



Tideland Topics

Real People. Real Power.

Sticky situation

Duct tape may have many useful purposes, but it simply doesn't pass muster when it comes to sealing HVAC system ducts.

Turn the page to see some of our energy audit photos and find out what product is recommended to ensure air sealing that lasts a lifetime.



Service milestone

Tideland EMC continues a proud tradition of member service as we celebrate 80 years of cooperative ownership. Of course, if you are of a certain age, you may know that the oldest of the four power companies that make up Tideland today was Pamlico Power and Light, an investor-owned utility headquartered in Engelhard. It began service in 1935 and would be 86 years old today.





Medical Alert members

Tideland restores power after a hurricane at the substations first, primary circuits second, and smaller taps third. While we cannot deviate from this restoration strategy that generally restores power in order of greatest impact to members, we do maintain a “Medical Alert” list for those dependent on home medical equipment.

We currently have 275 members on the list and we are able to tailor communications and updates to these members when the risk increases for outages that are anticipated to last multiple days. We will make a special effort to communicate with our medically fragile members during hurricane recovery.

Please reach out to us at 800.637.1079 if you or a relative has special medical needs and if their household would benefit from special communications regarding the risk of longer power outages.

Energy Auditor’s Notebook: It’s not magic. It’s mastic.

During a recent on-site visit of a Tideland served home, energy auditor Jim Rapin inspected ductwork located in the member’s attic. The ductwork looked to be in very good condition with no apparent disconnected ductwork. However, after 16 years of being located in the attic environment the duct tape used to seal the ducts at the connections was dry, brittle, and had lost adhesion.

Duct tapes just do not last, and as a result, we get air leakage at the

connections and the duct insulation is compromised. Duct leakage on the supply side is conditioned air (heated or cooled) that escapes into the attic before it enters the living space. This leads to higher energy use. It can also cause the living space to go under negative pressure, increasing air leakage across the entire building envelope. Duct leakage on the return side allows unconditioned and unfiltered air from the attic to enter the HVAC system. That can cause

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JIM RAPIN PHOTO



LARRY JOHNSON PHOTO



LARRY JOHNSON PHOTO

Annoying, but necessary

Blinks mean system is working

Tideland EMC strives to provide reliable electric service. An important part of outage prevention is an equipment operation we often call a “blink.”

Blinks occur when a breaker, or switch, opens along any portion of the power system. The breaker usually opens because of a large, quick rise of electrical current. This large rise, called a fault condition, can occur when a tree branch touches a line, lightning strikes, or a wire breaks. It can also happen when a bird with a large wing span comes in contact with more than one energized wire. It can also happen when farm equipment comes in contact with power lines.

When this happens, a relay senses the fault and tells the breaker to open, preventing the flow of power to the problem site. After opening, the breaker quickly closes. The brief delay, which allows the fault an opportunity to clear, usually lasts less than two seconds. If the fault clears, electric service remains on and all is well.

If, after the breaker closes, the fault condition is still detected, the breaker will open again and repeat the process. If after the third time the fault condition has not cleared the breaker locks out and a co-op crew must be dispatched to resolve whatever issue caused the fault condition.

Without these breaker operations our lines and equipment would be vulnerable to major damage resulting from pole fires or high-voltage conditions. High-voltage conditions would also put member-owned equipment at risk. These operations can also prove to be potentially life saving should someone come in contact with an energized line.

Thanks to Tideland’s automated metering infrastructure we now receive daily blink counts for every circuit on our system. When we see high blink counts on a circuit, tap or individual service we can dispatch crews to investigate.

Unfortunately, summer is prime time for blinks due to increased lightning strikes and thunderstorms, rapid seasonal growth of trees and other vegetation, and increased outdoor activity related to farming, land clearing and recreational sports. Even salt accumulation on power lines at Ocracoke and our more coastal service areas can contribute to blinks.

Regardless, blinks can be rather irritating for co-op members because they often require resetting timers and clocks left flashing “12:00.” It can also be worrisome to have a blink occur while HVAC systems are operating or any appliance or device equipped with a motor or compressor. The sudden interruption of operation followed by an immediate restart can leave such equipment vulnerable to failure. That’s why many newer model HVAC systems now come equipped with a delay start to protect the compressor after an interruption of service. Programmable thermostats like the Ecobee also have a delay start option.

An uninterruptible power supply (UPS) on your computer can help prevent information losses of unsaved work during a blink or outage. The UPS incorporates surge suppression features with a battery backup and can provide you with enough time to save your work and shut down your computer properly if needed.

Rights-of-way maintenance and construction schedule

During July, Lucas Tree Experts will trim trees in our rights-of-way in Engelhard, Swan Quarter, and Scranton. Gunnison Tree Service will continue trimming in Pantego and Sidney.

Our construction crews with Lee Electrical will be working in the following areas:

- Orchard Creek Road
- Spring Hope Road
- Lake Phelps/Allen Road

River City crews continue to install new ductile poles along Broad Creek Road in Washington.

Osmose will be conducting pole inspections between Manns Harbor and Scranton.

Remember to give roadside crews wide berth as you travel. It’s the law.

Holiday closing

Tideland offices will be closed Friday, July 2, in observation of Independence Day.

On-call crews will remain available to respond to outages and service emergencies. Our 24-hour call center will also be staffed during that time.

Please enjoy the holiday weekend safely and responsibly. We care.

Expand your membership with ElecTel financing



Who is ElecTel?

Membership in ElecTel Cooperative Federal Credit Union is open to any Tideland EMC member.

Membership is also open to the employees, directors, and officers of the electric and telephone cooperatives in North Carolina, Virginia, Maryland, Delaware, Tennessee, and West Virginia.

Unlike banks, whose primary goal is to maximize profit for a select group of stockholders, credit unions are owned and governed by members. And everyone has an equal voice.

ElecTel Cooperative FCU exists to serve your financial needs by offering a full range of affordable, easy to obtain services. Their "profits" are returned to you in the form of higher savings rates, lower loan rates, and fewer fees than you'll find at most other institutions.

Once you join, your membership is good for life!

CONTACT:
Electel.org
800.849.5600



Tidelanders can tap into credit union membership for generator financing & more

Tideland EMC is excited to offer you membership in ElecTel Cooperative Federal Credit Union. ElecTel is an ideal source for financing energy related projects such as backup generators, new HVAC systems and insulation projects.

The first step is to apply for membership online at electel.org. An ElecTel member representative will contact you to conduct the "onboarding" process to obtain proof that you are a Tideland EMC member. A copy of your bill will suffice or if you are a FlexPay member Tideland can provide verification of membership.

Your ElecTel account is opened with as little as a \$1 deposit so you can begin the loan appli-

cation process. Proof of income and the proposal for the energy related project must be submitted. Once approved, loan documents will be sent for electronic signature or by mail. When loan funds are disbursed they are sent directly to the vendor/contractor

Loan rates are based on the member's credit score and the financing terms which is up to 10 years for energy projects. Energy project loans are capped at \$40,000 and require a first or second lien on the member's home when financing over \$10,000. In the case of manufactured homes, loans can be made if the member owns the land but lending is capped at \$5,000.



LIGHTNING PROTECTION PREVENTING A DIRECT STRIKE



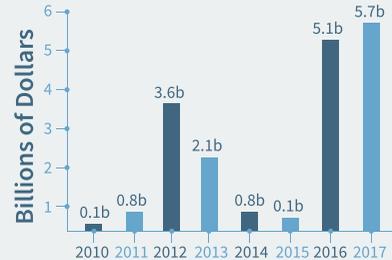
In the first quarter of 2017 alone, thunderstorms caused a record **\$5.7 billion** in losses, and lightning kills an average of **30 people a year**. Learn how to keep you, your family, and property safe from lightning.

▶ LIGHTNING IS DEADLY

22,600

An average of 22,600 fires were caused by lightning between 2007 and 2011.

According to Aon Benfield's Impact Forecasting, **insured losses** from lightning strikes are at an **all-time high**.



30

 people die a year from lightning strikes according to the National Weather Service.

According to the Lightning Protection Institute, the top 5 states most often **struck by lightning** are:

- 1 Florida 25.3 strikes per sq. mile
 - 2 Louisiana 20.3 strikes per sq. mile
 - 3 Mississippi 18.0 strikes per sq. mile
 - 4 Alabama 15.9 strikes per sq. mile
 - 5 South Carolina 14.6 strikes per sq. mile
- Oklahoma (tied)

▶ LIGHTNING IS FAR REACHING

1/3 of all lightning related injuries occur indoors – stay away from:



Corded phones



Electronics



Plumbing

10

Lightning can strike **10 miles** from a thunderstorm.



Lightning can strike **anywhere**, not just the tallest objects.

▶ LIGHTNING PROTECTION

Power surges caused by lightning can damage the electronics in your home.



Lightning protection systems **intercept lightning strikes** and provide a grounding path for dangerous electricity to **discharge safely**, leaving occupants and homes safe from harm.



Panel box surge protective devices (SPDs) serve as the **first line of defense** against harmful home electrical surges, limiting voltages by diverting currents at the electrical service entrance. Only a **qualified electrician** should install SPDs.



Protects electronics plugged into the device from surges, must be **replaced** over time or after a major surge event.



Power strips **DO NOT** provide surge protection.



No surge device can handle a **direct lightning strike**. Unplug sensitive electronics **WELL** before a storm to prevent damage.

2021 Hurricane Names

Ana
Bill
Claudette
Danny
Elsa

Fred
Grace
Henri
Ida
Julian

Kate
Larry
Mindy
Nicholas
Odette

Peter
Rose
Sam
Teresa
Victor
Wanda

Project updates



GRANTSBORO LINEMAN GREG MORRIS COMPLETES POLE TOP RESCUE

Gibbs takes top spot in timed trials

When NC's electric cooperatives have their next statewide pole top rescue competition, Ocracoke Line Superintendent Joseph Gibbs will be proudly representing Tideland at the event. Gibbs placed first in Tideland's annual time trials.

All linemen are required to complete the rescue operation in under five minutes to remain certified to climb. Placing second and serving as Tideland's alternate at competition is Pantego lineman Matthew Neal.



JOSEPH GIBBS - OCRACOKE



CREWS REPLACE REGULATOR BANKS IN THE PAMLICO BEACH AREA

Work continues to improve grid resiliency and reliability

Favorable weather conditions have allowed the cooperative to make steady progress on several major construction projects. At press time we were approximately 24 weeks away from completing the ductile pole installation between our Five Points and Washington substations. The rebuild of the circuit to Lake Phelps should move to the Allen Road area by mid-July.

In Pamlico County, our longest running construction project, both in terms of miles and time, is the Merritt circuit rebuild. Barring any unforeseen weather events, we expect to wrap up construction there in October of this year.



DUCTILE POLE INSTALLATION

Message to members

Surge protection coverage

by **PAUL SPRUILL**
GENERAL MANAGER &
CHIEF EXECUTIVE OFFICER

Summer storm season is upon us and with that comes increased exposure to power surges caused by thunderstorms and lightning strikes. Where once only a few household items were susceptible to surge damage, it is increasingly likely among a wide swath of home devices due to more onboard electronics and increased connectivity to telecommunication lines.

Most, if not all, home insurance policies provide some power surge coverage, but often the loss threshold is quite significant unless you opt for additional coverage. Furthermore, some policies confine coverage to specific events like lightning strikes.

It would be well worth your time to review your homeowner's or renter's insurance policy and discuss surge protection options with your insurance provider. There may also be an incentive to install surge protection devices to reduce your exposure to harmful power fluctuations.

One of the most overlooked components of your home's electrical system is the ground rod. Ground rods can be damaged by corrosion in a high salt environment, landscaping equipment, freeze and thaw cycles, and careless installation of grounds for other equipment such as cable TV, security systems or generators. In some cases, problems with ground rods are easy to see such as extending too far above the surface of the soil, loose wires, or visibly bent and corroded. If soil conditions change due to drainage or other factors that can impact ground rod effectiveness.

If you have concerns about your home's grounding the best course of action is to contact a licensed electrician. Even the best surge protection devices are much less effective without a properly installed and maintained grounding system.



Member spotlight Dowry Creek Marina

Located on the Intracoastal Waterway, Mile Marker 131.5, Dowry Creek Marina sits just below the transition from the Pungo River to the 20-mile Alligator River-Pungo River Canal.

In addition to a ship's store, club house, and laundry and shower facilities, the marina features a salt waterpool and tennis court. The marina offers both diesel and non-ethanol fueling and pump-out services and an on site LP-tank refill station. Paddleboard, canoe, kayak, pedal boat, bicycle, skill and dinghy rentals are available.

Maximum vessel length is 200 feet with 73 protected slips with water and electric hook ups.

By land the marina is four miles east of Belhaven off Highway 264. While you're visiting be sure to check out one of the available residential building lots for year-round laid back living. Weekly and monthly pool memberships are available during the 2021 season.

A new 4,800-square-foot restaurant and bar is currently under construction.

dowrycreekmarina.com
VHF Channel 16/71
35 31.98'N, 076 32.16'W
252.943.2728

AVOID UTILITY SCAMS

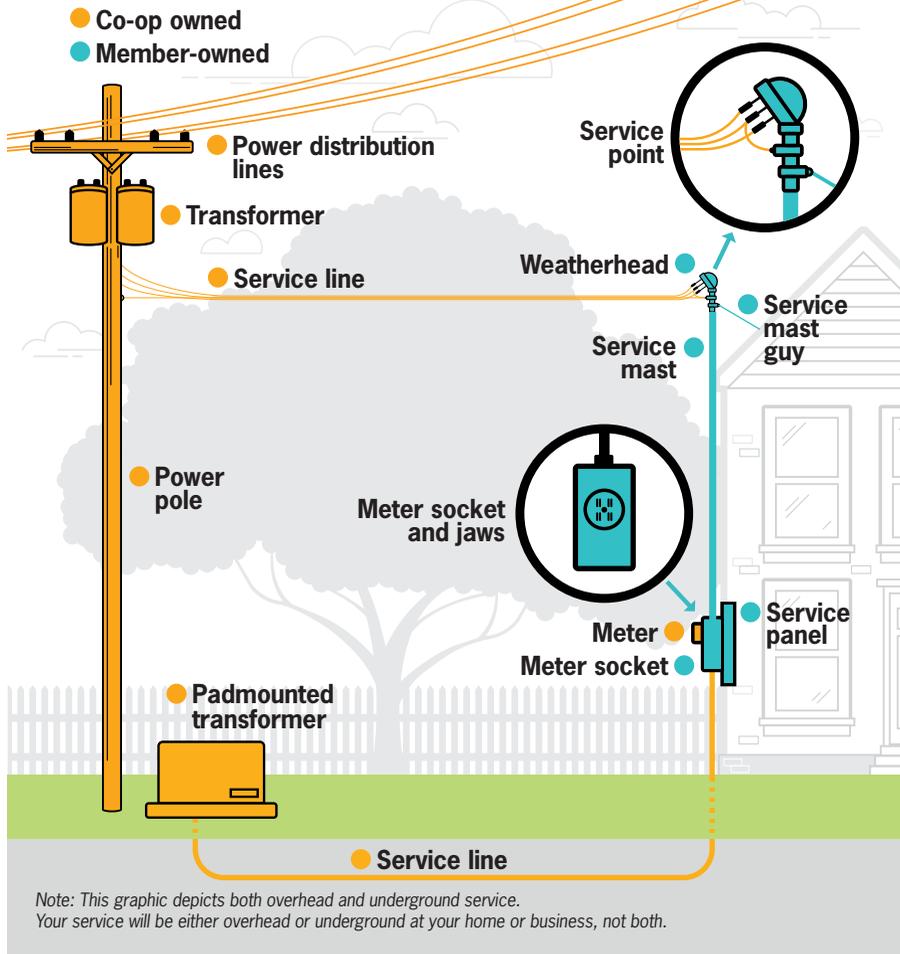
Scammers will threaten you with everything from shutting off power to your home to legal action. Don't fall victim to these types of scams.

- Our employees will never show up at your door to demand payment.
- Never give personal information to an unknown caller or visitor. Our representatives have access to the details they need to service your account.
- Demands for immediate payment by wire transfer, cryptocurrency, gift cards or cash reload cards should immediately raise red flags.
- If you think you've been contacted by a scammer falsely representing the co-op, call us at 800-637-1079.

Who owns what equipment?

REAL PEOPLE.
REAL POWER.

Do you ever wonder what equipment is owned and maintained by the co-op and what equipment you own and are responsible for maintaining? The graphic below depicts what is owned and maintained by the co-op (in gold) and you, the member (in blue). If a storm damages any equipment owned by the co-op, we will handle all of the repairs. However, if there is any damage to member-owned equipment, you will need to handle making the repairs. We recommend to always hire a licensed electrician when making any repairs to your equipment.



Tideland Topics

tidelandemc.com

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Tideland EMC is an equal opportunity provider & employer



Duct leakage

Continued from Page B

issues with the system coil and is certainly not the healthiest air to bring into the living environment.

The HVAC system is meant to be a closed loop where supply air is brought back through the filtered return system. The preferred method of air sealing the ductwork is with mastic paste. This is preferred over all tape products, which break down and lose their adhesion over time.

NC residential building code now requires duct testing in all new

homes. If the result of the testing is less than or equal to 5 CFM25/100SF for a total duct leakage test, or less than or equal to 4 CFM25/100SF for a "duct leakage to the outside" test, then the HVAC system air tightness is deemed acceptable. To achieve passing scores, more and more HVAC contractors now utilize mastic paste and consumers would be wise to insist on its use. In fact, we recommend stipulating the use of mastic paste in the HVAC quote to make sure the contractor understands you are serious about duct leakage.

SIEMPRE
LLAMA
ANTES DE
EXCAVAR

