Business & Technology Resources





Business and Technology Strategies 2020 Articles and Advisories Summary

NRECA's Business and Technology Strategies *Surveillance* articles and Advisories provide up-to-date reviews on an array of energy issues affecting cooperative members. Below is a summary listing of those issued in 2020. You can find the full articles and advisories of these highlights below through the links provided.

Be sure to <u>visit us on cooperative.com</u> to see new resources available to NRECA members, and sign-up for our twice-monthly newsletter, <u>Business and Technology Update</u>.

Analytics

Contact for Questions: David Pinney, Principal Analytical Tools & Software Products – <u>David.Pinney@nrea.coop</u>

- Articles: Turning Numbers Into Action: Analytics Bringing Visibility To Utility Operations, Clarity to Decision-Making
 - Article: <u>Case Studies Part 1 of 2</u>
 - Article: <u>Case Studies Part 2 of 2</u>
- Advisory: <u>AR/VR Case Study: Jo-Carroll Energy</u>
- Advisory: <u>AR/VR Case Study: Tri-State</u>
- Advisory: <u>TechAdvantage®: Takeaways from the Panel Session on Industrial Applications of</u> <u>Machine Learning, Augmented and Virtual Reality</u>
- Advisory: <u>Predictive Maintenance Tool Project</u>

Cyber Security

Contact for Questions: Cynthia Hsu, Principal Cyber Security Solutions – <u>Cynthia.Hsu@nreca.coop</u>

- Advisory: RC3 Online Self-Assessment License Program Round 2 application Advisory (replaced with updated version below)
- Advisory: RC3 Online Self-Assessment License Program Round 2 application FAQ (replaced with updated version below)
- Advisory: <u>RC3 Cybersecurity Tabletop Exercise Toolkit (TTX)</u> Factsheet

- Advisory: RC3 Online Self-Assessment License Program Round 2 Application Extension Advisory (replaced with updated version below)
- Advisory: RC3 Online Self-Assessment License Program Round 2 Application Extension FAQ (replaced with updated version below)
- Advisory: <u>Data Privacy: Data Strategies in a Changing Landscape</u>
- Advisory: <u>RC3 Online Self-Assessment License Program Final Round Application Advisory</u>
- Advisory: <u>RC3 Online Self-Assessment License Program Final Round Application FAQ</u>

Distributed Energy Resources

Contacts for Questions: Jan Ahlen, Energy Solutions Director – <u>Jan.Ahlen@nreca.coop</u> Brian Sloboda, Consumer Solutions Director – <u>Brian.Sloboda@nreca.coop</u>

- Article: Promoting Efficiency and Electrification in Home Heating and Water Heating
- Article: Beneficial Electrification Dual Fuel Home Heating
- Article: <u>Radio Wave Grain Drying Systems Energy Efficiency and Beneficial Electrification</u>
- Advisory: Update on NRECA as Sponsor of Electrification 2020 conference
- Advisory: Electric Cooperative Load Growth to Accommodate a Migration to Electric Vehicles
- Advisory: Advancing Energy Access for All Case Study Mid-Carolina Electric Cooperative
- Advisory: <u>Tools to Help Consumer-Members Manage Energy Expenses During COVID-19</u>
- Advisory: <u>Viable Fuel Alternatives to Class 7/8 Diesel Trucks</u>
- Advisory: Integrated Distribution Resource Planning (IDRP) for Electric Cooperatives
- Advisory: <u>The National Governors Association (NGA) Roundtable On Rural Energy Affordability -</u> <u>Key Takeaways</u>
- Advisory: DOE RFI on Potential Project for Connected Communities
- Advisory: Preparing to Plug in Your Municipal Transit Bus Fleet 10 Things to Consider
- Advisory: <u>Beneficial Electrification Project Funding Opportunity</u>
- Advisory: <u>Consumer Segmentation for Beneficial Electrification</u>
- Advisory: <u>DOE SETO Wind Generation Webinar Hosted by NRECA</u>
- Advisory: <u>ACCESS Project</u> (Overview)
- Advisory: DOE Funded Solar ACCESS Project Recruitment Advisory
- Advisory: <u>SEEDS II: Modeling Residential Rooftop Solar Adoption</u>
- Advisory: <u>Participation Opportunity: Rural Area Distributed Wind Integration Network Development</u> (<u>RADWIND</u>) <u>Project</u> (Advisory)



- Advisory: <u>Participation Opportunity: Rural Area Distributed Wind Integration Network Development</u> (<u>RADWIND</u>) <u>Project</u> (FAQ)
- Advisory: ACCESS Solar Project: <u>Case Study: Anza Electric Cooperative</u>
- Advisory: ACCESS Solar Project: <u>Case Study: Roanoke Electric Cooperative</u>
- Advisory: <u>ACCESS Solar Project: NRECA and PNNL Research Additional Benefits from Solar PV</u> and Energy <u>Storage</u>
- Advisory: <u>ACCESS Project Explores Use of Federal Assistance Funds to Provide Affordable Solar</u> <u>Energy for Low-Income Households</u>
- Advisory: <u>DOE Issues Funding Opportunity for Grid-Interactive Efficient Buildings and Connected</u>
 <u>Communities</u>
- Advisory: Energy Efficiency Opportunities for Cannabis Production

Generation, Environment, & Carbon

Contact for Questions:

Dan Walsh, Senior Power Supply & Generation Director - Daniel.Walsh@nreca.coop

- Article: <u>Summary: CEATI TGIG Report: Maintenance Optimization Using Risk-Based Tools report -</u> Part 1 of 2: Methods for Optimizing Maintenance and Analyzing Equipment Performance
- Article: <u>Summary: CEATI TGIG Report: Integration and Coordination of Energy Storage with</u> <u>Microgrids – Part 1 of 3: Current Operational Structure</u>
- Article: <u>Summary: CEATI TGIG Report: Integration and Coordination of Energy Storage with</u> <u>Microgrids – Part 2 of 3: Benefits, Challenges of Two Microgrid Case Studies</u>
- Article: <u>Summary: CEATI TGIG Report: Integration and Coordination of Energy Storage with</u> <u>Microgrids – Part 3 of 3: Benefits, Challenges of Two Additional Use Studies and Best Practices for</u> <u>Implementing Storage for Microgrids</u>
- Article: Optimizing Solar PV Plus Battery Energy Storage
- Advisory: <u>Wind Energy O&M Issue: Leading Edge Erosion</u>
- Advisory: NRECA Joins NCCC
- Advisory: <u>AREGC Annual Conference Highlights</u>
- Advisory: <u>NREL Report: Increasing Wind Turbine Tower Heights: Opportunities and Challenges</u>
- Advisory: Opportunities for Co-ops to Engage with CEATI
- Advisory: <u>Update on the Wyoming Integrated Test Center (ITC): DOE Awards Funding to Test New</u>
 <u>Carbon-Capture Membrane Process</u>
- Advisory: <u>Update: Increased Opportunities for Co-ops to Engage with CEATI</u>



Resource Adequacy & Markets

Contact for Questions:

Michael Leitman, Senior Analyst Economics & Business - Michael.Leitman@nreca.coop

- Advisory: <u>NERC's Annual Long-Term Reliability Assessment</u>
- Advisory: <u>Peak Demand Pricing</u>
- Advisory: <u>Delivering Value Through Green Tariffs</u>
- Advisory: Working with the Military: Nolin RECC Case Study
- Advisory: Financial Impact of COVID-19 on Electric Cooperatives
- Advisory: Jobs Most At Risk from Economic Impact of COVID-19
- Advisory: <u>COVID-19 Revelation: Broadband is An Essential Service</u>
- Advisory: Co-ops Continue to Lead Industry in AMI
- Advisory: Impact of COVID-19 on G&T
- Advisory: <u>Co-op Fuel Mix Update (2018 data)</u>
- Advisory: The Impacts of COVID-19 On Sector Specific Electricity Sales
- Advisory: Financial Implications of COVID-19 on Electric Cooperatives and Pathways to Relief
- Advisory: DOE SETO Wind Generation Webinar Hosted by NRECA
- Advisory: Co-op Renewables Continue to Grow, with Solar Accelerating
- Advisory: Working with the Military Case Study: Fort Leavenworth Case Study
- Advisory: New Energy Resource Model Initiative: Case Study on NCEMC
- Advisory: <u>Paycheck Protection Program Resources for Processing and Accounting for Loan</u> <u>Forgiveness</u>
- Advisory: <u>DER Growth Heightens Need for Increased T&D Collaboration and Focus on Bulk Power</u>
 <u>System Reliability</u>
- Advisory: <u>New Energy Resource Model Initiative: Case Study on Western Farmers Electric</u> <u>Cooperative</u>
- Advisory: FERC Order 2222 for DER Aggregation in Organized Wholesale Markets
- Advisory: <u>New Energy Resource Model Initiative</u>: <u>Old Dominion Energy Cooperative and Its</u> <u>Members</u>



Transmission and Distribution

Contact for Questions:

Patti Metro, Senior Grid Operations & Reliability Director - Patti.Metro@nreca.coop

- Article: <u>Self-Healing Grid United Power case study</u>
- Article: <u>CEATI Report Summary: State-of-the-Art Review of Mobile Substations: Part 1 of 3 -</u> <u>Literature Search and Vendor Survey Results</u>
- Article: <u>CEATI Report Summary: State-of-the-Art Review of Mobile Substations: Part 2 of 3 User</u> <u>Experience and Observations</u>
- Article: <u>CEATI Report Summary: State-of-the-Art Review of Mobile Substations: Part 3 of 3 –</u> <u>Technical Specification Guidelines</u>
- Article: Summary of CEATI Transmission Overhead Design & Extreme Event Mitigation (TODEM) Interest Group's Report Guidelines for Optical Groundwire Technology – Part 1 of 2: <u>Industry State-of-the-Art and Best Practices</u>
- Article: Summary of CEATI Transmission Overhead Design & Extreme Event Mitigation (TODEM) Interest Group's Report Guidelines for Optical Groundwire Technology – Part 2 of 2: <u>Tools To</u> <u>Identify and Mitigate Knowledge and Experience Gaps</u>
- Advisory: <u>Updating of NESC 2017 to NESC 2022</u>: <u>NESC Preprint Public Comments Due March 2</u>
- Advisory: IEEE Standard 1547.1-2020 for Testing DER Interconnections Now Approved
- Advisory: Integrated Distribution Resource Planning (IDRP) for Electric Cooperatives
- Advisory: <u>Predictive Maintenance Tool Project</u>
- Advisory: Draft Guide for Joint Use
- Advisory: <u>NESC Update Process Delayed By A Year</u>
- Advisory: <u>ASCE Standard for Overhead Utility Structures</u>

Management Services and Consulting

Contact for Questions: Ginny Beauchemin, Managing Director, Consulting Services – <u>Ginny.Beauchemin@nreca.coop</u>

- Advisory: <u>NRECA Management Services and Consulting Offerings Now Part of BTS</u>
- Advisory: <u>Update: NRECA Expands Consulting Services Within Business and Technology Strategies</u>
 <u>Portfolio</u>



Content Related to COVID-19

Contact for Questions: Joseph Goodenbery, Lead Economist - <u>Joseph.Goodenbery@nreca.coop</u>

- Advisory: <u>Tools to Help Members Manage Energy Expenses</u>
- Advisory: <u>Business and Technology Resources to Use Virtually During This Time of Physical</u> <u>Distancing</u>
- Advisory: Financial Impact of COVID-19 on Electric Co-ops
- Advisory: At Risk Job Sectors in Co-op Areas
- Advisory: <u>A COVID-19 Revelation: Broadband is an Essential Service</u>
- Advisory: <u>The Impacts of the COVID-19 Pandemic on G&T Cooperatives</u>
- Advisory: <u>The Impacts of COVID-19 On Sector Specific Electricity Sales</u>
- Advisory: Financial Implications of COVID-19 on Electric Cooperatives and Pathways to Relief
- Advisory: COVID-19 Economic Impact on Cooperatives and Pathways for Relief

