

The Path to Decarbonization: Where Does Hydrogen Fuel Fit?

For cooperatives that exploring technologies to mitigate their fossil fuel-fired power plants' environmental impact, one possible option may be the use of hydrogen as a generating fuel. As interest in the use of hydrogen for low- or zero-emission power generation grows, various groups have initiated research, development and demonstration projects – and the bipartisan infrastructure bill provides significant funding for regional hydrogen hubs where RD&D programs can be conducted. This new *Surveillance* article examines what is involved in the production, transport, storage and use of hydrogen for utility power generation. It also discusses the benefits and drawbacks of producing and using hydrogen, and reviews the Department of Energy's hydrogen program.

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

Cost Competitiveness for Small and Medium Wind Turbines

Small- and medium-size wind turbines generally have a higher levelized cost of energy compared to large-scale turbines. The U.S. Department of Energy's Competitiveness Improvement Project (CIP) aims to increase the cost-competitiveness of these turbines by optimizing their design and performance. This new advisory, produced through NRECA's [RADWIND](#) project, reviews this topic and how the CIP has resulted in improvements in design, performance, and certification to increase energy production and cost reduction in some small size wind turbines.

- [Advisory](#)
- [RADWIND Website](#)
- Contacts: [Fathalla Eldali](#) and [Michael Leitman](#)

Retail Rate Scenarios and Modeling for Beneficial Electrification Programs

Promoting electrification in American homes represents an enormous opportunity to decarbonize the economy. Many co-ops are actively implementing beneficial electrification programs. The retail rate structure is an essential tool to promote consumer behavior that positively impacts the value proposition. This new advisory explains this opportunity and highlights research by NRECA with Mid Mid-Carolina Electric Cooperative to analyze the effects of a three-part rate structure for residential and small commercial consumers, and the impact on the electrification of transportation and cooking.

- [Advisory](#)

- Contact: [Allison Hamilton](#)

Advancements in Self-Healing Networks

Several cooperatives are now using cutting-edge technology to restore power faster to consumer members after outages. FLISR—Fault Location, Isolation and Service Restoration system—reduces the magnitude of outages by automatically isolating a problem area and transferring consumers to adjacent circuits. This new article in *RE Magazine* explains this technology and highlights the efforts of [Suwannee Valley Electric Cooperative](#) in Florida to implement its FLISR self-healing network and the benefits they achieved.

- **Article**
- Contact: [Venkat Banunarayanan](#) and [Scot Hoffman](#)

Infographic: Trouble with Transformers

Months of constricted operations at electrical transformer factories caused by the COVID-19 pandemic have strangled inventory of these essential grid devices. Add to that spiking demand from new housing developments, scarcity of raw and finished materials, bottlenecks at shipping ports and a shortage of freight drivers, and it is a recipe for a long-term supply crunch. This new infographic in *RE Magazine* details some of the key drivers of the current national transformer shortage.

- **Infographic**
- Contacts: [Patti Metro](#) and [Scot Hoffman](#)

IEEE Standard 2800 for Interconnection and Interoperability of Inverter-Based Resources

In recent years, there has been a rapid pace of inverter-based resources (IBRs) interconnecting to the bulk power system, including transmission and sub-transmission systems. IEEE 2800 was published in April 2022 to address the gap in interconnection requirements of IBRs into the bulk power system and the misapplication of IEEE 1547, and to complement the North American Reliability Standard set by FERC and NERC. This new advisory explains the IEEE 2800-2022 performance standard.

- **Advisory**
- Contacts: [Fathalla Eldali](#) and [Robert Harris](#)

NRECA Broadband Supports Cooperatives' Expansion Efforts

NRECA's mission has always been to promote, support and protect the community and business interests of electric cooperatives and the communities they serve. As part of a new program of services to represent these vital efforts, NRECA Broadband is a new opt-in level of service supporting America's electric cooperatives that are committed to bringing reliable, high-speed internet to their communities. NRECA Broadband provides exclusive access to specific resources to help cooperatives succeed as community-focused telecommunications providers. Learn more from NRECA's CEO Jim Matheson and Chief Operating Officer Jeffrey Connor in our new

Along Those Lines podcast, and our other resources below:

- [Podcast](#)
- [Article](#)
- [NRECA Broadband Website](#)
- [Sign-up to Participate](#)
- [Additional Broadband Resources](#)
- **Contacts:**
 - Our Team: NRECABroadband@nreca.coop
 - [Paul Breakman](#), Business & Technology Strategies
 - [Brian O'Hara](#), Regulatory Affairs
 - [Katie Culleton](#), Legislative Affairs

2022 National Directors Survey Results Now Available

Every other year, NRECA conducts the National Directors Survey—a comprehensive survey of system policies and practices pertaining to cooperative governance. This year, 442 distribution systems participated, representing 3,251 individual directors in 44 states. Co-ops who did not participate may purchase the results. NRECA also offers governance consulting services for co-ops wanting assistance supporting their governance decisions, including [Board compensation benchmarking analysis](#), [Board assessments](#) and [governing policy review](#).

- [Learn More About the 2022 National Directors Survey](#)
- **Contact:** [Kim Christiansen](#)

Infrastructure Law Resources for Cooperatives

New Infrastructure Funding Guidebook

NRECA's has a new resource for members interested in pursuing infrastructure funding—"Infrastructure Bill Funding Opportunities: A Guidebook for Preparing Electric Cooperatives." This guidebook provides considerable information on \$110 billion in Bipartisan Infrastructure Law funding that are the most relevant opportunities for electric co-ops and the communities you serve. This is an essential resource for co-op staff to navigate the often complex federal funding process.

- [Guidebook](#)

Additional Programs and Resources

NRECA has a variety of resources now available to members, to help raise awareness of the funding opportunities available through the infrastructure law and to assist members in pursuing those opportunities:

Federal Funding Opportunities Webinar Series

Free 30-minute sessions share information about funding opportunities in which cooperatives may want to participate, including new opportunities with the infrastructure law. Next sessions are **August 17, September 21, October 19, and November 16 at 2:00 p.m. ET**. Past webinars are available to members [On Demand](#).

- [Webinar Registration](#)

- Contact: NRECA Team at ResearchFunding@nreca.coop

Grant Writing Assistance Portal

Provides NRECA voting members access to grant writing resources to support their efforts to seek federal funding.

- **Grant Writing Assistance Web Portal**
- Contact: [Lauren Khair](#)

Fact Sheet: Common Federal Grant Data Requirements

Provides insights into common data requirements of grant-making programs.

- **Fact Sheet**
- Contact: [Lauren Khair](#)

Professional Community

NRECA members are invited to join our new professional community to stay up to date on research funding developments, by sending a request email to: ResearchFunding@nreca.coop.

Co-op Consortia Opportunities

Members are invited to sign-up to participate in NRECA's consortia focused on five key areas of co-op interest related to infrastructure funding opportunities:

- **Cooperative Approach to Vehicle Electrification (CAVE) Consortium**
Seeks to work with federal agencies, foundations and vendors to provide grassroots electric transportation solutions for rural America. New webinar: **August 24, 2-3 PM ET.**
 - **Consortium Information and Sign-up**
 - **Webinar Registration**
 - Contacts: [Brian Sloboda](#) and [Meredith Miller](#)
- **Microgrid Consortium**
Seeks to partner with federal, state and local stakeholders to develop resilient, reliable, and economically beneficial microgrid and storage projects.
 - **Consortium Information and Sign-up**
 - **Webinar – On Demand**
 - Contact: [Tolu Omotoso](#)
- **Natural Hazards Consortium**
Seeks to build communities resilient to all hazards through holistic planning and risk assessment.
 - **Consortium Information and Sign-up**
 - **Webinar – On Demand**
 - Contact: [Patti Metro](#) and [Allison Hamilton](#)

- **Smart Grids and Data Consortium**

Seeks to use digital technologies to modernize grid infrastructure and better serve their communities.

- **Consortium Information and Sign-up**

- **Webinar – On Demand**

- Contact: [David Pinney](#) and [Fathalla Eldali](#)

- **Cyber and Physical Security Consortium**

Seeks to develop and maintain a well-rounded cyber and physical security posture at cooperatives.

- **Consortium Information and Sign-up**

- Contact: [Ryan Newlon](#) and [Justin Luebbert](#)

For More Information and Questions:

- **NRECA Infrastructure Consortia Website**

- **SAM.gov: The First Step to Accessing Funds for Co-ops in the Infrastructure Law**

- **NRECA Infrastructure Resource Hub**

- Contact: [Lauren Khair](#)

UPCOMING CONFERENCES

2022 Safety Leadership Summit

Join us **Aug. 17-19 in Austin, Texas** for NRECA's premier industry, educational and networking event for co-op staff responsible for safety practices. The summit will be held in person with portions available for viewing via livestream as well. New this year: In-person and online registrants can also participate in our whole person health & wellness and concern for community activities.

- **Registration**

- Contact for questions: [Perron Nicholas](#)

Business and Technology Strategies Sessions at Regional Meetings

Join us at the upcoming Regional Meetings to hear members of our Business and Technology Strategies group present on a number of important topics for our cooperative members:

- **Refining Your Co-op's Technology Planning Process**

Angela Strickland, NRECA Senior Vice President of BTS

Learn how to have a sound technology strategy, and about opportunities available in the infrastructure bill that may impact your technology strategy.

- **Update on NRECA's Infrastructure Resources and Co-op Consortia**

Emma Stewart, NRECA Chief Scientist (for Indianapolis, Minneapolis, Hollywood and Little Rock sessions), and Lisa Slaughter, Research Engineer (for Portland session).

Receive an update on NRECA's resources and the electric co-op consortia established to maximize potential

access to certain funding opportunities within the \$1 trillion bipartisan infrastructure law.

- **Electric Vehicles**

Brian Sloboda, NRECA BTS Director of Consumer Solutions

The necessary network of public chargers needed to support the continual progression of the electric vehicle market presents both challenges and opportunities for electric cooperatives. Learn about the impacts to the current infrastructure and how to be prepared for the coming demand.

LOCATIONS AND DATES

- Indianapolis, IN – September 6 - 8, 2022
- Minneapolis, MN – September 21 - 23, 2022
- Portland, OR – September 27 - 29, 2022
- Hollywood, FL – October 10 - 12, 2022
- Little Rock, AR – October 24 - 26, 2022

- **More Information**

- Contact for Program Information: [Kristen Wheeler](#)

2022 G&T Resource Planning Association Conference – Oct. 18-20

Registration is now open for the **G&T Resource Planning Association Conference**, October 18-20 in Sandestin, Florida. Hosted by [PowerSouth Energy Cooperative](#), conference highlights include Regulatory Update, Battery Storage Deep Dive and more. Network with co-op colleagues and gain insight into the top issues within the G&T industry.

- **Registration**

- Contact for questions: [Allison Hamilton](#)

WEBINAR OPPORTUNITIES

Federal Funding Opportunities Webinar – August 17

Join us on **August 17 at 2:00 p.m. ET** for our next session in our free monthly webinar series highlighting federal grant and other funding opportunity announcements (FOAs) and opportunities available to NRECA members. These 30-minute sessions share information on NRECA research initiatives and upcoming funding opportunities in which cooperatives may want to participate, including new opportunities with the infrastructure law. Subsequent sessions will be on September 21, October 19, November 16. 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

Electric Vehicle Funding Opportunities - August 24

Join us on **August 24, 2:00-3:00 p.m. ET** for this free webinar to learn more about how NRECA member cooperatives can advance electric transportation programs in their area using funding from federal and private sources. NRECA's Cooperative Approach to Vehicle Electrification (CAVE) is a network of electric cooperatives that have implemented or are planning to implement a variety of electric transportation programs. This group is working with federal agencies, foundations and vendors to provide grassroots electric transportation solutions for rural America.

- [Webinar Registration](#)
- [CAVE Website](#)
- Contact: [Brian Sloboda](#)

ON DEMAND WEBINARS

- [Microgrid Consortium Webinar](#)
- [Natural Hazards Consortium Webinar](#)
- [Smart Grids and Data Consortium Webinar](#)
- [Co-op Economic Outlook](#)
- [FCC Broadband Initiative](#)
- [RADWIND: Modeling Tools for Distributed Wind Hybrid System Sizing, Integration & Optimization](#)
- [Cybersecurity Incident Response Workshop](#)
- [Federal Funding Opportunities Series](#) (formerly Research Funding Opportunities series)
- [Leading Through the Workforce Revolution](#)
- [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](#)
- [The Power of Partnership: Solar Webinar Series – Vol. 1](#)
- [The Power of Partnership: Solar Webinar Series – Vol. 2](#)
- [Integrated Vegetation Management \(IVM\)](#)
- [Series: Mitigating Bird Issues](#)

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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