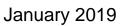
Business & Technology Resources





Articles and Advisories Summary - 2018

NRECA's Business and Technology Strategies *Surveillance* articles and *Advisories* provide upto-date reviews on an array of energy issues affecting cooperative members. Below is a summary listing of those issued in 2018. 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, Program Manager - David.Pinney@nreca.coop

- Article: Coles-Moultrie Electric Cooperative Taps the Value of Open Source GIS
- Advisory: Project Advisor Opportunity "VirtualBatteries"
- Advisory: <u>Contributor Opportunity for ARPA-E Open Grid Data Project</u>
- Advisory: Leveraging Technology for Avian Protection
- Advisory: <u>Electric Cooperatives Lead Industry AMI Deployment</u>
- Advisory: <u>Demand Response (DR) Program Planning with VirtualBatteries Software</u>
- Advisory: <u>Electric Cooperatives and Persistent Poverty Counties</u>
- Advisory: <u>Co-ops Increase Investments in System Maintenance to Promote Electric Reliability</u>
- Advisory: <u>Recruiting Now for the Analytics Research Member Advisory Group (ARR MAG)</u>
- Advisory: <u>Analytical Models for Determining the Value of Energy Storage on Co-op Systems</u>

Cybersecurity

Contact for Questions: Cynthia Hsu, Program & Product Line Manager – Cynthia.Hsu@nreca.coop

- Article: <u>RC3 Leverages 'Cooperation Among Co-ops' to Confront Cybersecurity Challenges</u>
- Advisory: <u>Opportunity to Participate in NRECA's RC3 SANS Voucher Program for FREE Cybersecurity Online</u> <u>Courses</u>

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- Advisory: <u>RC3 Self-Assessments: What CEOs and GMs Have to Say About Cybersecurity</u>
- Advisory: <u>Rethinking Passwords</u>
- Advisory: <u>Contributor Opportunity for U.S. Department of Energy MEEDS Project</u>
- Advisory: <u>CEO Leadership is Critical to a Strong Culture of Cybersecurity</u>
- Advisory: Engaged Employees are a Cooperative's First Line of Defense Against Cyberattacks

Distributed Energy Resources

Contacts for Questions: Brian Sloboda, Program & Product Line Manager – <u>Brian.Sloboda@nreca.coop</u> and Jan Ahlen, Program & Product Line, Manager – <u>Jan.Ahlen@nreca.coop</u>

- Article: <u>Do Smart Thermostats Make for Smart Demand Response Programs?</u>
- Article: Beneficial Electrification Agribusiness: Dairy Water Heating
- Article: <u>Beneficial Electrification Space Conditioning in Schools</u>
- Article: <u>Beneficial Electrification Natural Gas Pipeline Compressor Stations</u>
- Article: <u>Farm Beneficial Electrification: Opportunities and Strategies for Rural Electric Cooperatives</u>
- Advisory: <u>NRECA is Official Supporter of Electrification 2018 Conference</u>
- Advisory: <u>Beneficial Electrification for All Incomes</u>
- Article: Gearing Up for Electric Vehicles: Residential EVSE Program Design for Co-ops
- Advisory: Electric Vehicle Market Potential
- Advisory: <u>Electric Trucking</u>
- Advisory: EV Sales Set to Make All Time High New Co-op Program Could Help
- Advisory: <u>New EV Truck and SUV Models Coming Soon</u>
- Article: <u>Helping C&I Customers Maximize Their Energy Management Systems</u>
- Article: Methods to Help Members Control Electric Resistance Heat
- Advisory: <u>Utility Connected Home</u>
- Advisory: <u>Utility Connected Home The Value to the Cooperative and Use Cases</u>
- Article: <u>The Increasing Role of Lithium-ion Batteries in Today's Industry and the Importance of Battery Recy-</u> <u>cling</u>
- Article: <u>Vendor Solar-Plus-Storage Offerings Anticipating Deployment</u>
- Advisory: <u>Changes to Tax Code & Imposition of Solar Panel Tariffs Will Impact Co-op Solar Development Pro-</u> spects
- Advisory: Zero Net Energy and Community Solar
- Advisory: Solar Photovoltaics (PV) A Lexicon
- Advisory: <u>PV Safety Concerns and PV Impact Guide Online Courses</u>
- Advisory: <u>2018 Solar Power International Conference: Takeaways</u>
- Advisory: <u>Battery Energy Storage Assessment A Cooperative Viewpoint</u>



- Advisory: <u>DER / Energy Storage Compensation</u>
- Advisory: Can Grid Edge Devices Benefit Distribution Systems?
- Advisory: Insights from Design Thinking Research
- Advisory: <u>Design Thinking Case Study of Poudre Valley REA</u>
- Advisory: <u>U.S. Department of Agriculture Rural Energy Savings Program (RESP) 2018 Roundtable Takeaways</u>

Generation, Environment & Carbon Dioxide

Contact for Questions: Dan Walsh, Senior Power Supply & Generation Director – <u>Daniel.Walsh@nreca.coop</u>

- Article: <u>Wind Turbine Operation & Maintenance Issues</u>
- Article: <u>Several Technical and Economic Options Can Help G&T Electric Cooperatives Integrate Renewable Energy into the Grid</u>
- Article: <u>A Direct Injection Carbon Engine (DICE) Using a Coal Slurry Fuel</u>
- Advisory: <u>Today's Natural Gas Supply: Pipeline Infrastructure and its Challenges</u>
- Advisory: <u>Wyoming Integrated Test Center–Carbon (ITC-C) and XPRIZE Update: Finalists to Be Announced</u> <u>April 9; Major Construction Complete on Test Center</u>
- Advisory: <u>Wyoming Integrated Test Center–Carbon (ITC-C) and NRG COSIA CARBON XPRIZE Update:</u> <u>XPRIZE Finalists' Innovative Approaches to Converting CO2 Waste to Sellable Products</u>
- Advisory; Approval by the EPA of the UND EERC Multi Element Sorbent Trap for Halogens (MEST-H)
- Advisory: <u>Solar Photovoltaics (PV) a Lexicon</u>

Resource Adequacy and Markets

Contact for Questions: Michael Leitman, Senior Analyst Economics & Business – <u>Michael.Leitman@nreca.coop</u>

- Article: <u>Rate Options That Support Electric Vehicle Adoption</u>
- Article: <u>Vendor Solar-Plus-Storage Offerings Anticipating Deployment</u>
- Advisory: <u>Rate Options To Support EV Programs</u>
- Advisory: From Finding the Gaps to Bridging the Gaps: An Electric Cooperative's Need to Source Strategically
- Advisory: <u>Strategic Sourcing Case Study: North Dakota IEAC</u>
- Advisory: <u>Strategic Sourcing Case Study: Golden Spread Electric Cooperative's Member-Designed Information</u> <u>Technology Resource Program</u>
- Advisory: <u>Strategic Sourcing Case Study: Prairie Power's Broadband System Enabled Wide Area Network</u>
- Advisory: <u>How One Cooperative Leveraged Data to Advance its Pole Attachment Policies</u>



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- Advisory: <u>NRECA Releases Distributed Energy Resources Compensation and Cost Recovery Guide</u>
- Advisory: <u>Broadband Case Study: Anza Electric Cooperative</u>
- Advisory: <u>Broadband Case Study: Roanoke Electric Cooperative</u>
- Advisory: <u>Broadband Case Study: Orcas Power and Light & Rock Island Communications</u>
- Advisory: Broadband Case Study: Jo-Carroll Energy & Sand Prairie Broadband
- Advisory: <u>Broadband Case Study: Arrowhead Electric Cooperative & True North Broadband</u>
- Advisory: <u>Broadband Case Study: NineStar Connect</u>
- Advisory: <u>Broadband Case Study: Douglas East Net</u>
- Advisory: <u>Broadband Case Study: North Alabama Electric Cooperative</u>
- Advisory: <u>Broadband Case Study: Barry Electric Cooperative and goBEC Fiber</u>
- Advisory: <u>Broadband Case Study: Delta-Montrose Electric Association</u>
- Advisory: <u>Broadband Case Study: Valley Electric Association</u>
- Advisory: <u>Broadband Case Study: Midwest Energy & Communications</u>
- Advisory: <u>The Connect America Fund Phase II Auction</u>: <u>Cooperatives Take Advantage of Opportunity to Expand</u> <u>Voice and Broadband Services</u>
- Advisory: <u>The Value of Broadband for Electric Cooperative Operations</u>
- Advisory: <u>The Evolving Electric Cooperative Fuel Mix</u>
- Advisory: Electric Cooperatives and Opportunities For Working with the Military
- Advisory: <u>Electric Cooperatives and Persistent Poverty Counties</u>
- Advisory: <u>What to Know about Cryptocurrency Mining</u>
- Advisory: <u>Updated Electric Industry Generation, Capacity, and Market Outlook Report Released</u>
- Advisory: <u>ERCOT Hits New Summer Peak Demand</u>

Transmission and Distribution

Contact for Questions: Robert Harris, Senior Principal Transmission & Distribution Engineering – <u>Robert.Harris@nreca.coop</u>

- Advisory: <u>MultiSpeak Case Study: Wake EMC</u>
- Advisory: <u>Seeking MultiSpeak Case Studies</u>
- Advisory: Energy Efficient Transformer Standards
- Advisory: <u>IEEE 1547-2018: Standard for Interconnection of DER</u>
- Advisory: Distribution Optimization: Online Training for Distribution Operations Staff
- Advisory: Long-Standing Wind and Solar Integration Group Transitions to Address Energy Systems Integration

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- Advisory: <u>Cooperatives' Commitment to Zero Contacts</u>
- Advisory: <u>National Fire Protection Association (NFPA) Standard 855 for Energy Storage Systems</u>
- Advisory: <u>PV Safety Concerns and PV Impact Guide Online Courses</u>

