Business & Technology Update



Thursday, July 29, 2021 | coop.com | BTS Portfolio | Contact | Archive |

Small Nuclear Units Show Promise

Microreactors have a long way to go before they are a viable technology for utilities, but recent advances are showing promise. These factory-made nuclear power plants are small enough to be transported in a semitruck and have advantages for remote locations where alternative fuel access is challenging. This new *RE Magazine* article highlights what the future of small nuclear generation may look like and some remaining key questions.

Article

· Contact: Dan Walsh

Carbon Capture Innovation is Showcased at the Wyoming Integrated Test Center

NRECA has been involved with members of a public-private partnership in Gillette, Wyoming, on an industrial-scale laboratory that has been testing innovative methods for removing and utilizing carbon dioxide emissions from coal-fired power plants. The Wyoming Integrated Test Center (ITC) allows researchers to test the capture and utilization of carbon dioxide, using flue gas from the Dry Fork Station, a 422-megawatt generation facility owned by Basin Electric Power Cooperative. A recent article in *RE Magazine* provides an update on how the ITC is showcasing innovation and gaining attention around the world.

Article

More information on ITC

· Contacts: Dan Walsh and Will Morris

2021 National Benefits Survey Results Now Available

Conducted bi-annually, the National Benefits Survey (NBS) collects data from NRECA member distribution systems, G&Ts and Statewide Associations to help benchmark benefits provided by NRECA member cooperatives and the costs associated with those benefits. In addition to the comprehensive data included previous editions, the 2021 NBS also contains data on incentive compensation and changes to benefits made as a result of the COVID-19 pandemic. NRECA members that participated in the survey received a complimentary Executive Summary and are eligible to purchase the full NBS results at a discounted rate of \$395. Non-participants may purchase the results for \$595.

More Information & Order Form

Electric Vehicles Challenges, Opportunities and Trends

The adoption of electric vehicles (EVs) is continuing at varying rates across the country. EVs present a major opportunity to electric cooperatives to grow their load after a decade or more of stagnant or declining load, and to establish or expand their roles as their members' trusted energy advisors by engaging them about and preparing them for EVs. This report takes a look at EV opportunities, challenges and trends for electric cooperatives.

- Report
- · Contacts: Brian Sloboda, Mary Ann Ralls, and Stephanie Crawford

Registration Open: RC3 Cybersecurity Summit and Mini CyberSEEC Exercise

(August 9 Deadline for Cyber SEEC Session)

Cyberattacks, especially ransomware attacks, are making headlines worldwide. Join us on **Aug. 26** for a one-day online **RC3 Cybersecurity Summit and Mini CyberSEEC** to learn more about what you can do to improve your co-op's cybersecurity posture. The Summit will include speakers and a special opportunity to practice your co-op's incident response capabilities using a "mini" version of NRECA's **CyberSEEC** distributed play cybersecurity exercise. Any co-op staff responsible for cybersecurity, including those who are not IT professionals, are encouraged to attend. No prior cybersecurity skills training is required. You can register individually for the Summit Sessions or Mini CyberSEEC.

- More Information & Registration
- · Contact: Cynthia Hsu

Cuming County Public Power District Benefits Their Community with a Wind Turbine 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. Through project case studies, we highlight the innovative ways our members are advancing wind generation in our industry. The distributed wind project profiled in our latest case study is a large front-of-meter turbine deployed in 2019 by Cuming County Public Power District in Nebraska under a long-term power purchase agreement.

- Case Study
- Additional Case Studies
- RADWIND Website
- · Contacts: Michael Leitman and Maria Kanevsky

Infographic: What Drones Can Do for Cooperatives

As the range, payload and available sensors for unmanned aerial systems (UAS) have increased and federal restrictions regarding their commercial use have eased, electric cooperatives across the country are adding drones to their operations toolbox. This infographic featured in the June 2021 *RE Magazine* details some of the ways drones can be put to work for the benefit of cooperatives and their members.

Infographic

· Contact: Stan McHann

Using Smart Thermostats to Shift Space Conditioning Load

The market for Internet-connected products is growing, with connected thermostats becoming very popular with consumers. Some co-ops and other utilities are leveraging smart thermostats for demand response and other load shifting programs. This new report reviews the recent efforts of Jackson County Rural Electric Membership Cooperative, a distribution co-op in southern Indiana, and its generation and transmission co-op, Hoosier Energy, to test how smart thermostats could be used to reduce peak demand in both summer and winter. In addition, they aimed to learn whether smart thermostat programs could provide technology that members want, while serving as an engagement touch point.

Report

· Contact: Brian Sloboda

Guidebook for Rapid Solar Interconnection

The solar generation market has increased significantly over the past several years and is poised to outpace wind energy growth over the next several years. As consumer preferences continue to evolve and solar PV installation costs fall, behind-the-meter solar installations have become more popular. Large numbers of solar interconnection requests combined with labor intensive interconnection practices are challenging for small electric cooperative staffs, and yet existing automation solutions are expensive and often difficult to use. This new guidebook provides electric cooperatives and other utilities with an alternative approach to automate the solar interconnection process, and how to communicate solar programs to consumers. Five cooperative case studies are included.

Report

· Contact: David Pinney

Coal-Fired Power Plant Modifications to Improve Cyclic Performance

The rise of competitive power markets together with growing variable renewable generation are forcing coal-fired power plants into a reactionary posture, where they operate in a cycling manner instead of the traditional lengthy runtimes at or near rated load. Coal-fired power plants accumulate damage and degradation in key components during every start-up, shutdown, and ramping between load states – eventually leading to failure and reduced availability. This new NRECA Surveillance series summarizes CEATI's report Optimization of Coal-Fired Power Plant Modifications to Improve Cyclic Performance, providing guidance on the adaptations that electric cooperatives can make to coal-fired power plants to improve their availability. This first article focuses on equipment failure and damage mechanisms and the effect of cycling on forced outages.

· Contact: Dan Walsh

Using Segmentation Information to Better Understand Consumer-Members

When communicating with consumer-members about products and services, it is critical to position your message in a way that will achieve desired results. Understanding members and what motivates their choices regarding their energy consumption is key, and consumer segmentation is a tool that can help. NRECA recently conducted a segmentation study with consumer-members of 19 distribution co-ops and identified five distinct segments among consumer-members along with a predictive model to identify consumer attitudes and beliefs about various elements of the electric industry. NRECA Market Research Services is available to assist cooperatives conduct their own consumer segmentation study as well. Join us on **Aug. 17** for a related "Business Insights" webinar and hear from NRECA's Director of Consumer Analytics & Market Research, Mike Sassman, and Senior Director of Consumer Marketing at Touchstone Energy® Cooperative, Inc, Mary Ann Cristiano.

Report

Related Webinar – Aug. 17

· Contact: Mike Sassman

Upcoming Business Insights Webinars

Change is coming to every aspect of business at a level not experienced in generations — from changing business models to our changing workforce and consumer-members. Join NRECA for our Business Insights webinar series to gain perspectives that can help you navigate transformations facing your cooperative. Three upcoming sessions will focus on Performance-Based Frameworks, Market Segmentation, and Enterprise Risk from 2–2:50 p.m. ET on Tues. Aug. 10, Tues. Aug. 17, and Thurs. Sep. 2, respectively.

Registration

· Contacts: Robbin Christianson and Renee Garver

There's Still Time to Register – 2021 Safety Leadership Summit

Join us in Orlando, **Aug. 9-11** for the **2021 Safety Leadership Summit -** NRECA's premier industry, educational and networking event for electric co-op staffers responsible for safety. In-person capacity is limited, with priority registration being extended to individuals from NRECA member co-ops and statewide associations, so register now. If you cannot make it to Orlando, choose our online registration option to view portions of the event via livestream.

Registration

· Contact: Perron Nicholas

Webinar Aug. 31: Renewable Hybrid Power Plants

Renewable hybrid power plants using complementary technologies can greatly reduce the challenges of

intermittency. Join us on **Aug. 31 at 2-2:50 p.m.** for our next "Emerging Tech" webinar, **Wind Hybrid Power Plants as an Emerging Energy Resource Option**, and hear from NRECA's Director of System Optimization,

Michael Leitman, about two pioneering wind hybrid projects at the distribution and transmission scales.

- More Information & Registration
- · Contacts: Robbin Christianson and Renee Garver

WEBINAR AND PODCAST OPPORTUNITIES

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

Webinars

- · Business Insights Webinar Series
 - Using Performance-Based Frameworks to Deliver Consumer Value Aug. 10: 2-2:50 p.m. ET
 - Market Segmentation: Tools and Research to Understand Your Members Aug. 17: 2-2:50 p.m. ET
 - Enterprise Risk Management: It's a Good Fit for Your Co-op Sep. 2: 2-2:50 p.m. ET
- Emerging Tech Series: Wind Hybrid Power Plants as an Emerging Energy Resource Option Aug. 31: 2-2:50 p.m. ET
- Co-op Economic Outlook Series

Oct. 21: 2-2:50 p.m. ET Jan. 20: 2-2:50 p.m. ET

On Demand:

- 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

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
 - Q2 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 4301 Wilson Blvd, Arlington, VA 22203 | Tel: (703) 907-5500 | E-mail: nreca@nreca.coop

Click here to unsubscribe

