

A notable energy services company leverages FirstLight's Enterprise Monitoring solution to manage its new intelligent meter infrastructure and expansive IT environment.

CHALLENGE

A leading sustainable energy company, comprised of several electric and natural gas utilities that serves millions of customers, found itself in need of a better monitoring solution. Through the company's ongoing commitment to provide its customers with superior service and remain at the forefront of its industry, it launched an initiative to deploy smart meters across its footprint. The installation of these devices, at least one per customer location, offers many operational benefits to the utility and its customers, including advanced analytics, detailed usage information, and more tailored customer service interactions.

With this technology also came the need to monitor the operating environment of the smart devices to ensure their supporting infrastructure and software remained operational, efficient and compliant. With an emphasis on uptime, the company needed to be alerted to any service interruptions or underlying performance issues. It required a monitoring solution that could span across multiple data centers and landscapes, all while remaining compliant with rigorous North American Electric Reliability Corporation Critical Infrastructure Protection (NERC CIP) requirements.

Additionally, the company has critical IT infrastructure that supports several other functions and departments, including its e-mail server, billing software, and accounting tools. This environment, run separately from the intelligent meters, also required monitoring to ensure operability and optimize functionality.

SOLUTION

Given the complex IT environment that supports the company's smart meters, it required a robust monitoring solution to capture the complete range of data and analytics required to stay apprised of all activity. FirstLight's skilled talent and specialized capabilities within its Monitoring Services Group led to the utility company's selection of FirstLight's Enterprise Monitoring Solution for this extensive project.

EXECUTIVE SUMMARY

INDUSTRY:

- Utilities

CHALLENGE:

- The utility company had a new, expansive IT environment to support its smart meter rollout that required monitoring services to ensure uptime and performance.
- The company also had a separate, even larger IT environment that supported the core operational functions of the business that required monitoring to ensure operability, efficiency, and minimize service interruptions.

SOLUTION:

- FirstLight implemented an extensive SolarWinds-based monitoring solution for the smart meter landscape across several data centers that included deep insight into activity, advanced analytics, and met all security requirements set forth by NERC CIP.
- A second monitoring solution was implemented for the Utility's core operating landscape. The solution included tailored dashboards to focus on key metrics and help repair crews diagnose and resolve issues quickly and efficiently, as well as automated reporting on key technologies.

RESULTS:

- The Utility has a Network Management Center that provides detailed, real-time intelligence into all of its technology across the smart meter and core IT environments while remaining compliant with rigorous industry standards.
- The Utility leverages FirstLight for ongoing engineering support in order to refine its dashboards and thresholds to fine tune reporting and maximize the benefit of the solution.

With a focus on compliance and security, FirstLight implemented a comprehensive SolarWinds-based monitoring landscape that integrates with all leading security tools and applications. The solution includes secure environments across several data centers to adhere to strict security protocol, including the need to be “air-gapped.” It also provides concentrated, deep analytics of all facets of the IT environment and has the capability to monitor up to 800,000 simultaneous data points.

A monitoring solution for the company’s core IT environment, separate from the smart meters, was also deployed. Even more extensive than the monitoring solution for the smart meter environment, it involves tailored dashboards to focus on key metrics to measure efficiencies and ensure uptime. Like the smart meter monitoring solution, it provides incident response dashboards to help repair crews diagnose and resolve issues quickly and efficiently, as well as automated reporting on key technologies to ensure that operations run smoothly and problems can be anticipated and resolved before they affect vital infrastructure.

RESULTS

The Utility now has a network management center (NMC) with the visibility to monitor and manage its entire wireless meter infrastructure and its core IT infrastructure in a government-required NERC CIP secure environment, meeting 45 requirements and 9 standards.

Based on the intricacy and size of the solution, the Utility is leveraging FirstLight for ongoing support to ensure that the benefits are fully realized. FirstLight’s Monitoring Services Group is providing continuous engineering services and refinement and maintenance, which includes changing thresholds, creating dashboards, and running security and inventory reports.

In addition to its advanced application and infrastructure monitoring solution, the organization also leverages FirstLight for dark fiber connectivity, lit services, and hardware. This not only simplifies vendor relations with a primary, trusted resource, but also ensures end-to-end quality across its technology investments.

ABOUT FIRSTLIGHT

FirstLight provides a full complement of cost effective, high quality, scalable telecommunications services, including private line, high speed Internet access, data center, cloud, managed and voice services to retail and wholesale customers throughout the Northeast and Mid-Atlantic.