

February 2022

Proudly serving the members of Albemarle Electric Membership Corporation

Albemarle Sounds

is published monthly by Albemarle Electric Membership Corporation

Your Touchstone Energy® Cooperative The power of human connections®

> 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.



Tar Heel Teacher of the Week Selected

Congratulations to Grandy Primary School teacher Kathi Addaman.

She was recently honored as the Albemarle EMC Tar Heel Teacher of the Week. Addaman was chosen because of her Bright Ideas project "Beyond the

Classroom; Outside Learning Centers for the Classroom." Her project will create learning centers for special needs students.



Addaman's project was recently

featured in a radio spot during the University of North Carolina, Boston College men's basketball game.

Each year, Albemarle EMC awards more than \$15,000 in Bright Ideas grants to local educators, through

a competitive application process. The educators use the grants to bring into their classrooms fun, innovative projects that, otherwise, would lack funding.

Solar Power Calculator Available

Albemarle EMC encourages members to do their due diligence before paying to have solar panels installed.

A great resource is the PVWatts Calculator, located at <u>pvwatts.nrel.gov</u>. The calculator was produced by the National Renewable Energy Laboratory, which operates under the U.S. Department of Energy. Visitors to this site can quickly and easily determine if solar panels make sense for your home or business.

Once at the site, enter your address,



which enables the site to determine your home's position relative to the sun. Then visitors enter the size of the potential solar system in kilowatts, the type of solar system, the array type (roof mounted or tracking), system losses, degree of tilt and Azimuth degree. For homeowners who do not have this information, standard solar industry information is pre-entered to give close approximations of the amount of solar energy produced as well as the value of that energy. Next, visitors can input the type of rate as well as the amount the co-op pays to members for solar energy. Or, visitors can enter the residential rate charged to members by power providers that offer netmetering.

"Before entering into an agreement with a solar installer, we strongly encourage members to learn as much as they can," said Gary Ray, general manager of Albemarle EMC. "We want what is best for our members."

Statement of Nondiscrimination

Albemarle Electric Membership Corporation (AEMC) is a recipient of federal financial assistance from the Rural Utilities Service (RUS), an agency of the U.S. Department of Agriculture, and is subject to the provisions of Title VI of the Civil Rights Act of 1964, as amended; Section 504 of the Rehabilitation Act of 1973, as amended; the Age Discrimination Act of 1975, as amended; and the rules and regulations of the U.S. Department of Agriculture which provide that no person in the United States on the basis of race, color, national origin, age or disability shall be excluded from participation in, admission or access to, denied the benefits of, or otherwise be subjected to discrimination under any of this organization's programs or activities.

The person responsible for coordinating this organization's nondiscrimination compliance effort is Gary Ray, general manager of Albemarle Electric Membership Corporation. Any individual, or specific class of individuals, who feels that this organization has subjected them to discrimination may file a written complaint with this organization; or the Secretary, U.S. Department of Agriculture, Washington, D.C. 20250; or the Administrator, Rural Utilities Service, Washington, D.C. Complaints must be filed within 180 days after the alleged discrimination action, or by such later date to which the Secretary of Agriculture or the Administrator of the Rural Utilities Service extends the time for filing. Identity of complainants will be kept confidential except to the extent necessary to carry out the purpose of the rules and regulations of the U.S. Department of Agriculture.

Service Pins Awarded

Congratulations to the following employees and directors, who were recently awarded service pins.

Employees

Suzanne Phelps, 30 years Jody Parker, 30 years Katie Williams, 5 years

Directors:

Garry Meiggs, 35 years John Spence, 30 years Chad Mathews, 5 years

ACT Grants Benefit Community

The Dream Hunt and Fishing Program was recently approved for a grant from the Albemarle Community Trust.

The \$5,000 grant will be used to support the organization's educational events,



Teenagers participate in a Dream Hunt and Fishing Program summer camp.

dream hunting and fishing trips and Outdoor Adventure Camps. The grant will be used to help provide lodging, food and travel cost for participating families.

"Our programs are geared to youth ages two to 18," said Terry Boyce, program director. "We look at it as a great investment into our communities."

The Boys and Girls Club of the Albemarle will receive a \$3,000 ACT grant.

Their grant will be used to purchase food and snacks for club members. Located in Edenton and Elizabeth City, the local Boys and Girls Clubs serve more than 165 teens and children each day.

"With food prices steadily increasing, we are seeking help to support our efforts to ensure that disadvantaged children in our communities do not go hungry," said Elizabeth Mitchell, executive director of the Boys and Girls Clubs of the Albemarle. "On average, we serve over 165 children and teens each day.

Help Support Renewable Energy, Education

Albemarle EMC members have a convenient and effective way to help protect our environment and support STEM education. Albemarle EMC offers a renewable energy alternative called NC GreenPower. The program is designed to improve the environment by supporting renewable energy, carbon offset projects and providing grants for educational solar installations at N.C. K-12 schools. Customers may elect to contribute on their utility bill to help support a cleaner environment through electricity produced from renewable resources. For every \$4 donated, 125 kilowatt hours (kWh) of renewable energy is

supplied to the electric grid in North Carolina, rather than from traditional sources. In addition, each \$4 donation will also help support their Solar+ Schools



program, providing grants to N.C. K-12 schools for educational solar installations. Donations to carbon offsets may be made on their website here.

Utilities participating in the NC GreenPower program keep none of these funds; all contributions are forwarded by the utilities directly to NC GreenPower. Contributions are tax free and qualify as a tax-deductible contribution for income tax purposes.

It's easy to participate. Just call us at (252) 426-5735. Sign up today and begin contributing with your next electric bill. Remember, you have the power to make a difference!

The NC GreenPower Solar+ Schools grant application opens annually from January 2 – February 28. All K-12 schools in North Carolina are eligible to apply. Please visit their website for more information: https://www.ncgreenpower.org/solar-schools/.

Albemarle EMC is

at Your Service



Learn How to Diagnose Heat Pumps

As I write this, Albemarle EMC is not conducting in-house energy audits due to COVID-19 precautions. As such, it is more important than ever that members learn how to determine if their home or business is using unnecessary power due to equipment failure.

Potential culprit number one is the air-source heat pump. I have a lovehate relationship with air-source heat pumps. An air-source heat pump, when functioning properly, is tough to beat. However, when an air-source heat pump has malfunctioned, members often get blind-sided by a large power bill that was completely avoidable. If I could give you 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. You are probably thinking to yourself: Well, that's easy. If heat is coming out of the vents, then my heat pump must be functioning. That is an incorrect and, potentially, expensive assumption. 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, which 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



Heat pumps, located on the outside of houses, should be checked periodically throughout the winter to make sure they are running.

system will continue to function by using only the expensive heat. Another way to tell if your outside unit 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.

A central heating and air system is the largest user of electricity in any home. By learning how to determine if it is operating properly, you can quickly identify a malfunctioning unit and take action.

Albemarle EMC is committed to helping our members use electricity as efficiently as possible. One of the most valuable things we give members is the knowledge of where their energy dollars are going. You are welcome to call our office at (252) 426-5735, and we will do our best to perform a remote energy audit. Often a short conversation can reveal the source of the problem. Armed with this information, members can then take the necessary steps toward operating their homes more efficiently.