ACCG PARTNERS &
SPONSORS NEWSLETTER

Published December 20, 2024

Power moves across our state through a network of nearly 20,000 high-voltage transmission lines, various substations, and distribution lines that service homes and businesses. To ensure communities have power when and where they need it, Georgia Power is continuously maintaining and upgrading the power grid.

Over the past decade, Georgia Power invested more than $10 billion to make the grid stronger and more dependable. Through these purposeful investments and a data-driven approach, our 2.7 million customers experienced 15 percent fewer power outages on average in 2023, with 27-minute faster restoration times compared to the prior year.

A recent $160 million grant from the Department of Energy (DOE) further bolsters Georgia Power's ability to increase the resilience of the power system against extreme weather. This will help ensure access to affordable, reliable electricity for Georgia communities — from rural areas to urban centers. Hurricane Helene impacted 53 counties in our state, with 20,000 personnel responding to return power to 1.5 million customers in eight days, making it the largest restoration operation in company history. This effort was supported by recent grid investments, allowing Georgia Power to restore power to 523,000 customers within 48 hours of Hurricane Helene's arrival in Georgia.

Georgia Power is improving grid reliability by:

- Building new systems like battery storage
- Adding smart technology and connections
- Developing new clean energy sources

Battery Energy Storage Systems

As the energy landscape evolves, battery energy storage systems (BESS) will play a key role in the future power grid. Georgia Power is leveraging cutting-edge battery storage solutions to help increase grid reliability and expand the potential of existing renewable energy generation.

What are the Benefits of BESS?

- **Enhancing Grid Reliability**. Fast frequency response helps ensure that the grid remains stable and supporting the continued addition of clean, renewable intermittent energy.
- **Managing Peak Demand.** Efficiency peak demand management reduces the need for more expensive options during times of high energy needs.
- **Supporting Locally Generated Energy.** With power increasingly being generated closer to where it is consumed, battery storage technology enables integration of distributed energy resources like large-scale solar farms.

From Talbot County's Mossy Branch Battery Facility to a new battery project underway in Cherokee County, Georgia Power is developing BESS projects across Georgia. Additional new company-owned facilities include projects adjacent to Robins Air Force Base in Bibb County, Moody Air Force Base in Lowndes County, and Plant Hammond site in Floyd County.

The Smart Grid

Representing the next generation of electricity infrastructure, the smart grid incorporates advanced technologies, such as smart meters, sensors, and automated control systems. This creates a more resilient and adaptable power grid for modern energy consumption. More than 60 percent of Georgia Power's distribution grid is considered "self-healing," helping avoid thousands of power outages each year.

How do Smart Grids Enhance the Customer Experience?

- **Advanced Monitoring and Automated Response Capabilities.** Smart technology gives the ability to quickly identify and address problems like severe weather and cyber-attacks.
- **Minimized Outage Impact.** Advance detection and isolation of problems reduces outage impacts to fewer customers or automatically reroutes power for faster restoration.
- **Increased Energy Efficiency.** Real-time consumption data allows utilities to optimize energy distribution, reducing waste and lowering operational costs.

Next Generation Clean Energy

As America's first new nuclear investment in three decades, Vogtle 3 and 4 bring the next generation of advanced clean energy to Georgia, providing reliable, emission-free energy for at least 60 to 80 years. With all four units now in operation, Plant Vogtle is the largest generator of clean energy in the nation, expected to produce more than 30 million megawatt hours of electricity each year.

Nuclear power units, like those at Plant Vogtle, are the most reliable energy source, able to generate electricity at full power around the clock — more than twice as much as solar and wind resources. Nuclear also requires fewer maintenance outages than coal or gas, making electricity even more reliable for Georgians.

Building the Future of Energy

To meet the demands of the 21st century and beyond, Georgia Power is continuously strengthening the power system. Whether it's updating the electric grid to make it smarter and more resilient, developing innovative ways to generate and store energy, or restoring power quickly and safely after an outage, we are committed to keeping Georgia powered around-the-clock.

As the world moves toward more sustainable and efficient energy solutions, developments like battery storage, smart technologies, and advanced clean energy sources are becoming indispensable components of modern energy systems. Georgia Power continues to embrace innovation as we build an energy future that drives empowerment, sustainability, and economic growth for all of Georgia.

Learn more about how we're making the electric grid smarter and more dependable at georgiapower.com/reliability.