

Business & Technology Update



Thursday, January 13, 2021 | coop.com | [BTS Portfolio](#) | [Contact](#) | [Archive](#) |

NRECA Secures Opportunities for Co-ops in Infrastructure Bill

NRECA secured important wins for electric co-ops in the \$1 trillion infrastructure bill signed into law last November. The law includes significant investment and funding opportunities for co-ops and the communities they serve, but much work still needs to take place before federal agencies begin funding infrastructure projects. Federal agencies, including the Energy Department, Agriculture Department, Transportation Department, and Federal Communications Commission, are working to outline the programmatic elements of these programs. The timeline for federal agencies to stand up these programs will vary and is expected to take months. To best prepare our members to take advantage of 27 funding opportunities for electric cooperatives, NRECA has developed a [resource hub](#) on cooperative.com to keep you informed and help you evaluate opportunities for your co-op and membership. Similar to our engagement at the most recent CEO Closeup, NRECA will also have a specific location at [PowerXchange](#) on March 4-9 in Nashville, TN to discuss these resources and how we can best support you in pursuing these opportunities.

- [Infrastructure Bill Resource Hub](#)
- Contacts: [Emma Stewart](#) and [Paul Breakman](#)

Business and Technology Offerings at TechAdvantage 2022

Our Business and Technology Strategies team will be at this year's [TechAdvantage Experience](#) to provide a wide variety of educational sessions for members to learn about the opportunities and challenges facing our industry today. Find the link to the full listing below for details, including these highlights:

- *Cyber Strategy Summit*
- *Instruction on Building Your Cyber Incident Response Plan*
- *How to Develop a UAS Inspection Plan*
- *Using Open Source and Cloud Tools to Transform Data into Value-Driven Analytics*
- *Microgrid Planning*

We look forward to seeing you March 6-9, 2022 at the Music City Center in Nashville, Tenn. Remember to book your hotel by the January 26 deadline.

- [Listing of BTS Sessions](#)
- Contact for TechAdvantage Program: [Mary Ackleson](#)

Research Funding Opportunities Webinar – Jan. 19

Join us for NRECA's new monthly webinar series highlighting funding opportunity announcements (FOAs) and other sources available for NRECA research with members. These free, 30-minute sessions focus on sharing current NRECA research initiatives and upcoming research funding opportunities in which cooperatives may want to participate, including new opportunities with the Infrastructure Bill. Our next session is **Jan. 19 at 2:00 p.m. ET**. Past webinars are available to members [On Demand](#).

Also join our new professional community to stay up to date on research funding developments. Through this community, we will have member discussions and share ongoing updates on research and new funding opportunities as they become available. To participate, send an email request to ResearchFunding@nreca.coop.

- [Webinar Registration](#)
- Contact: NRECA Team at ResearchFunding@nreca.coop

Co-op Economic Outlook Webinar: Jan. 20

Join NRECA economic and investment experts **Jan. 20, 2 p.m. ET**, as they continue their quarterly discussion highlighting the latest issues expected to shape the economic health of electric cooperative communities in 2022. This free series covers key economic indicators, insights on economic growth, and the latest trends and implications for rural areas and the broader U.S. economy. Discussion will align with topics covered in the latest *U.S. Rural Economic Outlook* report – economic growth, labor market conditions and more.

- [More Information and Registration](#)
- Contacts: [Joseph Goodenbery](#) and [Robbin Christianson](#)

Co-ops Continue to Lead the Industry in AMI

As advanced communications have become increasingly important for electric system operations, cooperatives have been transitioning from Automated Meter Reading (AMR) to Advanced Metering Infrastructure (AMI), and phasing out meters with no communications capability. According to updated analysis by NRECA, electric co-ops continue to lead the industry in AMI deployment. Read details in this new advisory.

- [Advisory](#)
- Contacts: [Joseph Goodenbery](#), [Michael Leitman](#) and [Tony Thomas](#)

Resources to Advance Cooperatives' Cybersecurity Posture

NRECA has recently published new resources to assist our members in advancing their cybersecurity understanding and preparedness:

- [Cybersecurity Information Sharing Advisory Series](#)

Information sharing regarding cybersecurity threats is of paramount importance. Based on input from cooperatives who participated in our *Rural Cooperative Cybersecurity Capabilities (RC3) Program Summits*, our new advisory series reviews what information to share, when and how, as well as common barriers facing cooperatives and how to alleviate them. Our latest two advisories in the series focus on 'lack of resources' and 'personal risk' as potential barriers to information sharing.

- [Advisory Series Website](#)

- **RC3 Cybersecurity Guidebook for Electric Cooperative Board Members**

NRECA's *Rural Cooperative Cybersecurity Capabilities* (RC3) program has published our newest guidebook to provide cybersecurity guidance for directors of co-op boards. Each guidebook focuses on the responsibilities of specific functions within cooperative operations.

- [Guidebooks Website](#)

Also, join us at **TechAdvantage on March 6-9** for Pre-conference Workshops and Breakout Sessions about developing your Cyber Incident Response Plan and other cybersecurity discussions.

- Contacts: [Emma Stewart](#), [Ryan Newlon](#), and [Will Hutton](#)

New OASIS Program Provides Energy Storage Resources for Cooperatives

Electric cooperatives operate a large number of fossil power plants in the U.S. and can greatly benefit from advanced energy storage technologies but face various technical and financial barriers. Through a cooperative agreement between NRECA and the U.S. Department of Energy's National Energy Technology Laboratory (NETL), the new *Outreach for Advanced Storage Integration and Support* (OASIS) program is aimed at overcoming these barriers, increasing the adoption of storage technologies and contributing to the nation's power security and economic growth. Through OASIS, NRECA will provide members with access to educational resources, to help empower them to integrate new energy storage technologies with their generation systems. Find out more in our new website, and revisit often for updates and new resources:

- [OASIS Website](#)
- Contacts: [Dan Walsh](#) and [Anantha Narayanan](#)

Managing the Energy Transition

Changes in policy, energy markets and consumer expectations drive fundamental changes in how utilities generate and deliver electricity. To address these changes, cooperatives have been adding wind and solar to their generation portfolios and leading innovation in the development of microgrids and carbon capture and sequestration. This new *Along Those Lines* podcast features the leaders of [Seminole Electric Cooperative](#) and [Buckeye Power](#) for an important discussion about how cooperatives are managing the increasing social, economic and political pressure to accelerate the timeline for this transition and concerns about how it could affect utilities' ability to reliably and affordably provide electricity.

- **Podcast**
- Contact: [Scot Hoffman](#)

Cooperatives Test Electric School Buses

Electric school bus models are now available to purchase from the major school bus manufacturers, with important features for some co-ops like cold weather packages. While cost of these vehicles is about three times more than a comparable diesel school bus, school districts and cooperatives are leveraging available funding

programs to mitigate that hurdle and test the benefits of electric bus fleets, including improved emissions and increased electricity demand. This new *Surveillance* article discusses these developments and provides three co-op case studies.

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

Smart Inverters as a Grid Asset

Due to the recent rapid growth of inverter-based distributed energy resources (DER), the DER interconnection standard (IEEE 1547) has been updated and the related IEEE 1547-2018 and test standard IEEE 1547.1-2020 have been released. As they start to become mandated, utilities might be required to perform some advanced functions and services, and DER operators might need to adopt alternative settings for smart inverters to perform these functions. To guide cooperatives on how to determine the alternative smart inverter settings to comply with the standard and to achieve the benefits of the grid services, NRECA is working with cooperatives and conducting field tests; and working with NEETRAC to analyze the test data. This new report provides NEETRAC's analysis of the data from the second field test, conducted with White River Electric Association.

- [Project Website](#)
- Contacts: [Fathalla Eldali](#) and [Robert Harris](#)

How to Manage Risk

The electric industry is changing rapidly, and with that change comes risk. While cooperatives have a long history of dealing with risk, the scope of challenges posed from more complicated business operations is expanding. Enterprise Risk Management (ERM) provides an opportunity to have a more comprehensive view of the entire cooperative and its major issues, improve governance, create a more productive culture, and improve communication pathways. Our new series of advisories discusses Enterprise Risk Management and how it can address risk in every cooperative, no matter what size or level of operational complexity. This first advisory explains risk and the importance of effective risk management.

- [Advisory](#)
- Contact: [Ginny Beauchemin](#)

Improving Cyclic Performance of Natural Gas Power Plants

The rise of competitive power markets together with growing variable renewable generation are forcing natural gas combined cycle gas turbine (CCGT) power plants into a reactionary posture, where they operate in a cycling manner instead of running as baseload. CCGT power plants accumulate damage and degradation in key components during every start-up and shutdown – eventually leading to failure and reduced availability. This new NRECA *Surveillance* series summarizes CEATI's report *Optimization of Natural Gas Fired Combined Cycle Gas Turbines Power Plant Modifications to Improve Cycling Performance*, reviewing the adaptations that electric cooperatives can make to natural gas CCGT power plants to decrease failure mechanisms and improve their availability, and to rank those adaptations in terms of cost effectiveness. This first article in the series focuses on equipment failure and damage mechanisms and discusses the effect of cycling on forced outages.

- [Article](#)

- Contact: [Dan Walsh](#)

Infographic: How 5G Works

5G or fifth-generation mobile promises blazing speeds (up to 10 Gbps) and nearly zero latency, enabling technologies like self-driving cars, internet-of-things devices and remote surgery. But 5G's high-band spectrum requires hundreds or thousands of transmitters to keep signals strong and unimpeded – ideal for cities and towns, but less useful for rural areas. This new infographic shows how it works:

- **Infographic**
- Contact: [Scot Hoffman](#)

2021 Summary of Business and Technology Articles and Advisories

Throughout 2021, NRECA's Business and Technology Strategies department issued over 50 *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.

- **2021 Summary**
- **Additional Years' Summaries**

Contacts:

- Analytics: [David Pinney](#)
- Consulting Services: [Ginny Beauchemin](#)
- Cybersecurity: [William Hutton](#) and [Ryan Newlon](#)
- Distributed Energy Resources: [Brian Sloboda](#) and [Tolu Omotoso](#)
- Generation, Environment and Carbon: [Dan Walsh](#)
- Resource Adequacy and Markets: [Michael Leitman](#)
- Transmission and Distribution: [Patti Metro](#)

WEBINAR AND PODCAST OPPORTUNITIES

Webinars

- **Research Funding Opportunities Series**
Jan. 19: 2:00 p.m. ET
Feb. 16: 2:00 p.m. ET
Mar. 16: 2:00 p.m. ET
- **Co-op Economic Outlook Series**
Jan. 20: 2-2:50 p.m. ET

On Demand

- [Research Funding Opportunities Series](#)
- [Leading Through the Workforce Revolution](#)
- [Co-op Economic Outlook Webinar Series: July 22, 2021](#)
- [Grid Operations & Innovation Series: Wood Pole Production and Quality Assurance](#)
- [Grid Operations & Innovation Series: Wood Poles: The Growing Need for a Supply Chain Strategy](#)
- [Business Insights Series: Enterprise Risk Management: It's a Good Fit for Your Co-op](#)
- [Business Insights Series: Market Segmentation](#)
- [Business Insights Series: Using Performance-Based Frameworks to Deliver Consumer Value](#)
- [Emerging Tech Series: Wind Hybrid Power Plants as an Emerging Energy Resource Option](#)
- [Emerging Tech Series: Utility Uses for Augmented and Virtual Reality](#)
- [Emerging Tech Series: EV Trends and Consumer Perspectives](#)
- [Broadband and Digital Infrastructure Summit](#)
- [New Funding Available for Co-ops Serving Military Communities](#)
- [The Power of Partnership: Solar Webinar Series – Vol. 1](#)
- [The Power of Partnership: Solar Webinar Series – Vol. 2](#)
- [Measuring Co-op Response to COVID-19: Key Take-Aways and Action Items](#)
- [RC3 Online Cybersecurity Self-Assessment Program](#)
- [Integrated Vegetation Management \(IVM\)](#)
- [Series: Mitigating Bird Issues](#)

Podcasts

- [‘A Cultural Reset’ — How the Pandemic Has Elevated the Value of Soft Skills at Co-ops](#)
- [What is the Beneficial Electrification League?](#)
- [How Data Is Revolutionizing the Electric Utility Industry](#)

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, and broadband. The following are some resources that cooperatives may find helpful as our industry continues to address the challenges of the pandemic.

- [Podcast: ‘A Cultural Reset’ — How the Pandemic Has Elevated the Value of Soft Skills at Co-ops](#)
- [2021 U.S. Economic Outlook: A Focus on Rural America](#)
 - [Q1 - 2021](#)
 - [Q3 - 2021](#)
 - Contact: [Joe Goodenbery](#)

- **Measuring Co-op Response to COVID-19: Key Take-Aways and Action Items** (webinar)
 - Contact: Mike Sassman

- **Tools to Help Manage Energy Expenses**
 - Contact: Brian Sloboda

- **The Criticality of Broadband**
 - Contact: Paul Breakman

- **NRECA COVID-19 Hub**

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

Discover the value of NRECA membership. Learn more.

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