CASE STUDY

Managing an Array of Efficient, Targeted Grid Improvement Projects

Georgia Power's Grid Investment Program is a multibillion-dollar effort running from 2020 through 2036 to modernize the state's electrical transmission and distribution grid. The primary goals of the program are to enhance system reliability, boost customer satisfaction and replace aging infrastructure that poses a risk to the electrical system.

Challenge

Georgia Power's statewide reliability improvement program modernizes electrical transmission and distribution infrastructure to reduce outage frequency and duration while strengthening system resilience during severe weather. The scale and scope of this program make it one of the most complex initiatives ever undertaken by Georgia Power.

The challenges are significant, including managing projects spread across both urban centers and rural communities, converting overhead lines to underground systems, strengthening existing circuits, adding automation devices to increase protection on the system, and optimizing feeder configuration to reduce exposure to customers. Another layer of complexity comes from the need to coordinate among leadership, regulators, contractors and local communities to achieve milestones across sector priorities and policies.

Project Stats

Client
Georgia Power

Location
Georgia

160+
circuits invested in

45%+
outage duration reduction

428K
customers served

Burns & McDonnell tackles these challenges by applying adaptable delivery models, technology-enabled oversight and proactive stakeholder engagement. These approaches transform complexity into an opportunity for innovation and efficiency.

Solution

The utility selected Burns & McDonnell to provide program management services to execute its multiyear plan. This includes the following scope:

- Permitting and environmental compliance
- Project controls
- Outage coordination
- Project management
- Owner's engineering
- Project development (scoping)
- Procurement
- Construction
- Analytics and technology

As program manager, our role goes beyond traditional engineering. We developed and manage the delivery model, which coordinates hundreds of projects across Georgia. Key initiatives that have been implemented to drive efficiency and successful program execution include shifting from time-and-materials to a fixed-price contracting strategy, providing greater cost control and predictability. We also introduced geographic information system (GIS)-enabled field tracking for real-time performance measurement and automated processes in design, permitting and reporting to deliver faster, more reliable outcomes.

The program relies on a network of engineering and construction contractors and a third-party logistics provider, with Burns & McDonnell orchestrating the collaboration to see that all parties work toward the shared goals of reliability, safety and efficiency.

Innovation is central to the program's success. The team developed mobile, GIS-driven platforms with automated workflows that accelerate project handoffs and increase efficiency. Furthermore, a utility-specific delivery model was introduced to align contractor incentives with the utility's priorities, resulting in faster project turnover and improved cost control.

Results

The program is in its sixth year of execution and has yielded strong metrics as of early 2026:

- 161+ circuits have received investment
- 500+ miles of underground cable installed
- 4,600+ devices installed
- 29,000+ poles worked on

This program serves as a blueprint for how utilities can manage aging infrastructure. By combining technology, program management and contractor alignment, the program demonstrates a scalable model with broad potential applicability. The program has already improved reliability for more than 428,000 customers statewide, reducing outage durations by more than 45%. For Georgia Power, this translates to millions of dollars in savings from reduced emergency repairs and lower operating costs.

Despite the challenges of diverse geographic areas and coordinating numerous stakeholders, the program has consistently met its schedule, scope and cost targets, setting a new standard for utility-scale program management.

About Burns & McDonnell

Burns & McDonnell is a family of companies bringing together an unmatched team of engineers, construction and craft professionals, architects, and more to design and build our critical infrastructure. With an integrated construction and design mindset, we offer full-service capabilities. Founded in 1898 and working from dozens of offices globally, Burns & McDonnell is 100% employee-owned. For more information, visit **burnsmcd.com**.

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