

CenterPoint Energy

Smart Grid solutions increase operational efficiencies while cutting costs



PROJECT AT A GLANCE

Project Type

Operational utility solutions

Location

Houston, Texas

Number of Customers

More than five million

Applications

Flexibility to enhance a work sketch with GIS information, materials needed, and labor costs in a more streamlined and less detailed fashion

Solutions Implemented

ArcFM™ Design - Designer Express

CUSTOMER BENEFITS

- Supports a diverse set of work flows
- Enhances work sketches with GIS and other information
- Reduces labor costs
- Improves operational efficiencies



CenterPoint Energy, headquartered in Houston, Texas, has more than five million metered customers and a long history of service. CenterPoint Energy is composed of an electric transmission and distribution utility serving the Houston metropolitan area, local natural gas distribution businesses in six states, a competitive natural gas sales and service business serving customers in the eastern half of the U.S., interstate pipeline operations with two natural gas pipelines in the mid-continent region, and a field services business with natural gas gathering operations, also in the mid-continent region.

Challenges

With ongoing gas construction, maintenance and repair projects occurring in numerous areas across six states, CenterPoint Energy needed a consistent and uniform approach to creating project designs that could be reviewed by multiple engineers in various locations to increase efficiencies in the planning and work process.

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Although CenterPoint Energy had been utilizing Schneider Electric’s ArcFM™ Network solution since 1999, the company’s multiple regional service territories were employing different processes and design tools to create their designs. The varied processes resulted in design inconsistencies and made it almost impossible to effectively utilize design staff from one location to assist with work in another service area.

Solution

Schneider Electric partnered with CenterPoint Energy to design, develop and deploy Designer Express solution for use by each of its gas areas, compiled within eight different geodatabases. Designer Express provides lightweight sketching abilities using a simplified data model and design tab functionality. It has the ability to enhance a work sketch with GIS information, construction materials and labor costs.

“We brought together ideas from all of our regions to develop the best design tool for our organization and worked to produce the finalized product,” explains Cindi Salas, director, Land and Field Services at CenterPoint Energy. “Partnering with Schneider Electric was the ideal way to develop a solution that would best meet our needs.”

Designer Express is a fast, easy-to-use tool created specifically for designers who prefer not to identify each and every material or compatible unit prior to completing complex designs. The product provides CenterPoint Energy design technicians the flexibility to enhance a work sketch with GIS information, materials needed, and labor costs in a more streamlined and less detailed fashion. For CenterPoint Energy, the speed of creating the design was a key requirement, and Schneider Electric delivered.

Once a design has been created, CenterPoint Energy designers can add additional construction details, print a construction packet, create material lists,

etc. When the job is complete, the designer utilizes Work Flow Manager to simply assign the design to the ArcFM GIS editing group to complete the as-built process, taking the responsibility for data management off the designers themselves.

The Bottom Line

CenterPoint Energy began the Designer Express project in 2008 and put into production its first business unit in 2009. By early 2010, all CenterPoint Energy regions (eight geodatabases) were utilizing Designer Express for gas design, and the utility immediately began seeing improvements in operational efficiencies.

Designer Express is fast, simple to use, and supports a diverse set of work flows common in electric, gas and water utilities. In utilizing Designer Express, CenterPoint Energy is able to more effectively communicate new construction and maintenance of existing assets.

“In addition, by having a single code base that works across all regional databases, we are now able to utilize our development resources much more efficiently,” explained Jacob George, lead developer.

Since all CenterPoint Energy gas designers now use a common design tool, the company can save on design labor costs by more easily allocating work to employees in different parts of the country. For example, although there are fewer construction projects in Minnesota during the winter, an engineer in Minneapolis can continue to complete designs for the Houston region by simply logging into the database and accessing the designs from Texas. The project design can then be completed from the engineer’s office in Minnesota.

“It’s just the beginning of additional efficiencies that can be realized from having a consistent product and process that leverages GIS capabilities,” said Salas.