Articles and Advisories Summary - 2017

NRECA's Business and Technology Strategies *TechSurveillance* articles and *Member and Technology Advisories* provide up-to-date reviews on an array of energy issues affecting cooperative members. Below is a summary listing of those issued in 2017.

All Audiences

• Advisory: <u>New Opportunities for Co-ops to Engage with CEATI</u> (August 2017)

Co-op Workforce

• Advisory: Bridging the Skills Gap with Co-op Involvement (October 2017)

Cyber Security

- Advisory: <u>RC3 Program Overview</u> (February 2017)
- Advisory: <u>RC3 NRECA's Cybersecurity Summit: a Catalyst for Co-op Discussions about Cyber Security Risks</u> (February 2017)

Distributed Energy Resources (Energy Efficiency and Renewables Generation)

- Advisory: <u>Electric Vehicles: New Models Poised to Make a Splash</u> (January 2017)
- Article: Consumer-Centric Programs that Promote Electrification (January 2017)
- Advisory: Zinc Hybrid Cathode Battery Solution for Utility-Scale Energy Storage (February 2017)
- Advisory: <u>NRECA Launches New Solar Interest Group for Members</u> (February 2017)
- Advisory: <u>Test Shows that PV Systems Can Provide Frequency Response and Ancillary Services</u> (February 2017)
- Advisory: Tesla / SolarCity Announce New Residential and Utility Scale Batteries (February 2017)
- Article: <u>How a Problem with Vehicle Emissions Affects the Electricity Industry</u> (February 2017)
- Article: <u>When It Comes to Battery Storage Systems, Co-ops Should Focus on a Primary Application</u> (February 2017)
- Advisory: <u>PV as Energy Source</u> (March 2017)
- Advisory: <u>A New Transformer for a New Era: Grid Energy Router</u> (April 2017)
- Article: Considerations for Integrating Renewables (May 2017)
- Advisory: <u>NRECA Seeks Co-Op Examples of Beneficial Electrification for C&I</u> (June 2017)
- Advisory: <u>Does Tracking Make Sense for Co-op PV Systems</u> (July 2017)
- Advisory: <u>Changes Coming to Electric Commercial Water Heater Availability: The Grid-Enabled Electric</u> <u>Water Heater Market Needs Co-op Support</u> (August 2017)
- Advisory: Electric Vehicles Alleviating Misconceptions to Advance the Technology (August 2017)
- Article: DC Power in Buildings: Separating the Hype from Reality (August 2017)
- Advisory: <u>2017 Eclipse Effects on Co-op Solar Arrays</u> (September 2017)
- Article: <u>Beneficial Electrification for C&I Case Study: Forklifts</u> (September 2017)
- Article: <u>Beneficial Electrification for C&I Case Study: Rock Crushing Equipment</u> (October 2017)

Business & Technology Strategies

- Article: <u>Beneficial Electrification for C&I Case Study: Cooking Equipment</u> (November 2017)
- Article: <u>Beneficial Electrification for C&I Case Study: Irrigation Systems</u> (December 2017)

Generation, Environment, & Carbon Dioxide

- Article: Integrating Renewables: Fossil Generation Options Available to G&T Cooperatives (March 2017)
- Advisory: <u>Wyoming Integrated Test Center Carbon (ITC-C); NRG COSIA Carbon XPRIZE Research: Twelve</u> <u>Semi-Finalists will conduct small scale demonstrations through the summer</u> (March 2017)
- Article: <u>Growth of Wind Generation in the Electric Cooperative Community</u> (June 2017)
- Article: <u>The EPA §316(b) Rule on Cooling Water Intake Structures: Requirements and Challenges</u> (June 2017)
- Article: <u>G&T Cooperatives Have Several Options and Some Concerns When Complying with EPA's</u> <u>§316(b) Rule</u> (August 2017)
- Advisory: <u>New Opportunities for Co-ops to Engage with CEATI</u> (August 2017)
- Advisory: Small Modular Reactors: Generation III+ Nuclear Power Technology (October 2017)
- Article: <u>Current Wind Technologies</u> (October 2017)
- Article: <u>Technology Options for G&T Cooperatives to Meet the §EPA 316(b) Impingement and Entrainment</u> <u>Requirements</u> (November 2017)

Market Resource and Adequacy

- Advisory: <u>New Rate Guide to Address a New Era in the Electricity Industry</u> (February 2017)
- Advisory: <u>Challenges and Opportunities Facing Coal</u> (March 2017)
- Advisory: <u>The Evolution of the Western Markets</u> (April 2017)
- Advisory: Increasing the Value of Geospatial Data (June 2017)
- Advisory: <u>Today's Natural Gas Supply: The Impact of the Shale Gas Revolution</u> (August 2017)
- Article: <u>AMI Enables Flexible Pricing and Helps Co-ops Maintain Revenue Stability</u> (October 2017)
- Advisory: <u>NRECA Seeks Input from Co-ops for TechAdvantage Session on Advancing GIS Data Quality</u> (December 2017)

Transmission and Distribution

- Article: <u>IEEE 1547 Pt 3 Disturbance Performance</u> (February 2017)
- Article: <u>IEEE 1547 Relevant to Additional Issues Including Power Quality</u> (April 2017)
- Article: <u>Case Studies: Success with Unmanned Aerial Systems (August 2017)</u>
- Article: <u>Tackling the Big Technology Project AMI Case Study of MTEMC</u> (September 2017)
- Advisory: <u>The Importance of the SAIDI Number</u> (September 2017)
- Advisory <u>MultiSpeak[®] Use Case Study: Win Energy REMC</u> (October 2017)
- Advisory: Distribution Optimization (October 2017)
- Advisory: <u>Meeting the Challenges of Today's Integrated Distribution Network with MultiSpeak</u> (November 2017)