

# AEIC Members Share Cost Optimization Approaches

Innovating the Grid Transformation

BY CONSOLIDATED EDISON'S JOSEPH SOMMA AND DOMINION ENERGY'S RUSSELL HINTON

Electric utilities in the U.S. are continuously focused on improving efficiencies in operations, maintenance, and capital projects, while simultaneously maintaining safety, reliability, and meeting customer expectations. It is an integral part of everyday business and essential to industrywide efforts to achieve grid transformation.

The mission of AEIC's Power Delivery Cost Optimization Subcommittee is to bring utilities together to collaborate, share, and benchmark these efforts to reduce cost and maximize business value.

The Subcommittee holds regular quarterly meetings that address a wide range of topics, including using technology to improve business practices, data visualization and analytics projects, asset management and condition-based maintenance, and increasing operational efficiency.

At a recent meeting, subcommittee participants presented several cost optimization initiatives developed by AEIC member companies that are delivering measurable business results and provide meaningful benefits to both employees and customers.

As an example of the types of projects the subcommittee explores, Consolidated Edison has developed an auto-scheduler application that integrates key data into a single platform by leveraging technology and the knowledge of seasoned employees to develop

business logic for planning and decision making.

This tool integrates key data into a digestible format and presents all relevant data on one screen. The result minimizes false starts to improve productivity and cost efficiency, improves on work closure by identifying gaps in existing business processes, accelerates learning, and reduces human performance improvement error traps.

Consolidated Edison has also developed a change-of-schedule application that simplifies the task of issuing and tracking schedule changes. This application provides supervisors with contract logic behind choices made, logs change of schedules into an easy-to-search database and reduces time-charge errors.

Dominion Energy launched a net metering chatbot last year that utilizes machine learning to more efficiently provide information to its customers.

This chatbot enhances the customer experience by helping them easily find answers to their net metering questions.

Using Microsoft Power Virtual Agents, the platform provides analytics

Con Edison developed an auto-scheduler application that integrates key data into a single platform by leveraging technology and knowledge of seasoned employees to develop business logic for planning and decision making. Dominion Energy launched a net metering chatbot that utilizes machine learning to more efficiently provide information to customers.

and chat transcripts that indicate where Dominion needs to tweak trigger phrases and answers as well as add new questions. Each conversation makes the next one better. Using signals from responses coming from the "Did you mean?" questions, the chatbot learns automatically, removing the need to clarify the same question over again.

Dominion Energy has also developed a voltage drop calculator that allows users to analyze advanced metering infrastructure data out in the field to calculate voltage drop based on actual customer demand. This tool reduces trips to the site for calculations, increases efficiency, and saves time.

*(Cont. on page 93)*

**Joseph Somma**, General Manager of Electric Operations at Consolidated Edison and **Russell Hinton**, Director of Envision Tomorrow at Dominion Energy, are Co-Chairs of AEIC's Cost Optimization Subcommittee.

we're building. It's services, it's training, it's jobs, it's joint venture business contracts. It is providing funding to support education. It's a myriad, it's shoreline protection.

It's many things that we do. These partnerships, the model ensures that the communities impacted can draw significant benefits, and not just economically. They were involved in the planning, environmental assessment, and construction. Our partnership with indigenous communities, that's one of the things I am most proud of.

**Lawrence Jones:** Let's discuss transmission. Can you tell us a bit about the Manitoba-Minnesota Transmission Project?


**Jay Grewal:** First, we've had a long history of energy exports. We've been exporting energy since the 1930s to the U.S. So, this was a key investment to build the MMTP. It's a long, high voltage transmission line that went into service in June of 2020.

It connects to the Great Northern Transmission Line (GNTL) in Minnesota. Minnesota Power built the line to border, and we built MMTP for them to meet at the border. This is important because transmission is going to play a much more important role in the future than it did in the past.

When we built MMTP, it effectively doubled our capacity for

imports. We don't only sell energy; we sell capacity. Capacity is what I believe in the future will be the greatest interest in utilities and the export markets, given all the intermittent renewables that come in.

**Lawrence Jones:** What would you say to a young woman looking at the energy profession?

**Jay Grewal:** I'd say, this is the most exciting time to be in this industry. You have an opportunity to be part of a change that I don't think we'll see in our industry again. Second, the skills that are going to be needed are going to be diverse. New capabilities are needed. What I would say lastly is that if you think you can, you can. 

## AEIC Members Share Cost Optimization Approaches

(Cont. from p. 90)

Dominion Energy is also working on a dynamic report that provides transmission system operators visibility to generator operating parameters during a system restoration event. This report will help ET System Operators be prepared to dispatch generators by knowing their min/max, start-up sequence, fuel requirements, and more.


This report will provide insight into generators both owned by Dominion

and independent power producers and improve training for the system operators by practicing with live data and reports.

These are just a few examples of innovative approaches to cost optimization that AEIC's member companies are developing to create efficiencies, improve operations, and better serve customers. Other recent AEIC member initiatives have focused on improving the employee experience,

solar forecasting, an energy conservation program dashboard, and identifying open neutrals through machine learning.

Through AEIC's Cost Optimization Subcommittee, utilities are sharing unique approaches, expertise, and lessons learned. This collaborative approach is helping to diffuse innovation and accelerate the pace of grid transformation for the industry as a whole.

For more information on AEIC's Cost Optimization Subcommittee, please contact Joseph Somma at [sommaj@coned.com](mailto:sommaj@coned.com) or Russell Hinton at [russell.hinton@dominionenergy.com](mailto:russell.hinton@dominionenergy.com). 

### ADVERTISING INDEX

<b>Anterix</b> . . . . . 9	<b>Ericsson</b> . . . . . 45	<b>PSM</b> . . . . . 21
<b>Burns &amp; McDonnell</b> . . . Inside Front Cover	<b>GE</b> . . . . . 19	<b>The Select Group</b> . . . . . 35
<b>EEI</b> . . . . . 47	<b>Guidehouse</b> . . . . . Back Cover	<b>NAWC</b> . . . . . 83
<b>Emerson</b> . . . . . 11	<b>Osмосe</b> . . . . . 5	<b>NARUC</b> . . . . . Inside Back Cover

According to the Bureau of Labor Statistics, the component of the Producer Price Index for natural gas purchased by electric power-plant operators was twenty-two percent higher in March 2023 than in March 2022. In contrast, the PPI components for electric prices paid by commercial customers and industrial customers were nine and six tenths and nine and seven tenths' percent.