

# Saint John Energy

Advanced GIS for improving data management and functionality



## PROJECT AT A GLANCE

### Project Type

Operational utility solutions

### Location

Saint John, NB, Canada

### Number of Customers

36,000

### Applications

Integrate utility data and advanced geographical maps to provide a graphical view of a utility's infrastructure and tools that support cost reduction through simplified planning, analysis and operational response times

### Solutions Implemented

ArcFM™ Network

ArcFM™ Design

## CUSTOMER BENEFITS

- Model, design and manage critical infrastructure
- Highly configurable and easily adapted for multiple uses
- Ability to take the data on-the-road – automatically keeping mobile users up-to-date



Saint John Energy is a municipal electric utility that has been serving the City of Saint John, New Brunswick since 1922. The focus of the utility has been the efficient delivery of electricity to local consumers. As a non-generating utility, its primary responsibility is the distribution of electricity and customer service for approximately 36,000 customers.

Saint John Energy implemented Schneider Electric's ArcFM™ Network solution in 2003 and added the Designer suite in 2007.

## Challenges

Prior to implementing Schneider Electric's ArcFM Network solution, Saint John Energy was operating off of a CAD-based mapping system to design, maintain and manage its utility network. As a small utility, finding the manpower to efficiently keep the maps and other paper documents up-to-date was a near impossible process.

This proved to be particularly problematic when managing asset maintenance issues.

“With the GIS-based Schneider Electric technology, every person in our company has a better understanding of our network and how it is running on a daily basis.”

J. P. McGrath, GIS analyst at Saint John Energy

“Prior to having ArcFM the method of researching facilities requiring maintenance was a labor intensive activity,” said J. P. McGrath, GIS analyst at Saint John Energy. “We would use a number of in-office paperwork operations to determine which facilities needed to be looked at and where those facilities were located.”

To improve on its facilities management and the process for expansion of the utility network, Saint John Energy sought to upgrade its mapping system and integrate a design tool.

## Solution

When looking at the options for an enterprise mapping system, Saint John Energy reviewed a number of different technologies including GIS and CAD based systems. Esri’s ArcGIS® and Schneider Electric’s ArcFM Network were selected as the mapping system for the company’s electric network.

The utility saw immediate benefits from switching to this highly configurable, open-architecture system to model and manage its utility network. Saint John Energy liked the ease with which ArcFM Network could be used to update the network data automatically and seamlessly.

After a number of years of data collection and updating of the GIS, Saint John Energy wanted to implement a product that could assist in the graphic design and building process of its electric network. The fact that Schneider Electric’s Designer solution seamlessly integrated with the ArcFM Network platform made the choice easy.

Saint John Energy wanted to streamline the building process as much as possible in order to help its small staff efficiently expand the electric grid as necessary. With Designer the utility was able to easily design and construct its grid knowing in advance what the project would entail and how much it would cost.

## The Bottom Line

The immediate benefit of implementing ArcFM Network

and ArcFM Design technology was that, for the first time, Saint John Energy had a clear picture of all of the components within its service area.

“As a small utility, we haven’t had the manpower to keep our paper maps up-to-date on an ongoing basis before,” said McGrath. “With the GIS-based Schneider Electric technology, every person in our company has a better understanding of our network and how it is running on a daily basis.”

Additionally, Saint John Energy is able to better service its customers because of the more accurate information it receives from the Schneider Electric technology.

“We are now able to determine which customers will be affected when we are doing system maintenance,” said McGrath. “Using information from network traces within the ArcFM map, we are able to let individual customers know that there is going to be an outage and for how long they can expect to be without power.”

The ability to take the data on-the-road has also proved invaluable to Saint John Energy. Being able to access the ArcFM system from the field has allowed the utility to efficiently address outages and upgrades to the system.

“ArcFM replication is automatically keeping our mobile users up-to-date,” said McGrath. “So any changes made to the database are also being updated in our crew’s machines every day.”