

# Electrifying the Future: Revolutionizing Power Distribution with an Interactive Web Application

## Fortune 150 Electric and Gas Utility

### About the Client

This Fortune 150 company is one of the largest energy holding companies in the United States, with electric and natural gas serving millions of customers in several states.

### About Eichcorp

Eichcorp is a software consulting and implementation practice based in Charlottesville, Virginia that specializes in custom software implementation, GIS/mapping applications, software project/product management, and cloud solutions. Learn more at [www.eichcorp.com](http://www.eichcorp.com)




### The Challenge


Company stakeholders envisioned interactive mapping software enabling electric distribution planners to visualize physical assets, such as transformers, substations, and power lines. This technology would allow them to analyze current network capacity and identify potential bottlenecks or areas for improvement. Planners can also integrate data which forecasts future demand and make informed decisions about upgrades and expansions. Mapping massive amounts of information would require both modern technology and approaches in the chosen solution. Intuitive and highly performant look at feel were also critical for success.


### The Outcome


Eichcorp provided expert software design and implementation service including collaborating with a talented team to design and develop a web mapping application which truly transformed how planners at the utility visualize electric distribution networks. Utilizing mapbox-gl and deck-gl the team created an interactive platform that displays predictive usage data. The application's user interface is powered by Angular and the system is deployed in a cloud-native AWS infrastructure.

### The Solution

 **Amazon Web Services**  
Scalable cloud infrastructure

 **Angular**  
Frontend development platform based on TypeScript

 **deck-gl**  
GPU-powered framework for visual exploratory data analysis of large datasets. Frontend library for building map-centric web applications

 **Mapbox-GL**  
Frontend library for building map-centric web applications

