

Business & Technology Update



Thursday, December 16, 2021 | coop.com | [BTS Portfolio](#) | [Contact](#) | [Archive](#) |

NRECA's Business and Technology Strategies Team wishes you and yours a healthy and happy Holiday Season and New Year.

New Cybersecurity Resources for Cooperatives

NRECA has recently published new resources to assist our members in advancing their cybersecurity posture:

- **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](#)

- **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 'external sharing uncertainty' and 'policy and culture' as potential barriers to information sharing.

- [Advisory Series Website](#)

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

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](#)

The Future of Co-op Work

This year's *RE Magazine* Trends Issue focuses on the impacts of technology on electric utilities and what co-op work might look like 20 years from now. See an article and infographic about how cooperative jobs will be shaped by things like drones, virtual reality, artificial intelligence, and robots.

- [Article](#)
- Contact: [Scot Hoffman](#)

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](#)

Research Funding Opportunities Professional Community and Webinars

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. 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

Next Session of Hands-On Drones Course: Georgia – Jan. 10

NRECA has partnered with a top drone service provider, PrecisionHawk, to offer utility-specific training focused on developing pilot capabilities for operation of a UAV in a complex flight environment. The schedule of dates and locations for the course is available on our website, with the next session in **Georgia, Jan. 10-21**. In addition, NRECA offers a variety of UAS Flight Services to help utilities select the right drone technology and platform to meet their needs and to successfully integrate the technology into their inspection and assessment processes. Find out more through the links below:

- **Course Schedule and Registration**
- **More Information on NRECA UAS Course and Flight Services**
- Contact: [Stan McHann](#)

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](#)

Sharing Services Among Co-ops

Compliance Safety Training Coordinator Dee Fox splits her time among five cooperatives in Wisconsin to help ensure they are all up-to-date on the latest safety regulations. Fox's primary co-op, Dunn Energy, also shares services for tree trimming and electric vehicle charging networks. Read about the benefits of sharing services in this new *RE Magazine* article:

- **Article**

- Contact: [Scot Hoffman](#)

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](#)

Registration is Open for 2022 TechAdvantage Experience

Register today for the 2022 **TechAdvantage Experience**, March 6-9, 2022 at the Music City Center in Nashville, Tenn. In addition to three days of technology-focused sessions and pre-conference training, the TechAdvantage Expo is coming back with more than 275 exhibitors, as well as TechTalks from industry experts. The hotel registration link is available in your registration confirmation and the hotel deadline is January 25.

- [More Information](#)
- Contact: [Mary Ackleson](#)

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.

This is a promotion from the National Rural Electric Cooperative Association
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