


CASE STUDY / **SECONDARY NETWORK ASSESSMENT**

# Managing aging infrastructure

Safety and operational issues often go undetected in urban secondary networks. A large electric utility tackled the problem head-on by completing a thorough analysis of its system.





## Identifying tactics and strategies to modernize a utility's network takes careful analysis of design, engineering, construction and other functional areas.

### Project stats

**Client**

A large electric utility

**Location**

Midsized city, Midwest market

**Duration**

October 2018-May 2019

**1.6M**  
electric customers served



#### Challenge

Secondary network systems are a crucial part of the electric power infrastructure. They are designed to serve dense urban business districts and deliver high levels of reliability to customers. Yet they present unique challenges for utility managers.

Aging infrastructure, high maintenance and construction costs — and the loss of experienced staff through mergers and attrition — are common issues. The inherent reliability of secondary networks tends to mask critical issues. At the same time, their location under city streets exposes employees and the public to extreme safety hazards involving high energy levels in aged equipment.

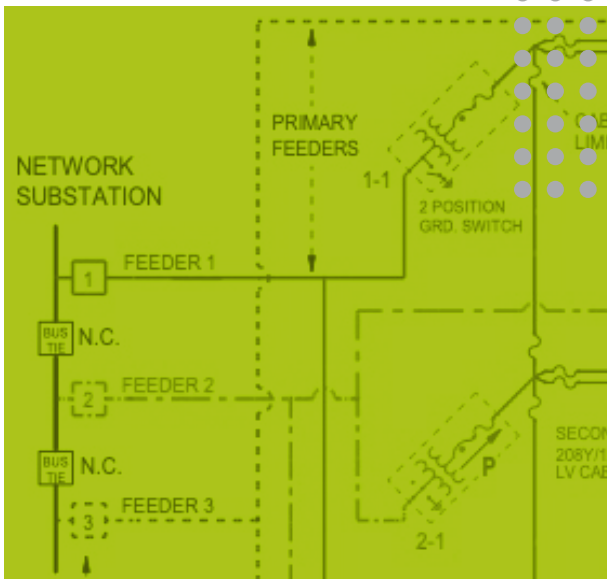
A large electric utility serving a Midwestern city needed a tangible action plan to identify and address the challenges associated with

ongoing operation of its secondary network. The utility enlisted 1898 & Co. to conduct a proactive assessment of all aspects of their network.

#### Solution

To provide this analysis, our team followed a structured methodology that included a fact-finding, asset condition assessment, evaluation and benchmarking of practices and processes relative to network systems. As part of this process, we conducted on-site workshops, interviews and field inspections.

We completed analyses of key functional areas, including planning, design, engineering, construction, operations, maintenance and safety. Ultimately, we provided the electric utility with an immediate tactical action plan and a strategic framework for optimizing its investment in grid modernization.



## Results

Like many of its industry peers — due to the loss of experienced staff — our client has lost network systems engineering and operational institutional knowledge in recent years. As a result, our analysis identified a risk profile that did not adhere to industry norms.

To address urgent safety and operational needs, we recommended realigning the company's organizational structure. We also provided a set of specific actions for the company to take to enable immediate resolution. The reorganized utility executed our detailed plans, thus lowering the risks and improving the safe operation of the secondary network system.

Positive intervention yields immediate improvements to utilities managing secondary networks. Our engagement delivered data-driven, fact-based results that made it possible for our client to plan ahead for future issues with confidence.

## About 1898 & Co.

1898 & Co. is a business, technology and security solutions consultancy where experience and foresight come together to unlock lasting advancements. We innovate today to fuel your future growth, catalyzing insights that drive smarter decisions, improve performance and maximize value. As part of Burns & McDonnell, we draw on more than 120 years of deep and broad experience in complex industries as we envision and enable the future for our clients.

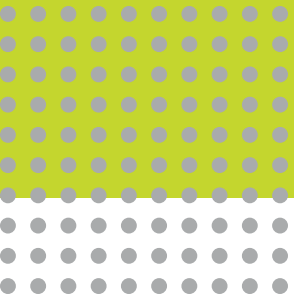
## Specialized services

- Distribution modeling
- Distribution network engineering
- Operational improvement
- Organizational change management
- Process improvement
- Safety quality control



The logo for 1898 CO, featuring the year '1898' in a large, bold, sans-serif font, followed by 'CO' in a smaller font with a stylized graphic element to its right.

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For more information, visit [1898andCo.com](https://www.1898andCo.com).

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