



Tideland Topics

Real People. Real Power.

Rose Acre microgrid

Thanks to North Carolina's Electric Cooperatives, Hyde County is now home to two microgrid projects: one at Ocracoke and another at the Rose Acre egg farm in Ponzer. The first phase of the Rose Acre project recently concluded and was followed up with local first responder training.

Read more beginning on Page D.



Tideland EMC recently surprised Terra Ceia Christian School educator Dana Jordan with a Bright Ideas grant in the amount of \$1,196.94. The funds will be used to create a comfortable reading environment for students that includes bean bags, a reading carpet, special lighting, motivational posters and reading pillows.

Read more about this year's award winners on Page C.





Space heater safety

Despite efficiency gains in home heating equipment, we continue to see electric space heaters regularly used in Tideland-served homes. They are also a common sight in many office settings.

Aside from operating cost concerns, there are safety risks associated with the overuse of space heaters. Most household wiring is not designed to continuously operate a space heater, especially on the highest watt setting. If wiring becomes overheated, the insulation covering the wire gets soft and the weakened wire becomes a fire hazard. During energy audits we frequently spot evidence of burn marks or melting on outlet covers.

- Space heaters should never be plugged into extension cords or power strips.
- Use the lowest wattage setting if you plan to use the space heater for an extended period of time.

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Middle Schoolers: Apply now for a summer basketball camp scholarship

After a two-year hiatus due to COVID-19, Tideland is once again accepting applications for full scholarships to basketball camps at two North Carolina universities this summer.

Middle school boys can apply for a scholarship to attend the Carolina Basketball School at the University of North Carolina at Chapel Hill, and middle school girls can apply for a spot at the Wolfpack Women's Basketball Camp held at North Carolina State University in Raleigh. These camps will take place in June 2022. Tideland will award one scholarship per camp.

At both camps, campers will work closely with college basketball coaches and camp staff to develop fundamental skills that help the young athletes perform and excel both on and

off the court. Campers will stay in dorms overnight during the camp sessions.

To apply, students must be a rising sixth or seventh grade student at a qualifying school and reside in a Tideland EMC served household. Applicants will be judged on their academics, extracurricular activities and an essay. The application period begins in January and applications

must be submitted by March 31. To learn more and apply, visit tidelandemc.com/my-community/basketball-camp.

The Touchstone Energy Sports Camp scholarship program provides a unique educational and athletic opportunity for our state's youth and further demonstrates your electric cooperative's commitment to the communities we serve.



Bright Ideas Grant Winners

In November, Tideland EMC presented \$13,503 in Bright Ideas Classroom Grants to eight local educators. Over 1,100 students will benefit from the funding of these innovative and hands-on projects.

Karen Glass
Terra Ceia Christian School
“Herd That!”

Funds will be used to purchase two market lambs. Students will raise and prepare them for the spring livestock show and sale. Proceeds of the sale will be returned to the school’s Future Farmers of America program for continuing livestock purchases.



Lyndsey Cuthrell
P.S. Jones Middle School
“Operation White Board Learning”

Students will engage in interactive, small group lessons using dry erase tables for collaboration and exploration of math exercises. This hands-on learning promotes classroom attentiveness and gives students an opportunity to teach their peers, reinforcing lessons they have already mastered.

Samantha Parker
Mattamuskeet Elementary
“Walking Classroom”

To promote learning and a healthy active lifestyle, students will be assigned a walk kit with preloaded podcasts of a 20- to 30-minute duration each. After students conclude their walking activity, they will participate in a group discussion and complete written assignments related to their podcast lessons.



Heather Summers
Arts of the Pamlico
“Let’s Get Muddy!”

Funds will be used to purchase a pottery wheel and 2,000 pounds of clay for art lessons to benefit more than 250



Beaufort County students, with Arts of the Pamlico providing staffing.



Sara Wilkinson
Fred Anderson
Elementary
“Weather Wizards”

Materials will be purchased for twenty-four student teams to build their own weather stations. Supplemental texts will also be purchased to support the classroom meteorological studies.

Susan Long
Fred Anderson
Elementary
“Shhh! We’re Reading”

Sixty copies of four different books will be purchased for fourth graders participating in the school’s novel studies. A new book will be introduced each quarter.



Ruffina Rasonabe
Washington County Early College High School
“College Prep Test”

Students in the ninth and tenth grades will take the ACT exam to better prepare for college entrance tests.





Space heater math

Space heaters can play a useful and even cost-saving role when properly utilized. For example, briefly using a space heater in the morning while showering or getting dressed can be more cost effective than raising the thermostat to warm up your whole house when you just want the temperature increased in a small bathroom. However, using a space heater to attempt as a room or home's primary heating source can quickly increase your electric bill more than you might anticipate. Let's look at the math:

At a 1,500-watt setting, a space heater will cost 11.49¢ per hour to operate. At that setting for eight hours of use the cost is 91.92¢. During a 30-day billing cycle that eight hours per day would consume \$27.57 worth of electricity. If used 24 hours a day for 30 days, that one single space heater would add \$82.71 to the monthly bill. And as noted on page B, overuse of a space heater could damage outlet wiring, contributing to a house fire.

One final note: all electric resistance space heaters are created equal in terms of "efficiency." A watt is a watt is a watt. The only real differentiation is related to safety features and thermostatic control options so choose wisely.

Rose Acre microgrid

North Carolina's Electric Cooperatives have partnered with the nation's second-largest egg producer, Rose Acre Farms, and Tideland EMC, to develop an agricultural microgrid that will deliver a variety of benefits including enhanced environmental sustainability and power grid resiliency.

Phase I of the project is nearly complete following the installation of a 2-megawatt solar array and a 2.5-megawatt Tesla battery pack that allows the energy generated by the panels to be stored and dispatched when

needed. The solar production is expected to offset about a third of the energy consumed by the farm which is Tideland's largest commercial account.

In addition to this new source of green energy, about 60 percent of the power Rose Acre already receives from Tideland comes from emissions-free nuclear and renewables. This helps Rose Acre meet sustainability goals that many of their customers require from vendors and in turn reduce their own carbon footprint.





2.5 MW TESLA BATTERY PACK
INSTALLATION
JIM CHRISMAN PHOTO

During December final inspections and testing were taking place with commercial operation set to begin this January. In

anticipation of the approaching start date, electric cooperative officials hosted a learning session for local volunteer fire fighters to

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Rights-of-way maintenance schedule

Tideland has hired Lucas Tree Experts and Gunnison Tree to trim trees in our rights-of-way.

During January, Lucas will continue work on the Rose Bay circuit out of Tideland's Ponzer substation along Hwy. 45 and Hwy. 264.

Gunnison crews will continue work on the Hyde County circuit out of the Pantego substation along Beech Ridge Road and Hwy. 264.

River City Construction continues work on the pole conversion project in the Bunyan area of Washington. A two-hour planned outage was conducted on November 18 to tie members into this newly rebuilt line. In total, more than 140 wooden poles have been replaced with new ductile poles for long-term system resiliency.

Lee Electric continues line construction work on the Dowry Creek circuit along Allen Road and on the Merritt circuit along Orchard Creek Road (Pamlico County).

Remember to support these important system maintenance operations. Proper tree care leads to greater system reliability.

Please observe proper distances when planting trees and erecting fences and other structures. And always call 811 before you dig to have underground utilities located before beginning an excavation or construction project.

⚡ Temporary Power Safety

The Occupational Health and Safety Administration (OSHA) states that **contact with electricity** is one of the leading causes of **construction workplace fatalities**. However, temporary power is essential to construction worksites and poses a great risk to workers. Follow these steps to **ensure proper safety procedures are met** when working with or around temporary power.



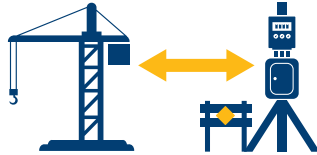
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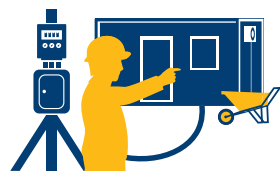
Temporary wiring should be designed and installed according to **OSHA, NEC, and NFPA 70E** requirements.



Temporary power must be installed by a **qualified electrician**.



Temporary power equipment should be located on a worksite **protected from vehicle traffic**, accessible only to **authorized persons**, and suitable for the **environmental conditions** that may be present.



Calculate the electrical load demand to ensure the temporary power has the capacity to supply all connected loads.

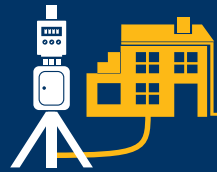


Ensure all unused openings are covered or closed to afford protection substantially equivalent to the wall of the equipment.

Use



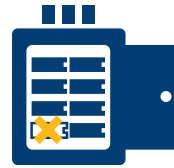
Inspect cords and wiring to ensure there is no **damage or alterations**.



Temporary wiring must be maintained in a **safe code-compliant manner**.



Ensure all equipment, receptacles, and flexible cords and cables are **properly grounded**.



Unused panelboard, disconnect, and breaker openings **must be effectively closed** to prevent any foreign objects from getting inside.



Establish a timeframe of when temporary power will be removed or switched over to permanent power.



Use equipment **rated for the environment** (indoor or outdoor) where supplied by temporary power.



GFCI protection is required for all 125-volt, 15-, 20-, and 30-ampere receptacle outlets. **Listed cord sets** or devices incorporating **listed GFCI protection for portable use** is permitted. Other receptacle outlets shall be GFCI protected or be included in an assured equipment grounding conductor program.



Test GFCIs monthly.



Keep a **test and maintenance log** of the equipment and cord sets being used.



Always **disconnect power and lockout/tagout** when maintaining, repairing, extending, or re-routing temporary power.

Removal

Temporary power **must be removed** when the project is completed. Temporary wiring is only allowed for:



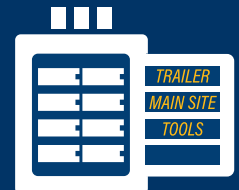
Construction, remodeling, maintenance, repair, or demolition of buildings, structures, or equipment — or similar activities.



Emergencies, tests, experiments, and developmental work.



Temporary wiring must be removed immediately upon completion of construction or the purpose for which it was installed.



Maintain circuit directories to ensure worker safety.

Please share this **free** resource to save lives.



www.facebook.com/ESFi.org

www.twitter.com/ESFIdotorg

www.youtube.com/ESFIdotorg

Message to members

You asked. We answer.

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

While rare, Tideland must occasionally conduct large-scale planned outages. When the duration of a planned outage is long enough, and impacts enough members, we try to conduct the outage overnight. In fact, we did just that in the early morning hours of November 18 when we took a Washington substation outage to move members to a newly rebuilt circuit.

Several members asked why we conduct these outages after dark. The primary reason is that electric system load (demand) is typically low in the wee hours of the morning as long as outdoor temperatures are mild. This underutilization of

electricity facilitates prompt power restoration once the planned outage concludes without the risk of overloading individual transformers.

Overnight planned outages are also less disruptive of member-owned businesses, the vast majority of which do not have third shift operations. Our hope is that most Tideland members will in fact sleep through the outage and then wake up on time to start a new day thanks to backup alarm clocks.

Thanks to good planning, communication and teamwork, these outages generally conclude in less time than allocated. We allowed a 4-hour window for the November 18 outage, but it concluded in two. No one was happier about that than our crews.



RIVER CITY CONSTRUCTION CREWS INSTALL CAISSONS AND DUCTILE POLES ALONG BROAD CREEK ROAD IN WASHINGTON. JIM CHRISMAN PHOTOS

Andy Midyette Retires

On Friday, November 12, line superintendent Andy Midyette turned off the lights as he departed his Engelhard office for the last time. Flipping that switch back on and any other switch on Tideland's system will now be someone else's job and Andy won't miss that part.

"It's stressful," Andy said. "This is a 24/7 business, 365 days a year. Even when you're not 'on call' you know the call can come at any time. Fortunately, I shared all those calls with a great team. I honestly couldn't ask for a better group of people to work with from top to bottom." And it's a 32-year story that almost didn't have a beginning.

Born and raised in Engelhard, Andy worked for NAPA Auto Parts nearly a decade. At age 30, he decided he didn't want to spend another year stuck indoors. but he also wasn't drawn to the county's two most popular outdoor jobs: farming and fishing. So Andy moved to Virginia to explore other interests. Before he left he applied for a warehouseman position at Tideland. Four months

later, the late Waverly Bond called to see if he was still interested in the job. The rest is history. Andy climbed the ranks ultimately serving in every operational role in the Engelhard district.

Andy reported for duty at the co-op in September 1989, the same month Hurricane Hugo hit. Fourteen Septembers later, Andy would live and work through his most memorable storm: Hurricane Isabel. "I never worried in the aftermath of a big storm because you know you won't be working it alone," Andy said. "Help is on the way and lots of it."

What does the next chapter look like for Andy? He's building a new home, just purchased an electric assist bicycle, and, with no more co-op phone calls to answer, he's even eyeing a trip to Europe. The future is bright.



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Real Power.

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Tideland EMC is an equal opportunity provider & employer

Holiday Closing

Our offices will be closed December 31. Our 24-hour call center will be fully staffed for outage reporting and account management.

2022

Winter Reminder

Remove window air conditioning units so windows can be properly closed.



spaceHeater

Continued from Page B

- If the breaker trips, don't ignore the warning. The circuit could be damaged or undersized for space heater use.
- Position the space heater away from the electrical outlet to prevent hot air from blowing back on the outlet, which will further compromise outlet wiring.
- If you see burn marks on the outlet discontinue use of the outlet and call an electrician.
- Never leave a space heater underattended.

microgridProject

Continued from Page E

discuss the unique challenges presented by Lithium-Ion battery packs.

Phase II of the project is set to begin this spring with installation of a microgrid controller that will expand the project's capabilities to include utilization of the facility's existing backup diesel generators.