

Business & Technology Update



Friday, February 12, 2021 | coop.com | [BTS Portfolio](#) | [Contact](#) | [Archive](#) |

CORRECTION: The PowerXchange and TechAdvantage schedule of Sessions with the BTS Team has been corrected to reflect updated dates and session times. Please download the schedule again for the most recent information.

Emma Stewart Joins NRECA as Chief Scientist

NRECA is pleased to announce that Emma Stewart, Ph.D., has joined our organization as chief scientist. With nearly two decades of demonstrated success in scientific research as a former leader and researcher at national laboratories and in the energy sector, Dr. Stewart will guide our Business and Technology Strategies research and expand the leadership of NRECA and electric co-ops in scientific and engineering communities.



- [Full Announcement](#)
- [Contacts: Jim Spiers and Emma Stewart](#)

2021 NRECA PowerXchange and TechAdvantage Experience Begins February 23

President George W. Bush to Be Special Guest

Tune in for the first PowerXchange general session (Feb. 24 at noon ET) as NRECA CEO Jim Matheson talks candidly with George W. Bush, 43rd President of the United States, regarding his thoughts on the challenges facing our country and building a stronger America for all.

NOTE: The PowerXchange General Session on Feb. 24 is closed to all personal recording, photography and note-taking by attendees. By participating, you agree to follow restrictions in place.

Business and Technology Strategies Topics for Members

Our Business and Technology Strategies team will be delivering information as leads and on panels for a wide range of topics to help cooperatives address the opportunities and challenges of today's industry. Join us for discussions on the future grid, advancing technologies, managing risk, safety, cybersecurity, and much more:

- [Sessions with BTS Team](#)
- [Full Conference Schedule](#)

- [Details and Registration](#)
- Contact on Program Details: [Mary Ackleson](#)

Co-op Case Studies in Beneficial Electrification

Beneficial electrification, the systematic conversion of energy end-uses from fossil fuels to electricity, is gaining traction within the utility industry as a way to save consumer-members money and reduce net carbon emissions. This new report summarizes the experiences of six electric cooperatives that have developed beneficial electrification programs. Insights from these electric cooperatives' bellwether experiences in this emerging business area are relevant to the entire electric industry and help to chart a roadmap to the future.

- [Report](#)
- Contact: [Keith Dennis](#)

Run On Less Demonstration for Electric Freight Vehicles

The trucking industry is beginning its move to an electric future. NRECA has signed on as a sponsor of the **Run On Less – Electric** (RoL – E) project by the North American Council for Freight Efficiency (NACFE) and Rocky Mountain Institute (RMI), an electric freight truck technology demonstration in 2021. Leading up to and throughout the Run, NACFE will showcase electric trucks in everyday operation and the actions needed to accelerate their adoption. The actual Run will begin in September of 2021.

- [Advisory](#)
- Contact: [Brian Sloboda](#)

Oklahoma Electric's New Solar Farm Serves a Community in Need

The **Achieving Cooperative Community Equitable Solar Sources (ACCESS)** project, the flagship project of NRECA's initiative **Advancing Energy Access for All**, aims to improve the affordability, performance, and value of solar technologies on the grid. Through this project, we are working with seven "Leader Co-ops" to field test different types of solar projects to benefit low- to moderate-income consumers. Oklahoma Electric Cooperative (OEC) is our first Leader Co-op to bring their project online, a first-of-its kind in the nation solar farm in partnership with a local school. Read more about their "**Field of Sunbeams**" project and hear directly from OEC at our TechAdvantage breakout session, **New Directions: Exploring Expanded ACCESS to Solar PV**, on **February 23 at 3-4:00 p.m.**

- [Oklahoma Electric ACCESS Project](#)
- [TechAdvantage Information](#)
- [ACCESS Website](#)
- Contacts: [Adaora Ifebigb](#) and [Maria Kanevsky](#)

Maximizing the Value of Energy Storage

Grid-connected energy storage is essential in enabling the large-scale integration of intermittent renewable generation, which will eventually support the energy transition and achieve the greenhouse gas emissions targets. Our new *Surveillance* article series summarize the CEATI Strategic Options for Integration Emerging Technologies and Distributed Energy Interest Group (SOIG) report *Methodologies to Maximize the Value and Amount of Energy Storage: Economic and Technical Evaluation*. Our second article in this series reviews key energy storage technologies, the potential services that energy storage can provide in both regulated and unregulated markets, results of ISO, RTO and utility surveys, and CEATI's energy storage valuation tool.

- [Article](#)
- [Article Series](#)
- Contact: [Dan Walsh](#) and [Jan Ahlen](#)

NEETRAC Research on Oil Analysis Techniques for Power Equipment

Oil testing has been considered a critical part of the evaluation of large power transformers and other essential equipment for many years. Sampling techniques for Dissolved Gas Analysis (DGA), moisture content, ac breakdown and other oil tests have sometimes been questioned as to the effect they can have on results. NEETRAC has been working on a study to evaluate and compare methods, which may be of use to co-ops who use oil samples to make decisions about essential equipment.

- [Advisory](#)
- Contact: [Robert Harris](#)

New Tools for Building an Adaptable Culture

NRECA and Touchstone Energy® recently introduced Phase 2 of the Young Adult Member Engagement (YAME) Initiative. The goal of the project is to help co-ops develop and nurture a workforce and organizational culture that can meet evolving member expectations and adapt to the changing energy industry. New resources include recruitment and onboarding tools, education and communications resources for new and tenured employees, a culture evolution toolkit and examples of successful co-op programs. The resources are designed for co-op leaders and others tasked with internal communications and/or the recruitment, onboarding or development of co-op staff and board members.

- [YAME Phase 2 Resources](#)
- [YAME Headquarters](#)
- Contacts: [Maura Giles](#) and [Delaine Orendorff](#)

Co-op Fuel Mix Update

After significant retail sales growth in 2018 driven by extreme weather, co-op retail sales were essentially flat in 2019. NRECA's analysis of the 2019 electric cooperative retail fuel mix, a blended estimate of co-op owned generation and power purchases, shows that the co-op power supply mix continued to follow national trends. Read the details in this new advisory.

- [Advisory](#)

- [Contacts: Michael Leitman and Lauren Khair](#)

Gaining Valuable Insights from Co-op Data Using Digital Twin Technology

The abundance of data available to cooperatives through assets such as AMI, SCADA and GIS presents the opportunity for cooperatives to gain important insights to improve operations. The challenge is managing such large amounts of information in a way that makes it useful. Digital Twin Technology integrates data from a variety of sources and from high-fidelity scans of utility assets onto a centralized platform, presenting the information in easy-to-read format with tools to help extract value from the data. This new report reviews how [Jo-Carroll Energy \(JCE\)](#) and [DMI](#) are working together to streamline procedures and develop best practices to showcase the development and use of digital twin technology to NRECA members.

- [Report](#)
- [Related Factsheet](#)
- [Contacts: Adaora Ifebigh and David Pinney](#)

Five Emerging Use Cases for Energy Storage

While electric cooperatives have long made use of battery energy storage, advancements in technology and plummeting prices for lithium-ion batteries have created new opportunities for both electric utilities and electricity consumers. By all measures, battery energy storage is, and will continue to be, an increasingly important tool for electric cooperatives. NRECA's new report provides a deep and detailed dive into battery energy storage evaluation, operations, key use cases, and lessons learned from a variety of applications relevant to electric cooperative needs. This report provides insights designed to inform the decision-making of cooperatives that choose to explore possible investments in and uses of battery energy storage.

- [Report](#)
- [Contact: Jan Ahlen](#)

Mobile Substation Pool Offers Savings for Cooperatives

Electric cooperatives are using more mobile substations to give them the flexibility to respond to emergencies and carry out maintenance and new construction while enhancing service reliability. However, mobile substations are expensive to buy and maintain, and age quickly from extreme weather exposure and bumpy rides. NRECA's recent *Surveillance* article series, *A Summary of CEATI Station Equipment Program's Report: State-of-the-Art Review of Mobile Substations*, provided valuable information for the purchasing, storage, deployment and maintenance of units. This new advisory reviews a cost-effective approach pursued by North Carolina Electric Membership Corporation (NCEMC) involving participation in a mobile pool, which provides access to several mobile substations at a very affordable cost.

- [Advisory](#)
- [Related Surveillance Article Series](#)
- [Contact: Patti Metro](#)

2020 Summary of Business and Technology Articles and Advisories

Throughout 2020, NRECA's Business and Technology Strategies department issued over 90 *Surveillance* articles and Advisories to assist cooperatives in addressing various opportunities and challenges facing our industry. Here is a summary, including links to each document.

- [Summary](#)
- [Additional Summaries](#)
- **Contacts:**
 - Analytics: [David Pinney](#)
 - Cybersecurity: [Cynthia Hsu](#)
 - Distributed Energy Resources: [Brian Sloboda](#) and [Jan Ahlen](#)
 - Generation, Environment and Carbon Dioxide: [Dan Walsh](#)
 - Resource Adequacy and Markets: [Michael Leitman](#)
 - Transmission and Distribution: [Patti Metro](#)
 - Consulting Services: [Ginny Beauchemin](#)

WEBINAR AND PODCAST OPPORTUNITIES

Podcasts:

- [What is the Beneficial Electrification League?](#)
- [How Data Is Revolutionizing the Electric Utility Industry](#)

Webinars:

- [2021 Co-op Economic Outlook](#)
February 16, 2-2:45 pm ET

On Demand:

- [New Funding Available for Co-ops Serving Military Communities](#)
- [The Power of Partnership: Solar Webinar Series](#)
- [DOE Hydro - Informational Webinar](#)
- [Measuring Co-op Response to COVID-19: Key Take-Aways and Action Items](#)

- **Future Of... Volume 1: EVs, Battery Energy Storage, and Grid Analytics**
- **Future Of... Volume 2: UAS, Analytics, and Distributed Operations**
- **Aligning Compensation with Your Business Strategy**
- **Broadband as an Essential Service**
- **DOE Wind Energy Webinar**
- **RC3 Online Cybersecurity Self-Assessment Program**
- **Impacts of COVID-19 on Renewable Energy and Storage Development**
- **Impacts of Postponing or Canceling Annual Meetings and Director Elections due to COVID-19**
- **Integrated Vegetation Management (IVM)Series: Mitigating Bird Issues**
- **Series: Mitigating Bird Issues**

Resources Regarding the Impact of COVID-19 on Co-ops

NRECA has completed several analyses on the impact of COVID-19 on electric cooperatives, including economic, job sectors, safety, broadband, and other areas. Below are links:

- RE Magazine Article: **The Covid Effect: Contact Injuries**
Contact: Bud Branham
- **Measuring Co-op Response to COVID-19: Key Take-Aways and Action Items**
Contact: Mike Sassman
- **Report: Mid-Year 2020 U.S. Economic Outlook: A Focus on Rural America**
Contact: Joe Goodenbery
- **Paycheck Protection Program: Loan Forgiveness**
Contacts: Allison Hamilton and Joe Goodenbery
- **Financial Impact Report**
Contacts: Russell Tucker and Joe Goodenbery
- **Financial Impact and Pathways to Relief**
Contact: Allison Hamilton
- **At Risk Job Sectors Report**
Contact: Michael Leitman

- **Impacts on Generation and Transmission Cooperatives**
Contacts: Lauren Khair and Michael Leitman
- **How COVID-19 Is Impacting Electricity Industry Sectors**
Contacts: Lauren Khair and Michael Leitman
- **Tools to Help Manage Energy Expenses**
Contact: Brian Sloboda
- **The Criticality of Broadband**
Contact: Paul Breakman
- **Business and Technology Resources to Use Virtually**
- **NRECA COVID-19 Hub**
- **Special Edition: Business and Technology Update**

See past issues of *Business and Technology Update* in our [archive on cooperative.com](#).

Discover the value of NRECA membership. Learn more.

This is a promotion from the National Rural Electric Cooperative Association
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