Tideland Topics

Real People. Real Power.

Bridge cable energized

On Dec. 6, Cape Hatteras Electric Cooperative (CHEC) completed work to attach transmission lines to the new jug handle bridge in Rodanthe. Electrical and fiber optic cables now run through conduit under the 2.4-mile long span that bypassed the S-Curves section of N.C. 12, which has been subject to ocean overwash for decades. CHEC completed the project two months ahead of schedule.

Photo by Kerry Hooper, Jr.

Refund totals $1.43 million

At press time last month, we did not yet have the details of the 2022 capital credit refund available for publication. The member refunds were subsequently processed on Dec. 2.

Details can be found in this month's Message to Members on Page G.

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 softs 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.
- If the breaker trips when you use the space heater don't ignore the warning. The circuit could be damaged or be undersized for space heater use.

Continues on Page H

Middle Schoolers: Apply now for a summer basketball camp scholarship

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. The UNC camp will be held June 17-21. The NCSU camp will also be held in June but specific dates are not yet available. Tideland will award one scholarship per camp.

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.

New HVAC efficiency standards

Tideland's heat pump rebate will be updated to require minimum 16 SEER equipment

Beginning in 2023, all new residential central air-conditioning and air-source heat pump systems sold in the United States will be required to meet new minimum energy efficiency standards.

The most recent minimum energy efficiency standards for these equipment types went into effect in 2015, and for the first time, separate standards were set for cooling central air conditioners sold in the northern parts of the United States and those sold in the southern parts.

The new standards continue to set different cooling efficiency levels for air conditioners in the south, and they also require an increase in the heating efficiency of all air-source heat pumps.

New rebate requirement:
SEER 16

The Energy Policy and Conservation Act (EPCA) of 1975 first gave the U.S. Department of Energy (DOE) authority to develop, revise, and implement minimum energy conservation standards for appliances and equipment. EPCA requires DOE to periodically amend energy conservation standards for certain equipment, but only if the amendments are energy-saving, technologically feasible, and economically justifiable.

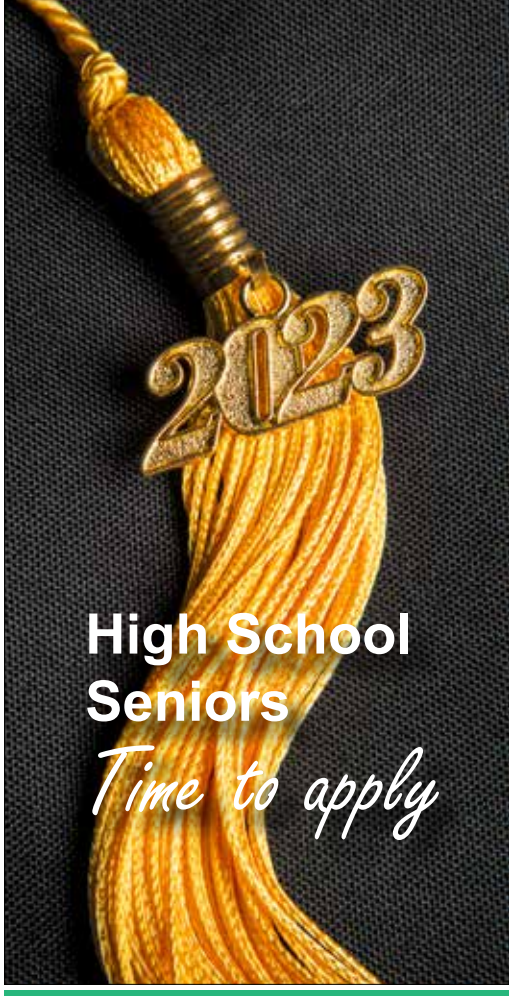
The National Appliance Energy Conservation Act of 1987 established the first minimum efficiency requirements for central air-conditioning and heat pump equipment sold in the United States. These standards went into effect in 1992, and later updates went into effect in 2006 and 2015.

In Southeast states, including Tideland territory, the minimum SEER rating in 2023 will be increased from 14 SEER to 15 SEER for AC units with below 45,000 BTU cooling output. AC units with 45,000 BTU or higher cooling capacity will have a minimum of 14.5 SEER rating in 2023. Higher SEER ratings indicate more energy-efficient equipment.

In addition, the new standards require an increase in the heating efficiency of air-source heat pumps—measured by the equipment's heating seasonal performance factor (HSPF). The minimum HSPF will be 8.8 HSPF compared with the 8.2 HSPF required by the previous standard that dated back to 2015.

As a result of the new heat pump standards, Tideland's heat pump rebate requirements will also be raised. For heat pumps manufactured after Jan. 1, 2023, we will provide a $75 rebate for 16 SEER ratings, $150 rebate for 17 SEER ratings and higher, and a $300 rebate for geothermal (water source) heat pumps.

It is estimated that 76 million primary occupied U.S. homes (64% of the total) use central air-conditioning equipment, and about 13 million homes (11%) use heat pumps for heating and cooling. When defining the new standards, DOE calculated that, in total, households using central air conditioners or heat pumps will collectively save as much as $12.2 billion on energy bills during the 30-year period following implementation of the standards.



Tideland EMC is now accepting college scholarship applications from high school seniors in Beaufort, Hyde, Washington, Pamlico, Dare and Craven counties. Applicants must be the dependent of a Tideland EMC member.

The co-op will award eight $1,000 scholarships. Two of the scholarships will be designated for students who plan to attend community college.

Students have until Friday, March 3, 2023, to apply. An application may be downloaded at tidelandemc.com.

For more information, contact program coordinator Heidi Smith at 252.944.2410 or heidismith@tidelandemc.com.

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 for prolonged periods or as a home's primary heating source can quickly increase your electric bill. Let's look at the math:

At a 1,500-watt setting, a space heater will cost 18¢ per hour to operate. At that setting for eight hours of use the cost is $1.44. During a 30-day billing cycle that eight hours per day would consume $43.20 worth of electricity. If used 24 hours a day for 30 days that one single space heater would add $129.60 to the monthly bill. And as noted on page B, overuse of a space heater can easily 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.

The nation's largest co-op microgrid nears completion in Hyde

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 was completed in 2022 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% 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 MW SOLAR ARRAY AT THE ROSE ACRE EGG FARM

2.5 MW TESLA BATTERY PACK INSTALLATION

Phase II of the project will soon be complete with the installation of a microgrid controller, which will expand the project's capabilities to include utlization of the facility's existing backup diesel generators.

In the event of a power outage, the microgrid components will allow Rose Acre's food production operations to continue. North Carolina's electric cooperatives will further benefit from the project by dispatching the stored energy to help reduce load during times of peak demand when energy is most expensive.

Rights-of-way maintenance schedule

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

During January, Lucas will have two crews working on the Bonnerton circuit which feeds out of our Edward substation. Once that circuit is complete one of the crews will head to Ocracoke to begin work and the other will begin trimming out the Lowland circuit which also serves out of our Edward substation.

Lee Electrical line construction crews will continue working on the Rose Bay circuit out of our Ponzer substation in the Rose Bay and Scranton areas.

Meter safety inspections continue with work wrapping up in Fairfield Harbour and moving on to Pamlico County services fed by our Silver Hill substation.

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.

PHOTOVOLTAIC (SOLAR PANEL) ELECTRICAL SAFETY FOR FIRST RESPONDERS

UNDERSTAND THE UNIQUE RISKS WHEN A PV (SOLAR) SYSTEM IS INVOLVED

Pre-Incident Planning

Contact building officials to see where PV systems are installed. Request to be notified when new PV is installed

PV Panels and Arrays

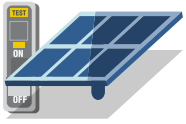
- Locate which portion of the roof has the PV system
- Follow conduit to locate where PV may be installed and location of disconnects / inverters

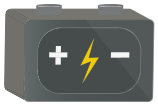
PV Disconnect Types

WARNING: *PV SYSTEMS MAY STILL* ***PRODUCE ELECTRICITY*** *AND WIRING FROM PV TO INVERTER MAY BE* ***ENERGIZED*** *DEPENDING ON INSTALLATION TYPES*

- Main Breaker: Shuts off AC power to the entire structure, including inverters

- May reduce to <30 volts DC within 30 seconds. PV array may also have voltage reduced





- PV System Disconnects: Shuts off power to inverter. Does not disconnect any other panel
- Energy storage systems will have a separate disconnect. Energy storage systems still contain hazardous energy even if they're shut down and disconnected
- Disconnects are often found in basements, electrical rooms, or on exterior pad mounts

Emergency Response

Identify, Shutdown, Watch Out

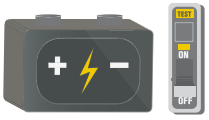
Identify the Issue

- Identify locations and types of PV installation
- Look for PV arrays, inverters, and labels & markers

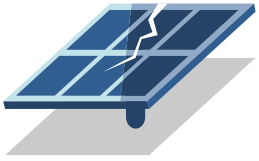
Shutdown

- Power to inverter must be shut down to secure power. *POWER WILL STILL BE IN WIRING BETWEEN PV AND INVERTER*

- Disconnects may be found on inverter, distributed along array, and at the main electrical panel



- If energy storage systems are installed, additional disconnects must be shut off



- If PV is damaged, shut off any disconnects found

Watch out for Hazards

- Older string inverters may not reduce DC from array to inverter
- All metal parts are connected and connected to ground. If damaged, they can become energized. *DO NOT TOUCH SYSTEMS WITH VISIBLE DAMAGE*
- Whole roof PV may introduce additional risks such as hidden wires and slippery roofs

ONCE INCIDENT OF FIRES HAS BEEN SECURED, HAVE A QUALIFIED PERSON INSPECT THE PV SYSTEM TO ENSURE IT IS NO LONGER A HAZARD

Please share this free resource to save lives

ESFI.org

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Message to members

$1.43 million in member capital refunded in 2022

by PAUL SPRUILL
GENERAL MANAGER &
CHIEF EXECUTIVE OFFICER

In fiscal year 2022, Tideland Electric Membership Corporation retired $1.43 million in member equity through capital credit refunds. Retirements to the estates of deceased members of the electric cooperative represented $614,000 of that total. Tideland's board of directors further authorized a general retirement of $816,911 to those members and former members of the cooperative that received electric service in 1991 or 1993.

Capital credits represent member margins that are collected through electric bill revenues and reinvested in the cooperative's utility infrastructure. At the end of each year, Tideland's expenses are deducted from revenue to determine the cooperative's net operating margins for the year.

Those margins are proportionally assigned to each Tideland EMC member as capital credits based on a percentage of what each member paid for electricity during the calendar year. By utilizing member capital to maintain the electric system, Tideland is able to minimize its reliance on outside lenders thus reducing borrowing costs for the entire membership.

The general retirement was issued through a combination of checks and electric bill credits during the month of December. Active account holders received a check if their electric account was current at the time of distribution and if their refund was $50 or more. All other Tideland members with active accounts received an on-bill credit if they had service with the co-op in either 1991 or 1993.

A Decade of Refunds at a Glance	
2022	$1,430,911
2021	$1,380,490
2020	$1,078,000
2019	$480,000
2018	$1,246,848
2017	$957,354
2016	$1,112,409
2015	$2,397,405
2014	$676,158
2013	$648,538
TOTAL	$11,408,113

Checks were mailed to former members at their last known address for refunds of $50 or more. That's why it is important to keep the co-op updated about future address changes in the event you leave the Tideland service area. Undelivered or unclaimed refunds are eventually escheated to the North Carolina Department of Treasury. You can search for unclaimed refunds by visiting nccash.com.

In the past decade, Tideland has retired $11,408,113 in member equity.

UnitedHealthcare UCard Payments

In early December, Tideland received its first phone call from a member who was enrolled in UnitedHealthcare's Medicare Advantage plan. The member asked if the co-op accepted payments via UnitedHealthcare's UCard program. We soon learned that other utilities were fielding similar phone calls so we reached out to UnitedHealthcare to learn more.

According to the company, the UCard can be used when participants:

- Visit a provider like your Primary Care Provider or dentist
- Fill a prescription
- Check in at the gym
- Buy healthy food and over-the-counter products
- Pay utility bills
- Spend earned rewards

The program is scheduled to begin in January 2023. Tideland can process payments from any card issuer connected to the VISA, MasterCard or American Express networks.

If the UCard is not associated with one of those networks and you choose to make a UCard payment via a third-party payment processing vendor like Walmart, please take into account that it can take up to seven or more business days for the payment to be received by Tideland. Therefore, if you are past due on your electric account or within a week or two of your due date, you may want to avoid the use of a third party vendor.

Questions? Give us a call at 252-943-3046.

space*Heater*

Continued from Page B

- 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.
- Never run space heater cords underneath rugs or through doorways.

- Make sure space heaters are a safe distance away from draperies and household furnishings.

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Tideland Topics

tidelandemc.com

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Member Service
252.943.3046
24 Hour Outage Reporting & Automated Services
252.944.2400

Tideland EMC is an equal opportunity provider & employer

Holiday *Closing*

Our offices will be closed Jan. 2. Our 24-hour call center will be fully staffed for outage reporting and account management.

2023

Winter *Reminder*

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