

High-Speed Broadband Service Update

Since the passage of SB2 by the Georgia legislature in 2019, Altamaha EMC has been pursuing various options to help bring high-speed broadband to our service territory. We have provided updates to our members periodically as we have progressed through the process. Because a fiber infrastructure is a significant investment, we have applied for grants to help fund the project. This has been a tedious and time consuming process and



while there is still a lot to be finalized, we are happy to announce that we plan to begin construction of the fiber network within the next year.

This fiber network will strategically serve two purposes. It will allow us to develop a smart grid for our distribution system that will increase service reliability for our electric

members. At the same time, we will use the fiber network to provide high-speed internet to our members.

We continue to work to finalize many aspects of the project, including a construction time line which is expected to take 6 years to complete. As plans progress, we will make announcements to our members. Watch our monthly newsletter, Facebook posts and our website for exciting news and updates.



The Official Newsletter of Altamaha Electric Membership Corporation

GEORGIA'S Energy Outlook

Benefits of nuclear power: green and efficient

Because electric cooperatives work hard to select the most reliable, safe and efficient resources to generate electricity, it is important for cooperative members to understand the basic operational differences among the resources and technologies used to generate power.

In coal and natural gas plants, hydrocarbons are combusted in an energy conversion process that drives a turbine to generate electricity. This process produces emissions such as sulfur dioxide, nitrogen oxide and particulate matter, which are regulated and managed on-site by environmental control technologies. Carbon dioxide is also emitted, but currently isn't regulated. Wind turbines require high-speed winds to turn large blades connected to a turbine-generator, and solar panels employ photovoltaics (PV) to directly convert sunlight photons to electricity. Nuclear plants are driven by splitting atomic nuclei in a process called fission, releasing energy that's used to drive a turbine-generator.

Wind, solar and nuclear are zero-emission technologies, with nuclear accounting for 55 percent of zero-emission electricity in the U.S. What can be mistaken for emissions are what appear to be white clouds rising from cooling towers employed at some nuclear plants to cool the water used in power generation. However, this is pure water vapor—not smoke, combustion by-products or radiated gases.

"Nuclear power produces no emissions, is a high-density fuel, has a proven track record of safety and is by far the most reliable power generation technology," General Manager/CEO Romanous Dotson says.

Annual capacity factor, which refers to the percentage of a year that a power plant is actually operating, is a standard measure of reliability. The chart below compares the different fuel sources, with nuclear leading all others.



 ENERGY INFORMATION ADMINISTRATION, bit.ly/npcfsw, bit.ly/npngenes

This aerial view shows the Alvin W. Vogtle Electric Generating Plant units 1 and 2 in Burke County near Waynesboro. Units 3 and 4 are under construction.

One of the most important characteristics of an energy resource is energy density, which is a measure of how much energy is concentrated in the resource itself. This has much to do with a technology's capacity to maximize the amount of electricity generated from each unit of energy consumed.

For fossil fuel plants, 1 kilogram (kg) of coal generates about 2.3 kilowatt-hours (kWh) of electricity, while 1 kg of natural gas generates about 6.8 kWh. For a typical U.S. nuclear plant, 1 kg of nuclear fuel generates about 353,547 kWh of electricity. Wind and solar have very low energy densities and don't compare to coal, natural gas and nuclear on a per-kilogram basis.

Because power plants are sized based on megawatts (MW) of generating capacity, they can be compared based on the megawatt-hours (MWh) of electricity generated for every MW of plant capacity. Last year, U.S. nuclear power accounted for 809.4 million MWh of electricity from a capacity of 98,788 MW. This translates to 8,193 MWh of electricity generated for every MW of installed capacity. The chart below compares nuclear power with several other fuel sources.

Each of these fuel resources adds value to a power generation portfolio, but the one resource that exceeds all others in all categories is nuclear power.

Annual capacity factors for power generation	
Source	Annual Capacity Factor
Nuclear power	93.5%
Natural gas	56.8%
Coal	47.5%
Wind	34.8%
Solar PV	24.5%

MWh of electricity generated for every MW of installed capacity

Source	MWh generated
Nuclear power	8,193
Natural gas	4,976
Coal	4,102
Wind	3,073
Solar PV	2,168

Change your clocks; change your batteries

The second Sunday in March (March 14) will trigger Daylight Savings Time, when we "spring ahead" and set our clocks one hour later. That's also the best day to change the batteries in smoke alarms and carbon monoxide detectors—even if the batteries aren't dead.

If you don't have fire alarms and carbon monoxide detectors, your family is at risk. The alarms will loudly warn you if smoke or gas is present in your home, so you can get out. Carbon monoxide is a clear, odorless gas that is deadly but hard to detect. If you don't have an alarm, it's unlikely you will know if your home has a leak.

Carbon monoxide doesn't come just from cars. Your gas furnace or stove is a potential source of the gas. The U.S. Environmental Protection Agency (EPA) offers these tips for poison prevention:

- Keep gas appliances properly adjusted.
- Use electric space heaters, not gas space heaters.
- Install an exhaust fan, vented to the outdoors, over a gas stove.
- Open flues when wood-burning fireplaces are in use.
- Choose properly sized wood stoves with tight-fitting doors that are certified to meet EPA emission standards.

• Have a trained professional inspect, clean and tune up your central heating system—including furnaces, flues and chimneys—annually. Repair leaks promptly. Do not idle your car inside the garage.

Foundation Scholarship Applications Available

Four scholarships, worth \$1,000 each, will be awarded to local students this spring. The Altamaha EMC Foundation Scholarship was founded in an effort to help local students further their education. The scholarships are funded entirely by members' donations through Operation Round Up.

Applicants must be a high school senior and live in the household of an Altamaha EMC member.

Applications are available on our website, <u>www.altamahaemc.com</u>. You can also request an application from any of our four office locations.

Scholarships will be awarded based on academic ability and financial need. Winners will be announced in May 2021. The deadline to apply is April 15, 2021.



Holiday Closing Notice



The offices of Altamaha EMC will be closed Friday, April 2 in observance of Good Friday. The drive-in window at our Lyons office only will remain open for the convenience of our members.

In the event of a power outage or related problems, standby personnel will be on duty. You can report power outages by calling (912) 526-8181 or (800) 822-4563.

Pandemic calls for extra spring cleaning

After a long winter of quarantining, homeschooling and teleworking while everyone was at home full time, it's time for a major spring cleaning. More people at home more often equals more dirt, grime, dust, finger prints and stains.

While you're scrubbing the COVID-19 pandemic out of your house, keep energy efficiency in mind. Here are six items to clean that could help your appliances, lighting and air conditioning system operate more efficiently—and save you money on energy bills.

1. Flip the switch. Ceiling fans' blades should rotate counterclockwise during warm weather to push



cool air down and make rooms feel more comfortable. And they should be dust-free; climb a ladder and clean the blades on top and bottom so they don't knock dirt into the air as they spin.

2. Clean air conditioner vents. They're a catchall for lint, pet hair, dust and dirt, which can block the air that's trying to flow in and out of them.

3. Caulk around windows, doors and electrical and cable outlets on the inside of outside walls. Cool air can escape through those tiny openings in the summer and find its way into the house during winter.

4. Wash your windows. Even a thin film of dust

and dirt on the inside or outside of glass panes can block sunlight from warming a room in the spring.

5. Call a service pro. Your cooling system needs attention from an HVAC tech once every spring to prevent a breakdown once the weather gets hot.

6. Dust electronics. Computers, printers, lightbulbs, appliances—anything that you plug in—sit still enough to collect a lot of dust. Dust can prevent them from operating efficiently.

Call a Pro for Electrical Repairs

Home improvement TV shows make household repairs look easy. But when it comes to electrical repairs, DIYers should move over and make room for a pro.

Working with electricity is risky business. Anyone who tinkers with wiring or circuits could suffer electrocution/shock, or could start a fire. Highvoltage equipment is especially dangerous to work on, even for professionals.

So even if it seems that the talented DIYer in your home has the skills to fix just about anything, he or she should not take chances with electrical repairs.

Licensed electricians are trained not only in the skills they need to work with electrical circuits and components, but in how to stay safe during the job, how to adhere to electrical codes and how to prevent fires. They also know which permits are required to do the work legally.

Homeowners also should consider the following before attempting to do their own electrical repairs:

• Some homeowner's insurance policies do not cover fires that start as a result of a DYI electrical repair gone wrong.

• Electrical work requiring city or county permits can result in fines for a DIYer who does not obtain those permits.

• Selling a home after electrical work has been done by a DIYer can be a challenge. Potential buyers usually hire home inspectors, who could flag faulty repairs and force the homeowner to pay for a professional do-over.

• Even when you hire a professional electrician to work in your home, insist on a license, proper permit and an inspection.









Member RECI ES

Hasselback Potato Gratin

Recipe courtesy of Georgia Grown

Ingredients

- 2 cups heavy cream
- 1/2 cup half-and-half
- 8 ounces finely grated Swisscheese, divided

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- 2 ounces finely grated fresh Parmesan cheese, divided
- 1 teaspoon Dijon mustard
- 2 teaspoons Worcestershire sauce
- 2 teaspoons fresh thyme leaves
- Salt and pepper, to taste
- 7 to 8 medium Russet potatoes, peeled

Preheat oven to 400 degrees.

In a large bowl, combine cream, half-and-half, half of the Swiss cheese, half of the Parmesan cheese, Dijon mustard, Worcestershire sauce, thyme and salt and pepper.

Slice potatoes into 1/4-inch slices. Toss potato slices in cream mixture until all slices are coated. Carefully make stacks of potatoes then arrange them vertically in a baking dish so that the thin edges of potatoes face up. Pour remaining cream mixture over the potatoes.

Cover baking dish with foil and bake 45 minutes. Remove foil and bake an additional 15 minutes or until potatoes are tender. Sprinkle with remaining Swiss and Parmesan cheeses. Bake an additional 10 minutes or until cheese is golden. Serves 8-10.

Visit Georgia Grown's website, www.georgiagrown. com, for recipes from farms and producers across our state. Each month, our newsletter features recipes submitted by our members. If you have a favorite recipe and would like to share it with other readers in the Altamaha EMC service area, send a copy, complete with name, address and daytime phone number to: Tammye Vaughn, Altamaha EMC, P.O. Box 346, Lyons, GA 30436. Each month, a recipe will be selected for publication. The member who submitted the featured recipe will be given a \$10 credit on their next Altamaha EMC bill. Due to limited space, not all recipes received will be featured. Recipes printed in *Plugged In* are not independently tested; therefore, we must depend on the accuracy of those members who send recipes to us.