down? Did I miss something?* About 5 days after the storm, an older man was so happy to have his power back. He showed me a tree limb laying on the service pole. I told him, ‘I’ll clear it out later. It’s nothing serious.’ After making it hot, we get a service call to the same address. I began questioning myself, *Did I make a mistake? Did I do something wrong? Did I look at it wrong? Was it really something hazardous? Something I didn’t catch right away?* It’s a sigh of relief when you see the fire department walking out the door holding a smoking surge protector.”

Wade shared a story from a few days past. He had just turned on power to an area 15 minutes prior when he began seeing smoke. He hadn’t seen any smoke earlier. It turned out the customer was burning limb debris in the backyard. “It still makes your heart skip a beat!”

“You really have to take an hour in a day for yourself. You can’t turn the phone off. You have to have it with you. Take that time to walk away from the crew to decompress and clear your head. When you get home, you’re still not decompressed. You’ve left your family. You are walking into your house – a whole other level of stress is there.” Often, they are working 16-hour days to restore power without having power themselves or even with damage to their homes.

Tree-cutters, such as Asplundh or Davey Tree Service, must go ahead of the power line technicians to cut trees out of the way, allowing them to perform their jobs. Cleco team leads are in charge of tree-cutter crews and making sure they can do their work safely.

Seeing all the downed power lines and poles, I asked why not use more underground utilities? “With Ida, we had two underground transformers go bad and two underground faults. Underground utilities are extremely expensive to



install and require much more intensive troubleshooting when issues occur. Above ground can usually be repaired in less than the time it takes to troubleshoot underground.”

I visited the Robert Road substation and learned about recloser, non-reclosing and a one shot. Typically, breakers are set in ‘recloser on’ mode, meaning that they will close 3 times under normal fault conditions. For example, a tree branch falls on a wire, it will see a fault, amperage rises, and the circuit opens (no power). After a pre-determined amount of time, it closes again. If the tree branch is still there causing a fault, it will open again. This will occur 3 times. After the third time, the power remains down (open) permanently until the problem is resolved and physically turned back on.

When power line technicians are working on energized (hot) lines, they would not want the breaker to open and close 3 times. Either by the DOC or at the substation, it is set to ‘non-reclosing’ for down-line protection. Therefore, if anything were to come in contact with a line being worked on, the line would permanently de-energize. This is also known as a one shot, since the circuit will only open once. With this highly sophisticated system, I asked, “Is it really necessary for customers to call Cleco to report an outage?”

Ben and Shiyou said in unison, “It never hurts!” Meters are on a network, collecting and sharing information upstream to a central location. This data includes usage statistics, billing data, outages, etc. Outages are reported directly to the DOC. “For example, a squirrel jumps on your transformer and the fuse pops. Say there are 5 meters on this circuit,

the meters call in and an outage message comes up on the DOC’s computer screen. If it is after hours, the DOC will contact the on-call technician for that area and send an outage report to the computer in the employee’s truck. The report includes the ELN, and the customers’ names and addresses. The on-call technician heads in that direction to restore power. In a storm situation, where hundreds or thousands of meters are calling in, the DOC is overwhelmed with outage reports. In order to continue working, a physical block is issued to stop the messages.” Yes, it’s a good idea to report your outage.

I was curious how the meter could relay an outage to the DOC if it had no power. Shiyou explained that each meter has a capacitor that stores enough energy to send that last signal, called the “last breath”, reporting an outage.

I joined Wade and Ben as they supervised crews from Shelton Energy Solutions who were in town from Alexandria to assist with restoration efforts. This morning’s task was to repair cross-arms on a power pole in the parking lot of Journey Fellowship Church on Pontchartrain Drive. Even though the cross-arms are made of treated wood, eventually termites get into them and they start to deteriorate. This deterioration is accelerated by the stress of the storm. To prevent further outages, they must be replaced. A “one shot” was implemented while the lines were worked hot except for the one that runs across Pontchartrain Drive to Los Cantaritos and the closed Burger King. This circuit was de-energized so they wouldn’t have to worry about it while replacing the cross-arms. Los Cantaritos’ only request was that their power be restored by 9am when they needed to



begin lunch prep. The crew was onsite to begin work at 7am and wrapped up by 8am.

Wade explained, “As long as we are wearing proper PPE and following safety rules, energized lines can be worked on safely.” Anyone below mid-level has to wear rubber sleeves, which withstand up to 30,000 volts, in addition to Class 2 gloves, rated up to 17,000 volts. Working 16-hour days in areas with extreme heat advisories, wearing heavy safety gear can be brutal. A full-body harness, weighing about 5 pounds, is worn while in the bucket to prevent a fall. In addition to wearing flame resistant clothing, Cleco technicians are equipped with a Personal Voltage Detector that will alert if they come close to an energized line.

Ben shared, “The best part of my job is restoring people’s power. The worst part is having to tell someone that I have to turn their power off for a repair. It’s all about maintaining public safety. We are here to help.”

After the storms pass and we are living amidst the persistent buzz of generators and chain saws, let’s all be thankful for God’s blessings and the wonderful power line technicians and support personnel that restore our power and bring life back to normal.

STORY CONTINUED ▶▶▶



GENERATORS

Do not run generators inside your house or your garage. They should be distant enough to keep carbon monoxide fumes out of the house. Carbon monoxide is known as the silent killer, as it has no smell. Only use a licensed electrician. Never hook your generator into your dryer outlet. This can and will backfeed to the power company and can kill those working to restore power. Overloading the generator can kill you and your family.

TRAINING

At Cleco, all schools are mandatory, educating workers not just on how to build something a certain way, but why it is built in that manner. For example, they learn specifications on hanging a cross-arm a specific way and why. Power line technicians are educated on every device - what it does, how it functions, and why. They are trained on where the power comes from and how it gets there. This knowledge is invaluable when troubleshooting issues. Even though technicians are assigned a specialized area, they are still trained in all areas – underground, overhead, substation, troubleshooting, transmission, etc.

Everyone takes their turn as a call crew. Every 5 weeks, three guys are ‘on’ for 7 days. In addition to their regular 40 hours, they are responsible for everything after hours and on weekends. In a way, this is preparation training for storm restoration. This trains the body for working long hours and long days. “We literally spend more time working and with co-workers than our own families. It takes a very understanding spouse.”

WHAT IS A POWER SUBSTATION?

An Electrical Power Substation receives electric power from a generating station or power plant via transmission lines and delivers power via the outgoing transmission lines. Substations are integral parts of a power system and form important links between the generating stations, transmission systems, distribution systems and the load points.





FEED LINEMEN – TELL US WHERE YOU ARE SO WE CAN BRING FOOD AND WATER FACEBOOK PAGE

Sheila Person of Lafayette created the page to connect linemen, linemen crews, linemen parents, and linemen significant others (wives, husbands, etc.) to available resources for housing, food, laundry, etc. Sheila is emphatic about this being God's work in the community to bring resources together to help others. "It's not me. It's God."

Even though her home received major damages from Ida's wrath, Sydney Ray opened her Folsom bed and breakfast (Casa Bella Magnolia) to nine Entergy-contracted linemen. This is the third Hurricane Ida group she's hosted. "I'm so particular about my dining setup. Although the guys have said they don't mind paper plates, I'm like, 'Nope, you are getting the full dining experience!' So, we serve on plates, silverware, cloth napkins - everything I would do for any other B&B guest."

FOOTNOTE: Power companies do provide lodging, meals, laundry, etc. for out-of-town crews. However, Hurricane Ida drastically damaged or destroyed many of these resources. As some power companies scrambled to obtain needed services, locals stepped up and did what Louisianans do – offered food, laundry, and housing. Louisiana Strong!



FRIENDS & FAMILY OF ST. TAMMANY LINEMEN FACEBOOK PAGE

Similar to the "Feed Linemen" page, this FB page targets St. Tammany Parish, putting those in need with those who can help by providing housing, food, laundry, etc. It was created by Melissa Snow of Slidell to focus solely on St. Tammany Parish pertinent posts. Melissa has a special interest in helping linemen, as her son is an Entergy lineman deployed to Lockport. She shares, "If my son was living in a tent and not able to get adequate food, it would break my heart. I want to do this to help others and I would want someone else to do this for my son, if necessary."

Melissa shared that she was so distraught when hearing that many of the utility workers were sleeping in tents and unable to get good meals, that she bought 45 pizzas, drove around town and handed them out to anyone in a utility truck or in one of the man camps. Kristin Collins, another member of the group, arranged housing at First Christian Church in Slidell for a group who worked for Aquila out of Ft. Worth, Texas. Here, working in dangerous, dirty conditions in the swamps around La Place, restoring communication lines, Johnnie, the foreman, described their work as a candidate for the TV show *Dirty Jobs*. Frank shared that they are very appreciative of the place to stay and the food that has been provided to them by Slidell residents. "We will be working south of New Orleans for at least 3-4 months. We love Slidell and will stay at the Church until they kick us out!"

Melissa, Kristin, myself and others stocked the guys with electrolyte drinks, power bars, snacks, watermelon, and lots of home-cooked meals. My husband, Eric, and I cooked breakfast their first morning at the church. One night, I turned my kitchen into a potato nightmare as I prepared 5 pounds of mashed potatoes! Over a weekend, we set up a table at Northshore Mall and handed out homecooked chicken & sausage gumbo, fried chicken, and more. Many locals stepped up, providing home-cooked meals and laundry services. Without fail, every out-of-town worker I spoke with reiterated how much the kindness of Louisiana residents has meant to them. Louisiana Proud!

