

Business & Technology Update



Thursday, May 6, 2021 | coop.com | [BTS Portfolio](#) | [Contact](#) | [Archive](#) |

New “Essence” Cybersecurity Tool Available for Cooperatives

NRECA is seeking 55 cooperatives for deployment of a new diagnostic tool, Essence 2.0, which accelerates the detection of malicious cyber threats on systems **from months to seconds**. After success at initial test sites, DOE has awarded NRECA \$6M to deploy Essence to assist cooperatives and the electric industry as a whole. Visit our website to learn more, request a demo, or sign-up to see if your cooperative qualifies to participate in this project.

- [Website](#)
- [Fact Sheet](#)
- Contacts: Doug Lambert and Emma Stewart at Essence@nreca.coop

Carbon XPRIZE Announces Winners

In the culmination of a six-year engineering competition, the NRG COSIA Carbon XPRIZE announced the final winners for both the coal – and natural gas – tracks. CarbonBuilt and Carbon Cure have been crowned the winners and each will receive \$7.5 million to continue advancing their carbon utilization technologies. Some of the competitors of the coal-track tested at the Wyoming Integrated Test Center (ITC), a carbon capture and utilization testing center attached to Basin Electric Power Cooperative’s state-of-the-art coal-fired power plant in Gillette, Wyoming. NRECA has been part of a public-private partnership for the industrial-scale laboratory that was used to test the innovative methods for removing and utilizing carbon dioxide emissions from coal-fired power plants.

- [Press Release](#)
- [XPRIZE Website](#)
- [ITC Information](#)
- Contact: [Dan Walsh](#)

Lake Region Electric Cooperative’s Innovative Wind-Solar Hybrid Project

NRECA’s *Rural Area Distributed Wind Integration Network Development (RADWIND)* project aims to understand, address, and reduce the technical risks and market barriers to the adoption of distributed wind technologies by rural utilities. The distributed wind project of Lake Region Electric Cooperative (LREC) profiled in our new case study is an innovative front-of-meter wind-solar hybrid system, connected to the co-op’s distribution grid. In conjunction with this project, LREC is also piloting an electric thermal storage (ETS) program utilizing

grid-interactive electric water heaters in members' homes on the same distribution feeder.

- [Case Study](#)
- [Additional Case Studies](#)
- [RADWIND Website](#)
- [Contacts: Michael Leitman and Maria Kanevsky](#)

Colorado Co-op Harnesses the Power of Partnership to Make Affordable 'Homes of the Future'

Holy Cross Energy's Basalt Vista housing development is home to 27 all-electric, net-zero residences, providing a path to home ownership for the local workforce. Outfitted with rooftop solar panels and on-site battery storage, these smart homes utilize innovative technology and partnerships to advance community solutions for NRECA members — a hallmark of NRECA's [Advancing Energy Access for All](#) initiative. Holy Cross Energy's partners include Habitat for Humanity, the Roaring Fork School District, Pitkin County, the Basalt town government, and various solar manufacturers.

- [Article](#)
- [Advancing Energy Access for All](#)
- [Contact: Adaora Ifebigh](#)

Progress Toward Solar Energy Access for LMI Communities

Achieving Cooperative Community Equitable Solar Sources (ACCESS), the flagship project of NRECA's [Advancing Energy Access for All](#) initiative, aims to improve the affordability, performance, and value of solar technologies on the grid for low- to moderate-income (LMI) consumers. Our latest "Along Those Lines" podcast focuses on the progress the ACCESS project made during the first of a three-year grant. Hear Keith Dennis, NRECA's vice president of Consumer Member Engagement, Deb Roepke, ACCESS PI/Technical Advisor, and Nick Shumaker of Oklahoma Electric Cooperative discuss the insights gained thus far by the project team and its partners. In addition, our latest case study provides example of how one cooperative, Orcas Power & Light Cooperative, is working to provide solar affordability benefits to their archipelago through a suite of partnerships and an innovative hybrid battery energy storage system.

- [Podcast](#)
- [OPALCO Case Study](#)
- [ACCESS Website](#)
- [Contacts: Adaora Ifebigh and Maria Kanevsky](#)

Improving Plant Performance with Transformative Digital Solutions and Operational Technologies

The rapidly evolving digital and operational technologies available to a range of industries are fundamentally changing and reshaping how companies operate. Our new *Surveillance* article series summarizes the CEATI Thermal Generation Interest Group's (TGIG) report: *Technologies to Improve Plant Performance: An Industry-Wide Review*. It describes some of the relevant transformative digital solutions and operational technologies

identified by CEATI as available to the thermal power generation industry and focuses on those that CEATI has determined offer measurable and immediate improvement to plant performance. This article, the first in the series, addresses advanced monitoring and diagnostics, as well as digital workers:

- [Article](#)
- Contact: [Dan Walsh](#)

NEETRAC Evaluation of Transformer Products

NRECA has an established membership with the National Electric Energy Testing Research and Applications Center (NEETRAC) of Georgia Tech, allowing our members to benefit from this organization's research and reporting. Recently, NEETRAC evaluated manufacturer transformer products and shared the results with each manufacturer to gather feedback on what they are doing to improve. The study helped manufacturers obtain a broadened perspective of utility member concerns regarding transformer quality and NEETRAC members obtained a better understanding of what manufacturers are doing to improve quality. Read more in their report, and about their current research efforts in NEETRAC's latest newsletter:

- [Report](#)
- [Newsletter](#)
- [Website](#)
- Contact: [Robert Harris](#)

Broadband and Digital Infrastructure Summit

Join us for the *Broadband and Digital Infrastructure Summit* on **Thursday June 3 from 12:15 – 5 p.m ET**, brought to you by NRECA and NRTC. We are bringing together experts from some of the biggest names in the broadband industry for an exclusive, half-day online event to deliver thought leadership and insight to cooperatives who are considering or in the process of deploying broadband.

- [Learn More and Register](#)
- Contact: [Mary Ackleson](#)

RUS Design Guide for Rural Substations

The Transmission Distribution Engineering Committee (TDEC) Substation Subcommittee completed a revision to RUS Bulletin 1724E-300 Design Guide for Rural Substations. The Guide is intended to be used by cooperatives, their consulting and staff engineers, and others interested in rural substation design and construction, concerns, and considerations. NRECA made the draft guide available as a reference document for NRECA members until such time that RUS publicly posts a final version.

- [Draft Design Guide](#)
- Contact: [Patti Metro](#)

New Report Outlines the Impact of COVID-19 on the Economy

in Rural America

NRECA economists and RE Advisers portfolio managers have published **2021 U.S. Economic Outlook: A Focus on Rural America**, a new report that takes a look at economic conditions and the investment landscape, particularly in rural America, as the country emerges from the COVID-19 pandemic. The report also examines issues expected to be particularly impactful for rural electric cooperatives and likely to play a big role in shaping the economic health of the communities they serve.

- **Report**
- Contacts:
 - Report: [Joe Goodenbery](#)
 - Portfolio Management Perspective: [Dima Awamleh](#)

Why Electric Distribution Utilities Use MultiSpeak

Software vendors and electric distribution utilities need a way to ensure their software works within a secure system. By leveraging a standardized structured external software interfaces, users can confidently choose secure protocols and implement new applications. That is what the MultiSpeak® standard enables for electric distribution utilities. The MultiSpeak standard allows for seamless integration among applications. Since most vendors support the MultiSpeak standard, rural electric cooperatives have several choices of software systems and do not need to be locked into a single vendor because of custom interfaces.

- **MultiSpeak Website**
- Contact: [Tony Thomas](#)

National Benefits Survey Closes May 10

NRECA's National Benefits Survey (NBS) provides comprehensive information on the benefits currently offered by member cooperatives and the costs associated with those benefits. Collecting comprehensive data from the majority of our member cooperatives is imperative to providing quality benefits benchmarking data. The survey was sent to Benefits Administrators in April and will close on May 10. Members that participate in the NBS receive a complementary Executive Summary of the results and a discount on the purchase of the full survey report.

- **NBS Website**
- Contacts: [Miki Snyders](#) and [Mike Sassman](#)

2021 TechAdvantage® Sessions Available On Demand with ENCORE

If you missed the 2021 TechAdvantage Experience, you can still benefit from the event's content through **TechAdvantage® ENCORE!** ENCORE gives you access to the same sessions that were delivered during the virtual TechAdvantage Experience. Content is available to watch at your leisure until June 25, 2021. Click [here](#) to learn more about TechAdvantage® ENCORE and how to purchase access to this valuable online product.

- **TechAdvantage® ENCORE**

- **TechAdvantage Schedule**
- Contact: Mary Ackleson

EPRI Papers on DER and Interconnections Now Public

The Electric Power Research Institute (**EPRI**) has been very active with implementation of the IEEE 1547-2018 standard for DER interconnections and related DER topics. To help move the technology forward, EPRI has made a number of their papers available at no charge to the public. This advisory reviews this development and provides a listing of the papers and corresponding links.

- **Advisory**
- Contact: Robert Harris

WEBINAR AND PODCAST OPPORTUNITIES

Podcasts:

- **What is the Beneficial Electrification League?**
- **How Data Is Revolutionizing the Electric Utility Industry**

Webinars - On Demand:

- **FY21 – The Defense Community Infrastructure Pilot Program (DCIP)**
- **2021 Co-op Economic Outlook**
- **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:

- **2021 U.S. Economic Outlook: A Focus on Rural America**
Contact: Joe Goodenbery
- 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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