

Utility Avoids 2K+ Incident Escalations with Intelligent Grid Monitoring



Value-Driven Benefits

3.3 TWh

Cumulative energy savings delivered with optimized voltage across the network

2,000+

Incident escalations prevented with AI-driven monitoring for 5M+ meters

99.5%

Of reported leak calls responded to within 30 minutes, up from 97%, to improve safety and responsiveness

Introduction

A leading energy utility serves over ten million people in the New York City metro area, delivering electricity, gas, and steam across one of the most complex urban energy networks in the world.

In 2015, the company launched its Smart Meter Initiative (SMI), a multi-year program to modernize New York City's energy grid, advance decarbonization, and empower customers with data-driven insights.

To achieve these goals at scale, the company partnered with C3 AI to build a unified data and AI foundation for SMI. Today, eight enterprise AI applications built on the C3 Agentic AI Platform are helping exceed its SMI objectives – delivering measurable improvements in reliability, operational efficiency, and customer experience.

Challenges

The company's modernization program required real-time intelligence at unprecedented scale. However, traditional data systems lacked the integration, speed, and analytical sophistication to make sense of billions of daily meter readings. Without a unified platform, engineers and analysts faced delays in identifying voltage issues, transformer overloads, and asset stress, which led to higher operational costs, energy inefficiencies, and service risks for customers.

Partnership with C3 AI

C3 AI provided the foundation for its smart meter ecosystem, enabling large-scale integration of meter data with grid, weather, and asset information and applying AI and machine learning to optimize operations in real time.

Today, the utility integrates data from over five million meters and 25 source systems, processing over two billion data points daily – scale made possible by the C3 Agentic AI Platform.

Leveraging this unified data foundation, the company has deployed enterprise AI applications that:

- Optimize voltage across the network, delivering over three TWh in cumulative energy savings (2021-2025)
- Monitor over five million meters to prevent more than 2,000 incident escalations
- Improve safety and responsiveness, with 99.5% of reported leak calls responded to within 30 minutes, up from 97%
- Enhance operational efficiency through a modular, API-driven architecture supporting over one million daily API calls

Beyond smart meter operations, C3 AI powers a growing portfolio of AI applications for improving gas operations, energy efficiency, grid modernization, and business processes.

With C3 AI, the utility has transformed its infrastructure into a real-time, intelligent grid platform that delivers enterprise-wide visibility, predictive insights, and measurable value for millions of customers.

Proven Results in Initial Production Deployment

Visit C3.ai/get-started