

# Itron: Improving Services with a Multipurpose Network

Chicago, IL | *Deployed on 4G LTE and Itron Gen5 Industrial IoT (IIoT) Network*

## SCENARIO

Commonwealth Edison (ComEd) had a mandate to improve overall system reliability and several other goals: improve energy efficiency and asset management, give city managers more control over streetlight operations, and deliver new and better services to its customers.

To accomplish all the above, the utility needed multiple smart grid and smart cities services, partnerships across Chicago area municipalities, and a common network that would support it all.

## SOLUTION

The Itron multi-purpose IPv6 IIoT network platform offered such intelligent connectivity.

Comprised of RF mesh, cellular, programmable logic controller (PLC), Wi-Fi, and distributed computing intelligence, it would be able to support an open ecosystem of smart utilities solutions.

For ComEd, this included:

- + Centralized streetlight management
- + AMI for delivering customers more choices and lower energy costs
- + Distributed automation for faster fault detection and power restoration

The ComEd/Itron implementation involved more than 3.7 million smart meters, 6,100 smart reclosers and switches, a comprehensive suite of Information Technology/Operations Technology (IT/OT) back-office application software, and more.

Through this shared network, ComEd has been able to implement a range of smart utilities solutions, from using smart controls to upgrade 140,000 streetlights to LEDs to bringing in a neighboring utility to support gas AMI.

### RESULTS

For streetlights alone, increased efficiencies in operations and maintenance and decreased energy costs reduced management costs by 65%, savings ComEd intends to return to customers each year.

Smarter utility services have resulted in less uncollectable debt . Here ComEd was able to reduce these costs by \$30 million—126% of its target.

In the critical area of outage management, ComEd was able to avoid millions of customer interruptions and reduce the frequency of these interruptions, lifting its J.D. Power scores for customer satisfaction.

Further, since ComEd began deploying smart grid and advanced metering infrastructure technology in 2012, overall reliability has improved by more than 80%, with customers avoiding more than 19 million interruptions and saving more than \$3.3 billion in outage-related costs through YE 2022.

In 2022, ComEd was named the most reliable electric utility in America.



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- + **65%** reduction in management costs
- + **Most reliable** utility in the country