

South River EMC Communicator

HANDS-ON AT HOME

ast March, students were sent home from school, with all hopes of returning in the fall. It both did and did not happen.

Many school districts returned, with some 80 percent of them offering some in-person instruction by November.

Whether as a parent, educator, or student, this has impacted you, and students in particular have studied lessons without certain resources.



BG

Kayla Fisher's grant helps second graders.

We spoke with one of our Bright Ideas recipients who teaches second graders at Roseboro Elementary.

Do you remember what you learned in second grade when it came to math? With students being in school and out of school, and math manipulatives not able to be shared when learning concepts, some students were struggling.

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GIVE US THE A'S!

hat's right, it's time to do a grade check! South River EMC's "Give Us An A" program is back!

So grab a copy of your child's most recent report card containing at least one 'A' on it and submit it to:

South River EMC "Give Us An A" PO Box 931 Dunn, NC 28335

Or email it to: connections@ sremc.com.

You must include the member's name, address, South River EMC account number and daytime telephone number. Report cards will **not** be accepted without this information.

The drawing is held for students achieving at least one A on their report card, and 30 names will be drawn to receive a \$25 gift card.

The program is open to students who are members, or children of members, of South River EMC.

Don't miss an opportunity to celebrate good grades, send that report card to us by July 7.



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Kayla Fisher wrote her Bright Ideas grant, "Hands-On At Home," so that her students would be able to learn concepts with their own manipulatives safely at school and at home.

"Manipulatives are objects that can be used to help students visualize concepts to help solve and work out problems," said Fisher. "The take-home kits consist of the following manipulatives: Cuisenaire Rods, Base Ten Blocks, Color Tiles, Pattern Blocks, Geared Clock, Snap

Cubes and a manipulative guide to help students engage in at home learning."

What is even better is that the kits can be cleaned sufficiently after each use. That's awesome peace-ofmind. Schools have really stepped it up when it comes to safely teaching students.

Those who are having inperson lessons, do so with classrooms at half capacity. And they are two days one half, a day off to clean, and back for the other half of the class the other two days.

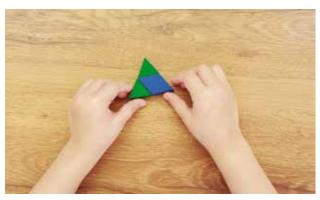
"When students are at school, they are developing the strategies and understanding of how to use their manipulatives at home," she said. "This allows students to stay motivated when they are not face-to-face and helps build their understanding of math problems."

Because they do not have daily hands-on lessons in the classroom, students often struggle to understand the concepts, and the manipulatives can help.

"I think what causes issues with mathematical learning is the lack of practice and resources. Some students learn better if they do math hands on with manipulatives or other resources," said Fisher. "If students do not have hands-on material, it may be

> hard for them to comprehend by considering problems visually and auditory."

"That is why I am thankful for this grant, to allow students not only to be able to work with math hands-on in the classroom but also at home," said Fisher.



THE SMARTENERGY PROFILE

re you looking for ways to save before the heat is here to stay?

A SmartEnergy Profile, or SEP for short, might be an option for consideration.

By tying your billing history with actual outside temperatures, as well as your home's energy use, a report is built.

By answering questions about how energy is used in your home, the report helps to identify the major drivers of energy use in your home. Then it shows how your current energy use compares to the previous month and the previous year. But it also provides helpful recommendations for energy savings.

The SmartEnergy Profile provides a step-by-step process for inputting your home profile and completing the analysis.

You can select items in your home that contribute to energy



costs, then edit your profile to see what implementing recommended tips does to your electric bill. Visit sremc.com/ smartenergy-profile to learn more.

CELEBRATING LINEWORKERS

very April, we celebrate our lineworkers for their tireless work keeping the lights on.

However, like most jobs during the pandemic, changes had to be made in the way business is conducted by crews.

Each morning the lineworkers would come into the office and meet with their crew, pick up their orders, get their materials and head out to their jobs.

"Now, the crews do not all report to the office in the mornings and afternoons," said Chuck Richardson, vice president of engineering and operations."There is one crew in each location (Dunn and Fayetteville) that reports to the office."

Instead, crews gather at a substation and begin their daily work from there.

When they need materials, protocol requires they call the warehouse to schedule pick-up.

"We try to limit material pick up times to just one crew at a time," he said.

You may see more vehicles at work as well, as crews maintain social distancing guidelines.

"When at a job location, they're careful to maintain social distancing, and when work prevents



distancing, masks are worn."

South River EMC and our crews are taking the pandemic seriously; however, they do have to be able to gather at times for certain issues, such as when a vehicle accident occurs and repairs must be made.

"When one or more of the crew have to quarantine, it is a little troublesome for us," said Richardson. "We send the rest of the crew out to do maintenance work."

That's the bright side, if there ever was one, even if a crew cannot be together to do certain jobs, those employees who are able can do maintenance work, which helps improve reliability of the electric system.

We encourage you, if you're appreciative of the lineworkers who work to keep your power on, give them a shout on social media this April.

IT'S TIME TO START THINKING BRIGHT

he Bright Ideas grant application period opens April 1. How will you teach your students in 2021-2022?

The ways are endless, and since the program's inception in 1994, educators statewide have received \$13.6 million used to fund over 12,922 projects affecting 2.7 million students.

Ideas can come from anywhere, however, many projects require money the school budget and teachers just can't cover. That's where the Bright Ideas grant program can help. The program awards grants to teachers in certified public K-12 schools, who have innovative, classroom-based ideas.

Each year, South River EMC awards at least \$50,000 in grant funding to teachers in parts of Harnett, Johnston, Sampson and Cumberland counties.

Grants can be written for any amount up to \$2,500, for any subject. However, applications for professional development will not be considered. The application period opens April 1, but there is plenty of time to apply. Educators with applications in by August 16, are eligible to win a \$100 Visa gift card. The final application deadline is September 15.

South River EMC only accepts applications online at ncbrightideas.com. If you're interested in learning more about this program, visit sremc.com or e-mail connections@sremc.com.

Visit ncbrightideas.com to apply for your Bright Ideas grant.

PROTECTING YOUR ELECTRONICS

echnology has changed a lot in the last 20 years, moving away from the desktop to a laptop, then a tablet, and always, your cell phone.

Our lives revolve around technology, with high-speed connections through advanced computer networks, home automation systems and entertainment streaming.

We pay our bills and manage our finances via our tablets, or our cell phones. Download speed, wireless routers and internet bandwidth are common topics during family discussions now!

New technology and electronic equipment can make our lives easier, but they also are at higher risk for damage from lightning storms and other events.

South River EMC can help protect your home and appliances through our Strike Guard surge protection program.

The program can virtually eliminate opportunities for a storm-related surge to damage your home, appliances and sensitive electronics.*

The first step to protect your home is a special meter base surge protector that installs directly behind your electric meter. It protects your home 24-hours-a-day, seven daysa-week, capturing surges and sending them to earth ground OUTSIDE... before they can enter your home and cause damage. The second step in protecting your home is to install quality plug-in surge protectors with sensitive electronics in your home.

Once the meter base surge protector and plug-in surge protectors are installed, you will experience peace of mind as storms rumble through, knowing that the system is providing 24/7 protection for your home and sensitive electronics.

Don't wait until after you have damage, call 910.892.8071 or go to sremc.com/ surge-protection to sign up before the next spring storm.

*A solution to "direct lightning strikes" is still under research. (Fortunately, these are rare!)

ENSURING RELIABILITY AS POWER SUPPLY TIGHTENS

ou expect reliable and affordable electricity from your electric cooperative, so how does your co-op deliver on that promise?

A complex network of electricity generators and tens of thousands of miles of electrical lines work together to ensure that enough electricity is available on the coldest winter morning and during the dog days of summer.

What happens when the demand for power overwhelms the ability to provide it? That's a particularly vexing question given the transition taking place in how electricity is produced and shared across this network.

The key to meeting the energy needs so essential to your quality of life is balancing electricity supply with demand. While that may sound simple, there is a complex web of facilities and organizations that work together to make it happen each day.



Regional transmission organizations coordinate, control and monitor the electric grid across several states in a region. Think of them as energy traffic managers on an interstate highway system, regulating the number of cars – in this case, electricity – and their destination.

Even so, on some days there is an imbalance in that system that leads to rolling power interruptions or blackouts—so-called "max-gen" events. In those cases, supply simply can't keep up. In the Midcontinent region comprised of 15 states, there were six max-gen events from 2006-2016. Since 2016, there have been 15, including three last July and August alone.

Simply, that's because power plants that generate electricity are being closed faster than new producers come online. In most cases, traditional largescale power suppliers such as coal and nuclear plants are being closed and replaced by alternatives on a much smaller scale. And this gap is closing more quickly despite the development of new natural gasfueled power plants.

As more electric utilities pursue zero- or low-carbon initiatives by 2035 and beyond, this challenge will grow more complex. So, what's the answer?

Electric cooperatives and others in the energy sector will continue to develop renewable options and pursue new technologies. But absent new large-scale alternatives and advances in energy storage, the stalwarts of today's energy fleet—coal and nuclear energy facilities—must continue to operate in many regions. In some, they remain the most cost-effective options for producing electricity.



ENERGY smarts



Look For The Star

South River EMC offers a rebate on Energy Star certified refrigerators, clothes washers, dryers, and dehumidifiers.

Energy Star certified refrigerators are about 9 percent more efficient than standard models.

An Energy Star certified clothes washer can save you about \$35 a year, while an Energy Star certified electric dryer saves \$215 in energy costs over its lifespan.

Energy Star certified dehumidifiers use nearly 15 percent less energy than a standard unit.

Purchase one of these for a rebate, details can be found at sremc.com or by calling 910.892.8071 x 2153.

What Are You Heating Your Water With?

What do you know about the amount of water used in your home every day, every year?

For example, the average household uses 64 gallons of water each day. Between \$400 and \$600 are spent on water heating each year by the average household. It also accounts for between 14 and 18 percent of your utility bill each month.

So, what type of water heater are you paying for each month? There is the storage water heater, the tankless water heater, the heat pump water heater, or the solar water heater.

You more than likely have a storage water heater, lower purchase cost with a life expectancy of 10-15 years. The biggest pro is the lower purchase cost compared to other units, however the one con is standby heat loss, which means energy is regularly used to reheat the water for when it is used. For energy savings with these, consider a water heater wrap.

If you have an electric home, it is unlikely you have a tankless system. Its life expectancy is 20+ years, and the unit provides a constant supply of hot water, between 8-34 percent efficiency over a storage water heater. The cons are that due to a limited flow rate of hot water. simultaneous multiple hot water use is often limited. And, the energy savings might not pay for the purchase and installation of such a system. As an electric water heating household, you might be interested to know that although the system heats water on demand, the initial start up uses quite a bit of energy.

Now, the heat pump water heater is also slightly more expensive than a storage water heater, but with a life expectancy of 10-15 years. It is two to three times more efficient than a storage water heater, but with lower operating costs. However, performance is dependent on location. Because the water heater exhausts cool air, it increases the use of space conditioning during heating months, so it is best to find an area which remains in the 40 to 90-degree range year-round.

As for solar water heating, it is more expensive than the other listed options, however the unit can last about 20 years and is 50 percent more efficient than a storage water heater. However, its efficiency depends largely on a few items including your solar resource, and the amount of water you use in your home. Most solar systems also require an electric back-up for those not so sunny days.

There is a lot more to water heating than just storage, and if they can help you save, why wouldn't you consider the options? South River EMC offers rebates on solar and heat pump water heating, and information can be found at sremc.com or by calling 910.892.8071 x 2153.

ENERGY smarts

Improving Comfort And Cost For Less

Looking to make improvements, but not big purchases? Check the insulation and weatherization in your home. These items can help prevent heat transfer, as well as infiltration. And preventing those, can help comfort and costs.

Save On Summer Fun

If you have a pool pump, it is going to use energy, how much depends on you and the type of system installed. A single-speed pump will use the most water and the most energy at all times of use. However, replacing a single-speed with a variable, or even a two-speed pump, will help.

Variable and two-speed pool pumps give you options for how much water and energy

The Time Is Right For Service

It's the perfect time to get your HVAC system serviced. This time between the very cold and very hot months, called the shoulder months, means that the air outside is close enough to buildings' ideal internal temperature.

During this service, your equipment is being checked to make sure everything is running as efficiently as possible, whether that is truly efficient is something to be seen. The older a system is, the more inefficient it becomes. Your service tech might find a costly repair is needed. So, if you have to replace, do you know your options?

Typically heat pump replac-

You might need to replace or refresh insulation in your attic, or under your home. You can prevent warm air from coming in during the summer with new weatherstripping around doors and windows, or maybe caulking around plumbing penetrations in your bathroom.

you want to use on tasks. Why use the highest speed when a mid level speed could do a better job?

Once you replace your pump, consider running it a little less. Pumps do not need to run for eight hours a day, particularly those single speed ones. But, run your pump when you are adding chemicals or chlorine. Then, try running it for six hours, is the water still clear? If

es heat pump, and you're in a good climate for one. When you look at replacements, try a higher efficiency unit of 17 SEER or greater. The seasonal energy efficiency ratio, or SEER rating, measures the cooling capacity of the unit. And not all heat pumps are meant for whole house use.

An air source heat pump, sure, depending on the size of your home, you might need more than one, but a higher efficiency one will help you save. A geothermal heat pump, not so much for existing home. Because of the work needed to install such a system, they are often best placed in a new



South River EMC offers rebates on several improvements, for details, visit sremc.com/insulation-weatherization or call 910.892.8071 x 2222.

so, try five hours the next day, and so on. When the water becomes cloudy, that obviously means the pump needs run longer, but if it's less than eight hours, that's a savings!

For details on pool pumps and rebates offered on the higher efficiency models, visit sremc. com/pool-pumps or call 910.892.8071 x 2153



construction setting. A ductless mini-split is wonderful for additions not connected to the home heating and cooling system. But the point is, find a system that works for you and your situation. A high SEER rating can help save and earn a rebate. Before you get your unit serviced, learn about our rebates at sremc.com/ energy-star-heating-cooling or call 910.892.8071 x 2222.

ADVISE Guys

Spring Into Energy Efficiency Tips

We have finally made it through the long, cold winter months! With the arrival of spring comes several opportunities and various measures that, when implemented, will help you save money while improving energy efficiency in your home.

HVAC Maintenance

Let's first look at a few measures to take for the largest user of electricity, which is the HVAC system. Now is the time to have your HVAC unit serviced in preparation for the upcoming hot summer weather.

Heating and cooling technicians are available and should be contacted to come out to your home to check freon levels as well as to clean the system properly. Make sure the freon line insulating foam is in good shape or replace it if needed.

We also recommended the replacement of return filters while keeping in mind that the less expensive fiberglass type provides maximum air flow and energy efficiency.

It is also important to check any outside units and ensure there is at least two feet of clearance between the unit and any trees, bushes, or shrubs. This may require them being cut back or pruned. Last, but not least, don't forget to check ductwork for leakages. Duct fittings and attachments should be sealed with Mastic sealant to help reduce air infiltration. Studies show that an estimated 30 percent of energy lost in the US is through leaky ductwork!

Check for Air Leaks

Once you have completed maintenance on the HVAC system, evaluate air infiltration and sealing inside your home. Keeping your home sealed is key to retaining HVAC conditioned air inside.

Door weather-stripping is a key area of concern that needs to be monitored regularly and maintained since this is a high-traffic area. Keep in mind that if the door is shut and sunlight penetrates through, it's time for maintenance.

Also, remember that any penetrations into unconditioned spaces, such as attic access doors or around sink or tub plumbing spaces, will need attention and repair.

Keeping your home airtight is a great way to save energy and money!

You will also need to check deep freezers for a proper and tight seal and replace any broken seals to reduce energy consumption. Refrigerators should only run



Advise Guy Robby Talton

about one-third of the time; therefore, a normal run time is about 20 minutes per hour. If you find your refrigerator running all the time, it is most likely time to replace it with an Energy Star qualified model.

Energy Star Rebates

Last but not least, don't forget South River EMC has rebates for the purchase Energy Star certified clothes washers, refrigerators and dehumidifiers! Look for the Energy Star logo on the energy guide before you purchase. If you do purchase it, be sure to send in the rebate application for process. Therefore, as you complete your thorough "spring cleaning" this year, keep in mind these energy and money saving tips. If you are interested in rebate information and energy-saving tips, please visit our website sremc.com/advise-guys.

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