

## Financing Methods for Distributed Wind Projects

Finance is a crucial component of distributed wind development. Because renewable energy projects are more capital-intensive than conventional fossil fuel generation projects, their long-term financial performances are sensitive to cost of capital and how their financing is structured when the project is undertaken. This new report from NRECA's *Rural Area Distributed Wind Integration Development (RADWIND)* project looks at various types of financing, incentives, and business models that can be used by electric cooperatives and other rural utilities to deploy distributed wind projects, or to support their members in doing so.

- [Report](#)
- [RADWIND Website](#)
- Contacts: [Michael Leitman](#), [Venkat Banunarayanan](#), [Maria Kanevsky](#)

## New Podcast: Understanding Essence, a Co-op-Created Cyber-Defense System

As utilities have deployed new connected technologies to monitor the grid, the need for strong cybersecurity on the operations technology side has grown exponentially. The latest episode of *Along Those Lines* takes a deep dive into Essence, a unique co-op-built tool for detection, visualization and reporting of potential cyberattacks. This new diagnostic tool accelerates detection of malicious cyber threats on systems **from months to seconds**. Listen to this podcast to hear from Emma Stewart, NRECA's chief scientist, about Essence and how it can help cooperatives.

- [Podcast](#)
- [Essence website](#)
- Contacts: [Emma Stewart](#) and [Doug Lambert](#)

## Infographic: Energy Storage

Energy storage involves devices and methods that absorb power when it is generated and save it for when it is most needed. The ability to “warehouse” large quantities of energy economically and over long periods of time will help utilities improve grid operations, integrate renewables and boost reliability. This new infographic explains four of the most widely used storage methods.

- [Infographic](#)

- [Contacts: Venkat Banunarayanan and Scot Hoffman](#)

## Threats to Rural Broadband Progress

Electric cooperatives and others trying to deliver internet access to unserved communities are facing unprecedented shortages in the broadband supply chain, including fiber optic cable, electronics equipment and even labor. This situation is particularly challenging as demand for reliable, high-speed internet access has exponentially increased due to the COVID-19 pandemic. This new *RE Magazine* article explains the “perfect storm” of shortages that is threatening the progress of rural broadband.

- [Article](#)
- [Contacts: Paul Breakman and Scot Hoffman](#)

## Increasing Resiliency at Critical Infrastructure with Energy Storage Systems

NRECA's new *Rural Energy Storage Deployment Program (RESDP)* focuses on the successful deployment of battery energy storage systems at rural critical infrastructure served by rural electric cooperatives for resiliency and sharing best practices and lessons learned. Electric cooperatives proudly serve over 125 military facilities in 41 states across the country. Battery energy storage is believed to be a key technology addition to maintain reliable and affordable electric service throughout rural America. Read more about this initiative on our website, including our first case study, featuring Poudre Valley Rural Electric Association's installation of a battery energy storage system as part of a multi-service microgrid serving a remote mountain community.

- [Website](#)
- [Case Study](#)
- [Contacts: Lauren Khair and Maria Kanevsky](#)

## Fox Islands' Distributed Wind Project Provides Energy and Resiliency

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 part of a front-of-meter community wind farm connected to the Fox Islands Electric Cooperative's distribution grid. This project provides the majority of power supply to the co-op, which serves two islands off of Maine's southern coast.

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

## Major Equipment Modifications to Improve Cyclic Performance of Coal-Fired Power Plants

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. The second article in this series discusses modifications of major equipment, some of which could require the involvement of original equipment manufacturers or third-party specialists.

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

## 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 and Order Form](#)
- Contacts: [Delaine Orendorff](#) and [Beth Wray](#)

## 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, and two cooperatives about their pioneering wind hybrid projects at the distribution and transmission scales. The first, Lake Region EC's hybrid in Minnesota, combines a 2.5 megawatt wind turbine with 500 kilowatts of solar and a community thermal storage pilot using grid-interactive electric water heaters. The second, Western Farmers EC's Skeleton Creek Project in Oklahoma, combines 250 megawatts of wind with 250 megawatts of solar and a 200 megawatt battery storage system in what will be the largest project of its kind in the U.S. when completed in 2023.

- [More Information & Registration](#)
- Contacts: [Robbin Christianson](#) and [Renee Garver](#)

## Sept. 2 Business Insights Webinar: Enterprise Risk Management

As the pace of change to the electric industry continues to intensify, managing risk becomes increasingly

important. Forward-thinking CEOs and boards are looking for tools that will help them manage risk more effectively across the enterprise. Enterprise Risk Management is a management process to identify, categorize, track and monitor risk across the cooperative – and it is scalable to fit any size organization. Join NRECA’s Managing Director of Governance, Business & Product Strategy, Kim Christensen, for “Enterprise Risk Management: It’s a Good Fit for Your Co-op,” part of NRECA’s Business Insights Webinar Series, to learn more about ERM and how it could be a good fit your co-op: **Thurs. Sep. 2 from 2–2:50 p.m. ET.**

- **More Information & Registration**
- Contacts: [Robbin Christianson](#), [Kim Christiansen](#) and [Renee Garver](#)

## **Oct. 7: Technology Planning and Decision Making Course at 2021 Cooperative University**

This newly revised and streamlined one-day course helps attendees develop an understanding of, and gain practice with, the core competencies now required of everyone in the cooperative organization to ensure that technology is applied effectively. It introduces a proven technology planning process, best management practices, tools, and resources crucial for effective technology planning and decision making: **Thurs., Oct. 7, 8:30 a.m.- 4:30 p.m.**

- **Register**
- Contact: [Brienne McIntyre](#)

## **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**

- **Emerging Tech Series: Wind Hybrid Power Plants as an Emerging Energy Resource Option**  
Aug. 31: 2-2:50 p.m. ET
- **Business Insights Webinar Series: Enterprise Risk Management: It’s a Good Fit for Your Co-op**  
Sep. 2: 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**

- **Business Insights Series: Market Segmentation**
- **Business Insights Series: Using Performance-Based Frameworks to Deliver Consumer Value**
- **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  
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