PROJECT OVERVIEW

Dominion Energy leveraged a database and application development platform to maintain their backoffice and field operations for many years. However, in an effort to gain better insight into the state of their operations, they implemented Itron AMI Operations in 2018. Dominion Energy selected Itron due to our industry expertise in delivering actionable and real business results. That, coupled with the establishment of a collaborative partnership enabled them to deploy an enhanced solution that extends value. In addition, Itron provided Dominion Energy with purpose-built network tools to help them deliver and maintain a reliable and valuable AMI system.

“We appreciate Itron due to their industry expertise, coupled with a collaborative partnership, that helps us deploy an enhanced AMI Operations solution to extend our value.”

-Mona Montgomery, AMI Metering Systems Supervisor, Dominion Energy

CUSTOMER

Dominion Energy

ABOUT DOMINION ENERGY

» Headquartered in Richmond, VA
» 7 million customers (electric, gas, residential, C&I)
» 16 states
» 30,200 MW of power generation
» 10,500 miles of electric transmission lines
» 85,600 miles of electric distribution lines
» 94,200 miles of natural gas transmission lines
» 3rd largest solar fleet in the U.S.

BUSINESS DRIVERS

» Gain insight into state of operations
» Optimize network performance
» Find and resolve issues quickly
» Establish a baseline to measure operational improvements

8,000 total service point issues completed via AMI Operations in 2020

40% of service point issues automatically closed in 2020
GOALS
» Realize operational savings
» Understanding status of AMI system
» Apply corrective actions exactly where and when they are needed
» Increase operational efficiency by leveraging automated business rules and workflows
» Utilize a robust analytics tool with more data and query functionality for proactive analysis
» Maximize field efficiency

SOLUTION
» Operations Optimizer
  • AMI Operations
  • Endpoint Management Services

AMI Operations is the primary solution Dominion Energy utilized to realize operational efficiencies. AMI Operations empowers utilities to optimize operations with integrated data and analytics to improve operational efficiency and develop business processes and workflows by leveraging insights from a variety of internal and external data sources.
AMI Operations runs on the Operations Optimizer platform, identifies and diagnoses meter data collection and delivery problems, monitors the network for meter safety issues and assists with managing AMI deployments. AMI Operations has the capability to identify failed meters, hop count irregularities, unreachable meters and high-temperature meter trends (not utilized currently by Dominion) before they reach a critical state. Both list views and map views provide the ability to view, search, filter and aggregate data through an easy-to-use interface. Specifically, Dominion Energy will utilize AMI Operations to:
Increase Backoffice Efficiency
According to Dominion Energy, AMI Operations improves the efficiency of back-office analysis by having meter data, location, alarms, events and other important meter and service point information needed in one location, which helps in making faster business decisions. In addition, having endpoints in consolidated work queues (with specific views) helps prioritize the most critical and most impactful service points first. According to Montgomery, “This is a very robust analytical tool that allows us to query directly from one solution and use the data to identify new trends and potential issues that allow us to be more effective and efficient in resolving AMI communication issues.”

Maximize Field Efficiency
AMI Operations allows Dominion Energy to improve efficiency in the field with the system intelligence in place to know when a service point should be closed (after an issue is resolved) to prevent unnecessary work. In addition, the application allows for the creation of customized views (for example, separate deployment vs. non-deployment endpoints or work by districts) in order to efficiently manage work volumes across the team.

Manage Large Amounts of Historical Data
AMI Operations provides Dominion Energy with a historical log of both endpoint and service point history. These reporting capabilities help to identify troublesome devices or troublesome service points. In total, AMI Operations manages over 2.3 terabytes of Dominion Energy’s data daily.

Automate Tasks
AMI Operations provides a number of tools that automate repetitive tasks and allow Dominion Energy’s AMI Operations team members to focus only on outlier issues and on developing new automations as trends emerge. In addition to automation, built-in business rules are customized to include detailed notes and action items that result in quicker analysis and resolution. Dominion Energy is now able to quantify the value of automation by showing the number of service points that were moved to a “detect” state (any issue that is completed and resolved is moved to this status) from either the analyst or field view due to a meter going active and/or bringing back reads, etc.

Streamline Processes
AMI Operations provides Dominion Energy with the opportunity to streamline work processes by having everything in one central location (endpoint analysis, historical data review, events/alarms, usage, work order management). This solution serves as an analytics tool and work management system all in one. By consolidating multiple system capabilities, data and information into one centralized location, operational efficiencies are quickly realized. Prior to the implementation of AMI Operations, Dominion Energy used Quickbase, which allowed them to later leverage Endpoint Management for better rule creation and enhanced efficiency processes. Originally, alarms and events were sent to the operations team via email, but these notifications have since been incorporated into AMI Operations. In addition, a number of data points (i.e., interval data information, alarms/events, rate, meter type, etc.) are now available in AMI Operations that would have previously been accessed via UtilityIQ.
CONCLUSION

AMI Operations Management provides Dominion Energy with the tools, integrated with state-of-the-art data management applications, to deliver accurate functional capabilities that enhance AMI operational efficiencies while managing and operating their systems at scale. Through increasing backoffice efficiency, maximizing field efficiency, managing large amounts of historical data, automating tasks and streamlining business processes, Dominion Energy is now able to achieve value through automation and reporting that previously was unattainable. By integrating AMI Operations seamlessly into their business operations, Dominion Energy is taking the necessary steps to ensure operational excellence, making their teams’ jobs easier, more effective and more efficient.