Energy New England

Load Forecasting in the Cloud Improves Operational Efficiency and Accuracy

OPPORTUNITY

Based outside of Boston in Mansfield, MA, Energy New England (ENE) provides an array of energy services to municipal utilities across the New England region. These services include risk management, energy efficiency and electric vehicle program support, and wholesale and retail energy procurement. Additionally, ENE generates short-term hourly load forecasts for its customers and submits demand bids on their behalf to ISO New England (the transmission grid operator) each day.

For more than 15-years, ENE used Itron's NDauto to generate the forecasts needed by their customers. While the product operated successfully for many years, it became clear that ENE's needs had expanded, which coincidentally occurred when NDauto came to end-of-life.

ENE's portfolio includes over 20 municipal electric systems serving more than 1,200 MW of electric load and more than 550 MW of generation in all six New England states, with peak loads ranging from 2 MW to 200 MW. With a growing and diverse customer portfolio, as well as increased penetration of utility scale and rooftop solar installations, ENE found the daily process had become more complex and lacked scalability. Utility and retail customer interest in distributed energy resources such as peak shaving generators and energy storage, and growing adoption of electric vehicle programs will only make daily forecasting more complicated. ENE turned to Itron for a solution to address its increasingly complex and growing business needs.



CUSTOMER

Energy New England Provides support services for over 24 municipal electric utilities

GOALS

- » Address a more diverse business mix
- » Increase flexibility to adapt for growth

SOLUTION

» Forecast as a Service (FaaS)

BENEFITS

- » Improved operational efficiency
- » Ability to meet customer needs

RESULTS

- » Accountability for growing penetration of distributed energy resources resulting in increased accuracy
- Easily scalable to incorporate new customers and solar plants



SOLUTION

In 2017, Itron worked with ENE to re-evaluate their requirements and to help them transition to a new platform. At the start of 2018, Itron began providing the Forecast as a Service (FaaS) to ENE, hosting software and databases on Microsoft® Azure cloud-based platform. Itron's team of experienced consultants maintains and monitors the system's operation, forecasts, and statistical models. ENE has access to an interactive web portal that allows users the ability to view, edit, and export forecasts, which are updated each hour.

Through an automated process, ENE sends updated historical load data to Itron. Itron sends forecast files via an automated process directly to ENE every day. To further streamline the daily process, Itron developed an interface to generate files that ENE can submit directly to ISO New England without manual intervention or editing.

FaaS has been overwhelmingly successful for ENE. First, the amount of time and effort required to generate ENE's load forecasts each day has been reduced dramatically, thereby freeing staff to perform other tasks. Second, the accuracy of the forecasts has improved because Itron has implemented statistical approaches to account for solar generation and because Itron's team of consultants is continually monitoring the forecasting process. Third, the speed with which the service can be scaled to incorporate new municipal customers and solar plants has allowed ENE to become more responsive to their customer's needs and to provide a higher level of service to them. "Itron's services and support are unparalleled. Itron is an invaluable partner, helping ENE to meet our customers' needs every day. They have worked with us to deliver a comprehensive solution that will grow with our needs." said Timothy Hebert, Chief Operating Officer at ENE.

For more information about implementing FaaS at your organization and to view a recent webinar, visit www.itron.com/forecasting.



Join us in creating a more **resourceful world**.

To learn more visit itron.com

CORPORATE HQ 2111 North Molter Road

Phone: 1.800.635.5461 Fax: 1.509.891.3355

Liberty Lake, WA 99019 USA