

December 2020

Proudly serving the members of Albemarle Electric Membership Corporation



Know what's **below**. **Call** before you dig.

We are members of NC 811. Call 811 or 1-800-632-4949 three business days before you plan to dig.

Albemarle Sounds

is published monthly by
Albemarle Electric Membership
Corporation

P.O. Box 69 Hertford, NC 27944 (252) 426-5735

Gary Ray, General Manager Chris Powell, Editor

Website and member portal: www.aemc.coop

Outages:

1-800-274-2072

24-hour payments: **(252) 426-4419**

Albemarle EMC is an equal opportunity provider and employer.

Your Touchstone Energy® Cooperative The power of human connections®

Together We Save



The continuing rise in power cost is putting pressure on our current rates. Each month, the cost of power exceeds the amount we charge members. Despite our best efforts to control costs, we find it necessary to engage a third-party consultant to conduct a cost-of-service study. The study will determine if a rate increase is needed to meet revenue requirements and expenses.

Albemarle EMC has not had a rate increase since 2012. Your co-op is asking members to help lower usage during peak demand, which will save on power costs and hopefully delay the need for a rate increase.

On Jan. 1, Albemarle EMC will be launching a Beat The Peak program. Members who participate will be alerted by text message when a peak time period or time of high energy use across our co-op is expected. Peak-use times are typically a few hours and occur only a few times a month. We will ask our members to join our efforts to lower costs by reducing their energy use during those peak times, which are often in the mornings or evenings. Energy reduction methods include reducing the use of hot water, delaying the use of a stove or adjusting your thermostat.

A large part of our power supply cost is determined by energy used during highenergy use times. If we can reduce the energy use during these few hours, we can reduce our power costs and save our members money.

Peak usage typically occurs during times of extreme outside temperatures, when a majority of members' electricity usage increases all at once. Because additional generation has to be brought online to meet the spike in demand, Albemarle EMC must pay more for wholesale power, based on that higher demand rate.

"Energy use during times of peak power consumption increases what your co-op pays for electricity, so anything members can do to help reduce power use during peak times will also help delay a future rate increase," said Albemarle EMC General Manager Gary Ray.

Members who prefer not to participate in the Beat The Peak program may opt out by replying to the Beat The Peak text notification with the word "quit."



Bright Ideas Grants Awarded

More than \$15,000 in Bright Ideas education grants were recently awarded to local educators.

Christy Stanley, a teacher at Camden Intermediate School, received \$745.59 for her project "Digital Accessibility." Her project will help students engage with digital learning and the North Carolina Extended Core Standards as well as interact with their community through the understanding of current events.

Kathi Addaman, a teacher at Grandy Primary School, received \$1,300 for her project "Safe and Sound Space to Learn." The focus of her project is to create a tranquil space within the classroom, where students can calm down.

D.F. Walker teacher Elizabeth Hicks was awarded \$390 for her project "The best SIGHT in the house." She will use her grant to purchase an Osmo, which turns an iPad into a document camera. This allows remote learners to have a more personal interaction with their teacher.

Stacey Banks, a teacher at D.F. Walker Elementary, received \$529.17 for her project "Project Fresh Air." She intends to conduct small-group games and activities that will encourage students to improve social skills such as decision making, managing emotions and working together.

Angela Brickhouse, a teacher at Chowan Middle School, was awarded \$800 for her project "Gardens for Growth." Brickhouse will teach her students about native species found in our area, and students will use that knowledge to construct outdoor habitats.

Pasquotank Elementary School teacher Colene Walker-Brown received \$508.71 for her project "Math Manipulatives." Her grant will be used to purchase 19 Math Manipulative sets and 24 clocks. Abstract ideas will be made concrete through a hands-on learning approach.

Deborah Bunch, a teacher at Chowan Middle School, received \$457.60 for her project "Fill It Up, Wrap It Up & Mark It Up!." Her grant will be used to purchase teaching aids that help students understand the difference between volume and surface area by filling in shapes.

Chowan Middle School teacher Malorie Stockwell was awarded \$869 for her project "Language Arts Escape Room." The goal of her project is to show students that reading strategies, Language Arts standards and skills can carry over into many different activities. Students will learn inference, sequence of events and textual evidence. They will then receive a story and begin to use their skills to either escape or solve the mystery.

LeAnn Nixon, a teacher at White Oak Elementary, received \$186.11 for her project "Calm Corner in Our Room." Her grant will be used to purchase yoga mats, bean bag chairs, fidget toys and other items to promote mindfulness and compassion for others.

Jennifer Robinson, a teacher at Moyock Middle School, received \$1,029.50 for her project "Let's Get Sewing." Robinson plans to teach students how to sew, which will include hand sewing basics, use of sewing machines and advanced techniques. She will use her grant to purchase ten portable sewing machines, designed for children.

Pasquotank County High School teacher Megan Pennington received \$850 for her project "A Brighter Future." She will use her grant to expand the AVID program by bringing in guest speakers from colleges and trade schools to expose students to potential career paths.

Sheila Winslow, a teacher at River Road Middle School, received \$950 for her project "Books Beyond the Walls." She will use her grant to purchase e-books that students can access remotely. She also plans to increase the amount of diverse reading material in digital format as well as provide a resource to support the social and emotional concerns of middle school students.

Sharon Wilkerson, a teacher at Northeastern High School, received \$1,000 for her project "Eagle Enterprises." Her grant will be used to purchase a drill press, deburring tool, metal tube cutter as well as bulk soap-making ingredients and some used furniture. She plans to grow a school-based business and provide an entrepreneurial experience for special education students by providing real-life work experiences.

Tonya Monique Little, a teacher at the Northeast Academy for Aerospace and Advanced Technology, received \$1,000 for her project "NEAAAT Griffins Advancing Service-Learning Project-Based Learning Remotely." Her grant will be used to purchase ten Vernier Conductivity Probes. The probes will be used to conduct a water hardness study in students' homes. Tap water will be tested for pH and hardness.

Alexis Abbott, a teacher at Pasquotank Elementary School, received \$483.72 for her project "Math Manipulatives." She will use her grant to purchase 18 sets of Math Manipulatives as well as 24 clocks. She intends to teach math through a learning-by-doing approach.

Dee Winslow, a teacher at Perquimans Middle School, received \$500.25 for her project "Beyond the Words." Her grant will be used to purchase reading comprehension teaching materials. Her goals are to bridge students' reading gaps and develop a passion for reading.

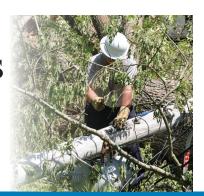
Elizabeth Riddick, a teacher at Perquimans Middle School, received \$761.90 for her project "Better Together." Her grant will be used to purchase a Lumina Flipper Folding Table with a dry-erase top. The table will be used to provide a safe and collaborative workspace where students can design and create.

Perquimans High School teacher Sheila Williams Twine received \$959.84 for her project "I am the MASTER of the Drawing Tablet." She will use her grant to purchase 16 Wacom One drawing tablets. She intends to provide students with enough hands-on experience to master the drawing tablet. The drawing tablets will also be used to expand Pirate Productions, which offers video-broadcasting as well as print and digital media services.

Heather Rountree, a teacher at Perquimans Central School, received \$1,000 for her project "Teaching with Star's." She plans to purchase a STAR Program and Media Center combo. The STAR program provides clear objectives and effective student-progress monitoring for students with autism at the preschool and elementary school levels.

Stacey Pierce, a teacher at Perquimans Central School, received \$694.71 for her project "Seeing is Bee-lieving." Her grant will be used to purchase materials designed to teach environmental studies. Students will learn about plant life cycles as well as the ways in which humans interact with the environment.

Albemarle EMC is at Your Service



How Albemarle EMC works to provide its members with the highest-quality service possible.

Watch Out for Faulty Heat Pumps

by Chris Powell, coordinator of public relations

With Albemarle EMC energy audits suspended due to social distancing, it is more important that ever for members to keep a sharp eye on their home energy use. The device to watch the closest is the one that uses the largest amount of power, your heating and air system, which is typically a heat pump.

I have a love-hate relationship with air-source heat pumps. An air-source heat pump, when functioning properly, is hard to beat. However, when an air-source heat pump has malfunctioned, members can get blind-sided by a large power

bill that is often easily avoidable. If I could give someone one piece of advice, it would be to simply check to make sure that your heat pump is functioning during the months the unit is used for heating. A properly functioning heat pump is one in which the outside unit is running. The same device that cooled your house all summer must be running to also heat your house in the winter. The fan on top of the unit should be turning, which indicates that the compressor beneath it is working. If you notice that heat is coming from your registers, but the heat pump outside never turns on, you have a problem. If the unit is not repaired promptly, I can almost guarantee you a bill that you will look at with disbelief.

To fully understand why malfunctioning heat pumps cause skyrocketing power bills, we must fully understand how an air source heat pump is designed to work. A heat pump has two methods of providing heat. It has an outside unit that pumps whatever free heat is available in the outside air into the house. However, sometimes there is not enough outside heat in the air to heat a house. When this occurs, the heat pump automatically reverts to a backup heat system, called auxiliary or emergency heat. The backup heat is a series of metal strips that heat up much like a toaster oven. An air handler blows air through the heat strips. The heated air comes out of the registers at about 120 degrees. The backup system heats a house wonderfully. The

problem is that it is very expensive heat. So if your heat pump

ceases operating outside, your system will continue to function

with very expensive heat. Another way to tell if your heat pump

is inoperable is by looking at the thermostat. Depending on your

thermostat, you may see the words *auxiliary heat*, or you may see an indicator light, or you may see nothing at all. The better approach, in my opinion, is simply to visibly inspect your heat pump once a month to make sure it is, indeed, running.

The next step in making sure your heat pump doesn't unnecessarily consume power is to check the temperature of the air coming from the vents. This can be done with inexpensive thermometers that can be purchased at most auto parts stores. A thermometer can be placed in a vent on the floor or taped to a

vent in the ceiling. A properly functioning heat pump will produce air from about 95 degrees to possibly over 100 degrees. If the air coming from the unit is in the 80s or lower, your unit needs to be serviced or you have significantly leaking ductwork. As discussed earlier, if the air coming from the vents is around 120 degrees, that is a clear indication that your unit is using backup heat, and the strips are running. This may be normal or abnormal, depending on the outside temperature. If the air temperature is in the mid 30s or lower, there is not enough heat in the outside air for your heat pump to bring in the house. As such,

it will use backup heat to make up the difference. However, if the air temperature is in the upper 30s or higher, your heat pump should be able to heat the house on its own. If the air coming from the vent is 120 degrees and the outside air temperature is in the upper 30s or higher, your heat pump is not operating correctly and should be serviced.

Albemarle EMC is committed to helping our members use electricity as efficiently as possible. Though we currently cannot offer in-home energy audits, we will do our best to help you over the phone. To speak with one of our customer service representatives, simply call (252) 426-5735. We advocate low-cost methods to save energy for the simple reason that high-cost methods rarely are cost effective over a reasonable amount of time. One of the most valuable things we give members is the knowledge of where their energy dollars are going. Armed with this information, members can then decide which trade-offs they are willing to make to keep their power bills manageable.



Knowing how to spot a faulty heat pump can save you considerable money while heating this winter.