

GIS Integration Enhances Performance at Progress Energy



UTILITY IMPROVES NETWORK VISUALIZATION AND DECISION-MAKING PROCESSES WITH NEXT-GENERATION SYSTEM FROM INTERGRAPH®

THE CHALLENGE:

Progress Energy is pursuing a balanced strategy for a secure energy future in two of the country's fastest-growing regions, Florida and The Carolinas. That balance includes aggressive energy efficiency programs, investments in renewable energy technologies, and a state-of-the-art electricity system. Progress has long realized that key to its long-term success is accurate, easily-accessible location-based data. In 1997, Progress began its transition to a fully digital environment, leveraging Intergraph® solutions to monitor and map its infrastructure, and to dispatch field crews. For Progress, the 100 percent digital conversion significantly contributes to faster response times during power outages.

Today, the Intergraph geographic information system (GIS) at Progress serves as the foundation for all of its distribution asset records. The system also feeds the utility's Intergraph InService outage management system (OMS) and mobile workforce management system, and its circuit analysis programs. It also allows crews in the field to view the same visual representation of its assets as those back at the office.

With a proven return on investment for its GIS, Progress wanted a next-generation system that could upgrade and consolidate disparate systems. The consolidation of the systems used by Progress Energy Florida and Progress Energy Carolinas was the equivalent of bringing the geospatial assets of two entirely separate utilities together under the same open-standards data model. Progress chose to undertake the project to improve data access for its employees, including project planners, designers, GIS operators, inspectors, and maintenance teams in the field. The intended result was the ability to respond to outages quickly, better manage incoming and existing data, and more efficiently capture, design, and analyze network asset information for enhanced customer service. The system transformation would also reduce operating and administrative costs.

PROFILE:

Name – Progress Energy

Web site – www.progress-energy.com

Headquartered in Raleigh, North Carolina, Progress Energy is a *Fortune* 250 company with approximately 11,000 employees and \$9 billion in annual revenues. The utility provides electricity and related services to 3.1 million customers in North Carolina, South Carolina, and Florida.

KEY BENEFITS:

- Better communication with customers for outage restoration
- Enhanced maps provided to State One Call centers
- Cost savings of more than \$1,000,000 per year
- Consolidation of GIS sets the stage for the consolidation of other systems, such as outage management and mobile workforce management

PRODUCTS USED:

- G/Technology software suite
- InService outage management system

THE PROJECT OBJECTIVES:

- Improve data access and management for employees
- Ensure ability to respond to outages quickly, enhancing customer service
- Reduce operating costs
- Enhance data quality in One Call maps

THE SOLUTION:

In July 2005, Progress began a large-scale project to upgrade two existing systems based on Intergraph's FRAMME (GIS) technology to G/Technology, Intergraph's next-generation infrastructure management system. The large-scale project was completed in 2008. Today, more than 800 Progress employees use the system to view GIS data and create or update facility information. Engineering field personnel also use the system as a platform for work-order sketches.

With the new system, the utility now has greater capabilities for performing spatial analysis with its GIS data, as well as any other data that can be represented spatially. This visualization greatly enhances and expedites decision-making processes. The new system also gives Progress the capability to send more accurate data to its State One Call centers. This helps One Call centers locate potential underground conflict areas more quickly, and helps Progress significantly reduce operational costs each year.

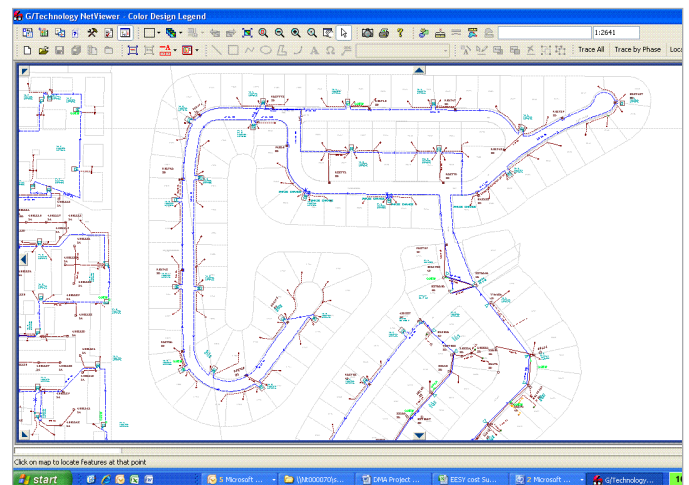
Additionally, the integration of GIS information with the utility's OMS has helped Progress continue to improve outage response time caused by minor events, as well as outages caused by larger-scale disasters such as hurricanes and ice storms. Enhanced models promote better capabilities for determining the cause of disruptions along the power grid. This results in better communication with customers for outage restoration, which improves customer relations and reduces labor hours.

THE FUTURE:

As Progress moves forward with its smart grid strategy and initiatives, the upgraded, consolidated GIS will become even more critical to its operations as the utility increases its focus on configuration management to be able to operate its grid in real time.

The next phase of the GIS integration will be to allow more field personnel to access GIS data. This will ultimately speed service for customers, whether it is for new construction or facility repairs on assets such as street lights.

Progress is also considering an expansion of the GIS outside of just the distribution department to become the company's enterprise system. Progress' telecom, transmission, real estate, vegetation management, environmental, and economic divisions all see potential uses for the Intergraph system in their respective areas.



G/Technology NetViewer enables Progress Energy to easily visualize more data.

ABOUT INTERGRAPH

Intergraph is the leading global provider of engineering and geospatial software that enables customers to visualize complex data. Businesses and governments in more than 60 countries rely on Intergraph's industry-specific software to organize vast amounts of data into understandable visual representations and actionable intelligence. Intergraph's software and services empower customers to build and operate more efficient plants and ships, create intelligent maps, and protect critical infrastructure and millions of people around the world.

Intergraph operates through two divisions: Process, Power & Marine (PP&M) and Security, Government & Infrastructure (SG&I). Intergraph

PP&M provides enterprise engineering software for the design, construction, and operation of plants, ships, and offshore facilities. Intergraph SG&I provides geospatially powered solutions to the defense and intelligence, public safety and security, government, transportation, photogrammetry, utilities, and communications industries.

For more information, visit www.intergraph.com.

