

**Power up** to take on new challenges in reliability, safety, security, and innovation



DIAMOND SPONSOR



March 31 - April 03  
**2019**

**THE ACADEMY**

# Engineering & Operations Conference

Colorado Springs, Colorado

AMERICAN  
**PUBLIC POWER**  
ASSOCIATION

“ The E&O Conference is the best place to stay current on the latest issues and **engage with the best in the industry.**

**JON BEASLEY**

Director of Training and Safety  
Electric Cities of Georgia

## FIND YOUR Community

Join more than 400 public power professionals at the American Public Power Association's Engineering & Operations Conference. You'll have plenty of opportunities to compare notes and catch up with the best and the latest in your field.

Network with other utility professionals—both veterans and those new to the electric industry—and share experiences and strategies. Join us to discover how to improve systems, processes, and outcomes in:

- Communications & Control
- Environmental Issues
- Generation & Fuels
- Safety
- Supply Management
- System Planning
- Transmission & Distribution

## CONFERENCE Mentor Program

Need help navigating the conference as a first-timer? Want someone to exchange notes with because you're the only one from your organization attending? Eager to share your knowledge and experience as a long-time conference attendee?

The conference mentor program pairs up new attendees with seasoned conference-goers. You'll meet at the Welcome Reception and stay in touch throughout the conference. Ask for a mentor or volunteer to serve as one—check the box when you register, email [EducationInfo@PublicPower.org](mailto:EducationInfo@PublicPower.org), or call 202-467-2965 by March 22 to participate.

### POWER UP

For event updates  
and to register, visit  
[www.PublicPower.org/  
EandO](http://www.PublicPower.org/EandO)

## THANK YOU Conference Co-Hosts





# THANK YOU Sponsors

As of December 18, 2019

Thank you to our sponsors for the generous financial support to create the best experience for attendees.

Learn more and review sponsorship opportunities at [www.PublicPower.org/EandO](http://www.PublicPower.org/EandO).

## DIAMOND SPONSOR



## GOLD SPONSORS



The American Public Power Association is the voice of not-for-profit, community-owned utilities that power 2,000 towns and cities nationwide. We represent public power before the federal government to protect the interests of the more than 49 million people that public power utilities serve, and the 93,000 people they employ. Our association advocates and advises on electricity policy, technology, trends, training, and operations. Our members strengthen their communities by providing superior service, engaging citizens, and instilling pride in community-owned power.

## THE ACADEMY

AMERICAN PUBLIC  
POWER ASSOCIATION

The Academy is public power's complete resource for professional education and certification, helping electric industry employees stay abreast of rapidly evolving technologies, regulation, and customer needs. Learn more about our conferences, webinars, special events, continuing education, and custom in-house trainings at [www.PublicPower.org/Academy](http://www.PublicPower.org/Academy).



Before I attended the Engineering and Operations Conference, I thought I knew all there was to know about electrical transmission and distribution. After attending, I quickly learned **the value of getting outside of my bubble** to learn from others in similar positions.
















**KEVIN THORNTON**

Line Superintendent

City of Columbia Water & Light, Missouri

## Breakout Sessions at a Glance

Visit [www.PublicPower.org/EandO](http://www.PublicPower.org/EandO) for updates and to register.

Monday, April 1		8:30 - 10 a.m.	10:30 a.m. – Noon	1:30 – 3 p.m.	3:15 – 4:30 p.m.	4:30 – 6 p.m.
<div></div> <div>All Tracks</div>	Opening General Session: Association Board Chair Address Transforming Millennial Myths into Workplace Breakthroughs			Joint Action Agency/State and Regional Association Roundtable	Expo Opening Reception	
<div></div> <div>Environmental</div> <div></div> <div>Generation &amp; Fuels</div>		Environmental Regulatory Overview	The Future of Fossil Fuels: An Insider Perspective	Balancing the Growing Renewables Portfolio		
<div></div> <div>Safety</div>		Self-Care for Disaster Responders	Up Your Safety Game with the New eSafety Tracker	Deadline or Dead? Efficiency WITH Safety		
<div></div> <div>Communications &amp; Control</div>		How to Be a Key Connector in the IoT World	Leverage Your AMI Data to Provide Value	The Connected Utility: Integrating Software and Data <i>(joint session)</i>		
<div></div> <div>Transmission &amp; Distribution</div> <div></div> <div>System Planning</div>		Bitcoin and Blockchain Mania: Managing Load and Costs	Shore Up with New Lessons in Disaster Response			
<div></div> <div>Supply Management</div>		Supply Management Opening Roundtable		Power of the P-Card: Beware of Fraud		
Tuesday, April 2		8:30 – 9:45 a.m.	10:45 a.m. – Noon	1:30 – 2:45 p.m.	3 – 4:15 p.m.	4:30 – 5:30 p.m.
<div></div> <div>All Tracks</div>					Operations and Reliability Power Hour	
<div></div> <div>Environmental</div> <div></div> <div>Generation &amp; Fuels</div>	Energy Storage 101: The Life Cycle of Batteries and their Environmental Impacts <i>(joint session with T&amp;D/SP)</i>	Flip or Flop: Generation Edition	Virtual Power Plants: Lessons Learned on Integrating Distributed Energy Resources	State of the Waste: A Solid Waste and Coal Ash Regulatory Review		
<div></div> <div>Safety</div>	The Train Reaction: How to Keep Your Employees	Mutual Aid and Preparedness Best Practices: Plan Your Work and Work Your Plan	Underground Lock to Lock: Ignore at Your Peril!	Arc Flash and Protective Equipment: Overview and What's New		
<div></div> <div>Communications &amp; Control</div>	Connecting in a Crisis	Cybersecurity: Fix the Weakest Link First	Breakthroughs in Mobile Workforce Technologies	GIS: Much More than Location Mapping		
<div></div> <div>Transmission &amp; Distribution</div> <div></div> <div>System Planning</div>	Energy Storage 101: The Life Cycle of Batteries and their Environmental Impacts <i>(joint session with ENV/GEN&amp;FUELS)</i>	Unpacking Integration at the Grid Edge	Project Delivery Methods: What's Best for You	Challenges and Benefits to Increasing Renewables: Find the Sweet Spot		
<div></div> <div>Supply Management</div>	New Technologies for a Well-Run Warehouse	Improving Your Bottom Line	Store Your Stuff	Ethics in Logistics: Get it Right the First Time		
Wednesday, April 3		8:30 – 10 a.m.		10:30 a.m. - Noon		
	Environmental Issues Roundtable Safety Roundtable Communications & Control Roundtable T&D/System Planning Roundtable Supply Management Roundtable			Closing General Session: Powering Your Leadership Brand: Strengthen Your Communication Skills and Professional Presence		



CONFERENCE AGENDA

Sunday  
March 31

<b>8 a.m. – 6:30 p.m.</b>	<b>Registration Open</b>
8:30 a.m. – Noon	Morning Preconference Seminars
1:30 p.m. – 5 p.m.	Afternoon Preconference Seminars
9 a.m. – 4:30 p.m.	RP3 Review Panel Meeting

PRECONFERENCE SEMINARS

Preconference seminars offer longer class times, smaller class sizes, interactive formats, and experienced instructors. Dive deep into hot topics to add value to your conference experience.

*Separate registration and fee required.*

8:30 a.m. – Noon  
**Creating a Culture of Safety:  
Foundations of Communications Workshop**

*Recommended CEUs .3 / PDHs 3.25 / CPEs 3.8, Specialized Knowledge*

If you're looking to establish or enhance a safety culture at your utility, you need to start by empowering your team. Do they feel comfortable speaking up when they see unsafe work practices? Do they feel like someone is listening and trusts them? Do you have a system to provide constructive criticism as well as positive recognition, as merited? Learn how you can put processes in place to facilitate these basics. Discuss employee accountability and strong follow-up communications in the wake of safety incidents or threats. Learn the six steps to achieve safety excellence.

*Kevin Ellison, MBA, SSBB, Senior Associate, Caterpillar, Inc., Peoria, Illinois*

8:30 a.m. – Noon  
**Improve the Reliability of Your  
Distribution System**

*Recommended CEUs .3 / PDHs 3.25 / CPEs 3.8, Specialized Knowledge*

Many public power utilities excel in reliability. What is the secret to their outstanding track record in preventing service interruptions and responding quickly when interruptions do occur? Learn how to set reliability performance targets, implement performance improvement initiatives, and establish indices to measure reliability. Experts will guide you on how to build an organizational culture that supports a reliable infrastructure and operations to help you meet the reliability expectations of regulators, customers, and stakeholders. Discover best practices used by RP3 (Reliable Public Power Provider) utilities, designated by the American Public Power Association.

*Tom Black, P.E., Management Consultant, Collaborative Learning, Inc., Colorado Springs, Colorado; and John Miner, P.E., President, Collaborative Learning, Inc., Austin, Texas*

1:30 – 5 p.m.  
**Efficient Electrification: Electric Vehicles  
and the Evolving Grid**

*Recommended CEUs .3 / PDHs 3.25 / CPEs 3.8, Specialized Knowledge*

Increasing electrification—especially in transportation—offers potential for significant load growth but also poses new distribution system challenges. Distributed energy resources and changing customer preferences continue to impact the grid in new ways. Are you ready to meet the increasing demand and handle the new load patterns? Learn how to modify system planning, provide for infrastructure changes, and adapt your business model to accommodate electric vehicles and DERs. Discover how you can combine the benefits of electric transportation and energy storage and opportunities for electric heavy-duty transport. Explore emerging technologies and understand how you can make the most of electrification.

*Rob Chapman, Vice President, Energy & Environment, Electric Power Research Institute, Palo Alto, California; John Halliwell, Senior Project Manager, Electric Transportation and Jason Taylor, Principal Project Manager, EPRI, Knoxville, Tennessee*

1:30 – 5 p.m.

## Maintenance of High Voltage Electrical Distribution Systems

*Recommended CEUs .3 / PDHs 3.25 / CPEs 3.8, Specialized Knowledge*

The key to safe, reliable operations is a well-managed maintenance program—so join us to review best practices. Learn from the experts about corrective, preventive, and predictive maintenance programs for overhead and underground lines. Go over the essentials of inspection and testing of distribution lines and equipment. Review NESC maintenance requirements, risk management, and cost accounting with the experts. Get tips on how to evaluate your maintenance programs using productivity and service level measures and benchmarks. Understand regulatory requirements in distribution system maintenance.

**Tom Black, P.E.**, *Management Consultant, Collaborative Learning, Inc., Colorado Springs, Colorado*; and **John Miner, P.E.**, *President, Collaborative Learning, Inc., Austin, Texas*

1:30 – 5 p.m.

## Talent Wars: Are You Ready to Enlist the Millennials?

*Recommended CEUs .3 / PDHs 3.25 / CPEs 3.8, Specialized Knowledge*

**FREE!** (Offered as part of the Association's Supporting Workforce Development strategic initiative)

Can public power engineering and operations leaders attract, motivate, train, and retain the millennial workforce that has the digital talent to power our smart world? See how others are building the engineering and operations workplace of the future and closing the gaps in diversity and inclusion. Understand and learn to work with generational differences in career expectations and workplace behaviors. Prepare for the impact of Baby Boomer retirement, manage the forgotten Gen Xers, and engage the millennials. Explore the real cost of attrition and retention and ways our industry can modernize its message and work environments. Learn from case studies and examples and build an action plan to take on the competition for new talent.

**Janet Kieffer**, *Principal, INFLUENCE, Austin, Texas*

5 – 6:30 p.m.  
Welcome  
Reception

Enjoy hors d'oeuvres and drinks while you reconnect with old friends and meet new people. Pick up your badge and conference materials at registration desk.

# Monday April 1

7 a.m. – 6 p.m. Registration Open

7:30 – 8:30 a.m.

## Opening Breakfast

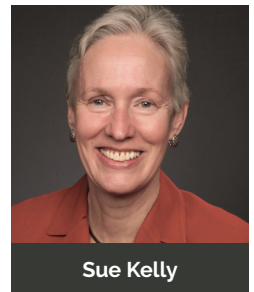
Join fellow participants for a networking and awards event, and to learn more about the Association's research and innovation program, DEED.

## Awards Presentation

Recipients of the following American Public Power Association awards and honors will be recognized:

- Reliable Public Power Provider (RP3) designation
- Safety Awards of Excellence
- 2019 DEED Award of Continued Excellence

Opening address by **Sue Kelly**, *President & CEO, American Public Power Association*



Sue Kelly

8:30 – 10 a.m.

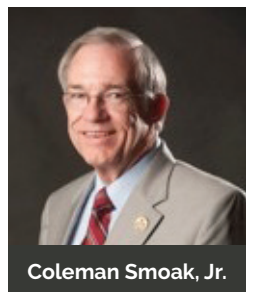
## Opening General Session

*Recommended CEUs .1 / PDHs 1.25 / CPEs 1.5*

### Public Power Matters

Public power has unique strengths and advantages but do we fully leverage them? Are we still committed to ensuring reasonable rates? Are we staying on top of new trends and technologies? Are we prepared for changing customer and workforce demographics? Are we advocating and telling our story? A veteran public power leader shares a lifetime journey with humorous perspective and helps you focus on what really matters. Get a refresher on public power's inspiring history and commit to building a bright future.

**Coleman Smoak, Jr.**, *Chair, American Public Power Association, and General Manager, Piedmont Municipal Power Agency, Greer, South Carolina*



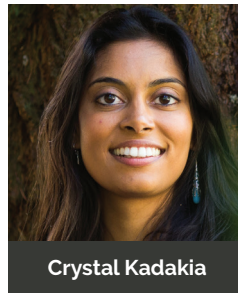
Coleman Smoak, Jr.



### Transforming Millennial Myths into Workplace Breakthroughs

A two-time TEDx speaker and author of *The Millennial Myth*, will help you adapt your leadership and relationship management skills to the talent of the future. Break down the five biggest myths about millennials and abandon the stereotypes. Learn how to navigate the behaviors and expectations of a generation that has grown up in a digital world. Understand the new dimensions in human behavior engendered by millennial lifestyles. Reimagine the workplace and discover how to drive employee productivity and engagement.

**Crystal Kadakia**, Founder & Principal Consultant, Invati Consulting, Atlanta, Georgia

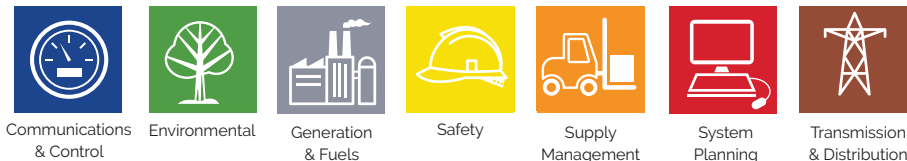


10 – 10:30 a.m.

### Break

Photos: RP3 and Safety Award winners

#### Key to Sessions



10:30 a.m. – Noon

### Breakout Sessions

*Recommended CEUs .2 / PDHs 1.5 / CPEs 1.8*



#### How to be a Key Connector in the IoT World

The increasingly connected nature of our world has immense implications for electric utilities. Discover your role in the nexus of energy and the Internet of Things that drives smart homes, electric vehicles, smart inverters, and other technologies. Consider implications for demand response, data aggregation, and cybersecurity. Discover what new apps, devices, and business models you must align with.

**Joel Danforth**, Platte River Power Authority, Colorado, and **Pablo Bauleo**, City of Fort Collins Utilities, Colorado



#### Self-Care for Disaster Responders

Disaster response takes its toll on all electricity workers. The pressure increases when crews travel to provide mutual aid in areas with unfamiliar weather and terrain. How can those helping in emergencies care for themselves, stay healthy, stay safe, and give their best? Learn from the veterans and prepare to coach your disaster response team in self-care.

**Craig Batchelor**, Safety & Training Specialist, ElectriCities of North Carolina, Inc., Raleigh, North Carolina; **Mike Willetts**, Director of Training & Safety, Minnesota Municipal Utilities Association, Plymouth, Minnesota; and **Brandon Wylie**, Assistant Director of Training & Safety, Electric Cities of Georgia, Atlanta, Georgia



#### Supply Management Opening Roundtable

Network with colleagues, discuss supply management topics of mutual interest, and hear about current projects and challenges.



#### Environmental Regulatory Overview

Discuss environmental and generation regulations around air, water, and waste issues. Get up to speed on key rulemakings that impact you.



**Carrie Jenks**, Executive Vice President, M.J. Bradley & Associates, Concord, Massachusetts; and **Kerry L. McGrath**, Partner, Hunton Andrews Kurth LLP, Washington, D.C.

## ROUNDTABLE DISCUSSIONS

All roundtable discussions are limited to employees of public power utilities, state and regional associations, and joint action agencies.

**Have topics you'd like to discuss at any roundtable?**

Email **EandO@PublicPower.org** before the conference.



## Bitcoin and Blockchain Mania: Managing Load and Costs



Bitcoin mining strains the electric grid in unprecedented ways. Blockchain operations are becoming popular for finance and other transactions as well. Such operations can be established and disbanded quickly, require massive amounts of computer processing, and target communities with low-cost electricity. Learn how you can manage the increased load; be adequately compensated; and ensure affordable, reliable power for all your customers.

*Prakash Santhana, Managing Director, Cyber Risk, Deloitte, New York, New York; and John Stoll, Managing Director of Customer Utilities, Chelan County PUD, Wenatchee, Washington*



## Shore Up with New Lessons in Disaster Response



From wildfires to tornadoes, from snowstorms to typhoons, 2018 saw its fair share of natural disasters. What new challenges did the public power veterans responding to these disasters face? And what did they learn? Hear firsthand about their experiences. And get some new tips and tricks for disaster planning, preparedness, resiliency, supplies and materials management, logistics, and vegetation management.

*Charles Bauschard, Utility Director, City of New Bern, North Carolina; Bret Marchese, Director of Distribution Maintenance, Salt River Project, Phoenix, Arizona; Cairo Vanegas, Manager of Member Services Development, Florida Municipal Power Agency*



## The Future of Fossil Fuels: An Insider Perspective



Understand how the outlook for coal, natural gas and other fossil fuels will impact your utility's costs and ability to keep the lights on. Hear from Morgan Stanley and The National Coal Council on the future of fossil fuels and their role in our economy and energy output.

*Janet Gellici, CEO, National Coal Council, Washington, D.C.; and Jason Jarecki, Vice President, Morgan Stanley, New York, New York*

Noon – 1:30 p.m.

## Lunch on Your Own

1:30 – 3 p.m.

## Breakout Sessions

*Recommended CEUs .2 / PDHs 1.5 / CPEs 1.8*



## Leverage Your AMI Data to Provide Value

The increasing deployment of smart meters and advanced metering infrastructure opens up new possibilities to collect and examine data on energy use. How do you store, track, analyze, and make sense of the vast amounts of data generated by multiple devices? Discover how two public power utilities found the value hidden within AMI data and used it to benefit customers and stakeholders.

*Matt Heath, AMI Department Manager, BrightRidge, Johnson City, Tennessee; and Leslie Jones, AMI Manager, Jackson Energy Authority, Tennessee*



## Up Your Safety Game with the New eSafety Tracker

Based on years of field experience and utility input, the American Public Power Association has developed the eSafety Tracker to help you monitor and benchmark your safety practices. Come and demo this new software and share your feedback to help your own and other public power utilities reach new levels of excellence in safety.

*Alex Hofmann, Director, Energy & Environmental Services, American Public Power Association; and stakeholders from ElectriCities of North Carolina, Electric Cities of Georgia, Fort Collins, Huntsville Utilities, Kissimmee Utility Authority, and Santee Cooper*

3:30 – 4:30 p.m.

## Expo Preview Hours

Get a sneak peek at the Expo and start meeting vendors offering deals on the products and services your utility needs year-round.



The ability to share best practices and pick up new ideas from other utilities is **worth the price of admission.**

**ERIC WEAVER**

Deputy Director  
Ocala Electric Utility, Florida



3 – 3:15 p.m.  
**Break**

3:15 – 4:30 p.m.  
**Breakout Sessions**

*Recommended CEUs .1 / PDHs 1.25 / CPEs 1.5*



### **The Connected Utility: Integrating Software and Data**

Big data means big analytics, and big challenges as well as big opportunities for your utility. The ongoing technology revolution places a host of new software applications and new data sources at your disposal. Learn how to leverage all these technologies, connect and integrate, and use the output to benefit your customers, streamline operational efficiencies, and move your utility into the digital future.

*Richard da Silva, Vice President of Strategic Operations, New York Power Authority; and Liz Jambor, Ed.D., Manager, Data Analytics & Business Intelligence, Austin Energy, Texas*



### **Deadline or Dead? Efficiency WITH Safety**

Deadlines are important but efficiency and productivity can't come at the cost of safety. Learn how to get critical tasks and maintenance work done quickly and efficiently, while ensuring the safety of your full team. Hear stories and case studies from the field that have been used to ensure safety.

*Mike McCleary, Manager of Member Services Development, Florida Municipal Power Agency; and Brandon Wylie, Assistant Director, Training & Safety, Electric Cities of Georgia*



### **Power of the P-Card: Beware of Fraud**

Purchasing cards can simplify the purchasing and procurement process but can also open up potential for fraudulent activity. Join this session to learn tips and tricks from a P-Card expert on how to optimize use and oversight. Learn best ways to identify and avoid fraudulent charges. See what controls and compliance requirements you can put in place and how you can mitigate risk.

*Speakers TBD*



### **Balancing the Growing Renewables Portfolio**

As the share of renewables in generation portfolios grows, utilities need flexible and reliable power sources to balance the suite. For example, you need quick and easy peaking capacity. RICE technology has been gaining popularity as it offers the flexibility you need. Learn from utilities that have used reciprocating engines to help balance their renewable generation and ensure reliability.

*Phil Rutkowski, Business Development Manager, Wärtsilä, Littleton, Colorado*



### **Joint Action Agency and State/Regional Association Roundtable**

Meet with your peers at other joint action agencies and state/regional associations to discuss engineering and operations hot topics.

4:30 – 6:30 p.m.

## Expo Opening Reception

Enjoy some down time with colleagues. Unwind over drinks as you connect with industry suppliers, vendors, and consultants and discover how their products and services can help your organization succeed.

### **PHOTO OP**

*All award winners can have their pictures taken at this time.*



The Engineering and Operations Conference is an **excellent venue to network** with other public power professionals and learn from each other in our ever-changing industry.

### **CHRISTIAN FENSTERMACHER**

Project Engineer  
Shakopee Public Utilities, Minnesota

# Tuesday April 2

7 a.m. – 4:30 p.m. Registration Open

7:15 – 8:30 a.m.

## Women in Public Power Panel and Networking Breakfast

Grab your continental breakfast and join a lively discussion about the growing influence of women in public power. Share challenges and wins with your peers.

7:30 – 8:30 a.m.

## Networking Continental Breakfast

Power up with coffee and connections at this informal breakfast. There are no speakers or moderators—just visit with your peers and chat with sponsors.

8:30 – 9:45 a.m.

## Breakout Sessions

*Recommended CEUs .1 / PDHs 1.25 / CPEs 1.5*



### Connecting in a Crisis

When you're hit by a natural disaster, staying in touch with your staff and being able to call on outside entities for help is critical. But what if your communications systems go down? Do you have a plan in place? Hear from a utility that uses a resilient communications channel called the Interoperable Response and Preparedness Platform to communicate across devices and via cell, satellite, and broadband networks.

*J.T. Flick, Director of Emergency Management, New York Power Authority; and Rob Wright, Vice President of State and Local Sales, Mutalink, Wallingford, Connecticut*



### The Train Reaction: How to Keep Your Employees

Public power utilities spend significant money and resources on employee training. But what if we train them and they leave? It hurts when employees depart prematurely and take their expensive training elsewhere. But what if we don't train them and they stay? Lack of training is a clear impediment to safety and productivity. Find your way out of this conundrum and learn how to train and retain your staff.

*Troy Adams, P.E., General Manager, Elk River Municipal Utilities, Minnesota; Olin Clawson, General Manager and CEO, Lawrenceburg Municipal Utilities, Indiana; and Aaron Haderle, Manager of T&D Operations, Kissimmee Utility Authority, Florida*



### New Technologies for a Well-Run Warehouse

Smooth workflow in the warehouse is at the heart of a well-run utility. How efficient is your warehouse? Are you up to speed on new, cost-efficient technologies? Learn about a range of technologies from barcoding to vending machines that might make sense for you and see how others are using them to increase productivity and turnaround times, and manage inventory for optimum performance.

*Speakers TBD*



### Energy Storage 101: The Life Cycle of Batteries and their Environmental Impacts



Hear about utilities that have adopted energy storage technologies about the benefits and challenges they've experienced. Learn all you wanted to know about batteries—assess the options in the market for strength, lifecycle, and cost; select the right batteries; and plan for proper operation, maintenance, and disposal. Understand the impact of storage on transmission, distribution, and the environment. Get tips on integrating battery storage into your system.

*Daniel Crotzer, President, Fractal Energy Storage Consultants, Austin, Texas; and Jeffrey Plew, Director – Development, NextEra Energy Resources, Juno Beach, Florida*

9:45 – 10:45 a.m.

## Vendor Expo & Refreshment Break



10:45 a.m. – Noon

## Breakout Sessions

Recommended CEUs .1 / PDHs 1.25 / CPEs 1.5



### Cybersecurity: Fix the Weakest Link First

Changing the leadership and staff culture to be more cyber aware is harder than installing the right hardware and software. Yet without the culture change, no cyber plan can be effective. Hear from an organizational change expert as well as small and medium-sized public power utilities on how you can motivate and train your team to practice good cyber hygiene and secure your utility against threats.

*Christopher Kelley, PMP, Vice President, Beam Reach Consulting Group, LLC, Baltimore, Maryland; Utility speakers TBD*



### Mutual Aid and Preparedness Best Practices: Plan Your Work and Work Your Plan

Take your disaster planning and preparation to the next level. Join the authors and experts for an overview of the American Public Power Association's new All-Hazards and Restoration Best Practices Guidebooks. Learn how to plan and participate in effective restoration operations and communicate with customers and stakeholders in emergencies. Walk through the five-step preparedness cycle that helps in the development or continuous improvement of emergency preparedness programs and all-hazards planning efforts.

*Korey Bush, Chief Electric System Operator, Lakeland Electric, Florida; and Kate Leese, Managing Partner, Kinetics Consulting, Detroit, Michigan*



### Improving Your Bottom Line

Review the financial aspects of supply management and inventory. Learn about the economics of procurement and supply management and how to apply data analytics to stock.

*Bethany Ryers, Senior Manager, Baker Tilly, Madison, Wisconsin; other speakers TBD*



### Flip or Flop: Generation Edition

Many old generating plants are in historic downtown areas. They have both interesting architectural features and valuable real estate. Hear from experts about how utilities have repurposed old power plants to benefit customers and the community.

*Trisha Elizondo, COO and Principal, Energy Renewal Partners, LLC, Austin, Texas; and Tom McKittrick, Principal, Forsite Development Inc., Charlotte, North Carolina*



### Unpacking Integration at the Grid Edge

EPRI is working on the concept of an integrated grid and notes that to serve all consumers at established standards of quality and reliability, distributed energy resources at the edge of the grid must be integrated into systems planning and operations. Join the experts to explore key aspects like distribution planning, customer-sited back up generation, microgrids, and other DERs operating as virtual power plants.

*Mark McGranaghan, Vice President, Integrated Grid, Electric Power Research Institute, Knoxville, Tennessee; and other EPRI experts*

1:30 – 2:45 p.m.

## Breakout Sessions

Recommended CEUs .1 / PDHs 1.25 / CPEs 1.5



### Breakthroughs in Mobile Workforce Technologies

Mobile apps and cloud-based integrated software platforms are helping public power utilities optimize and automate field work and communications while improving safety, reliability, and outage response time, as well as improving customer service satisfaction and employee productivity. What mobile technologies are other utilities like yours using and what can you learn from them? What are the costs and the pitfalls to avoid? Get answers and learn how to improve employee productivity and customer satisfaction.

*Ivan Baker, Account Executive, Clevest, Richmond, BC Canada; and Randy Trimble, Executive Director, Energy Delivery, Bryan Texas Utilities*



### Underground Lock to Lock: Ignore at Your Peril!

Join an open discussion on the use of rubber gloves while working on underground residential distribution equipment from lock to lock. Examine case studies and lessons learned from real-life incidents. Reflect on your own situations and garner best practices from colleagues. Review OSHA compliance requirements and exceptions. Dive deep into issues like secondary service hookups, flame resistant requirements, and grounding before cutting cable.

*Jeff Hedden, Line Superintendent, Huntsville Utilities, Alabama; Scott McKenzie, Member Safety Manager, American Municipal Power, Inc., Columbus, Ohio; and Chris Taylor, Commercial Underground Line Supervisor, Huntsville Utilities, Alabama*



### Store Your Stuff

Space can often be hard to find in a warehouse. Luckily, there are storage and organization systems available which can help you optimize your space. Come to this warehouse-focused session where we will review the various material storage systems to maximize storage efficiency.

*Speakers TBD*



### Virtual Power Plants: Lessons Learned on Integrating Distributed Energy Resources



Learn about the potential challenges in coordinating distributed energy resources. Review case studies on maximizing the value of DERs via utility controlled dispatch and other smart devices. Hear about virtual power plants from their beginning to where they are now. Examine technological advances to VPP system reliability and predictability.

*Dean W. Musser, P.E., President and CEO, Tangent Energy Solutions, Inc., Kennett Square, Pennsylvania*



### Project Delivery Methods: What's Best for You



There are many project delivery methods for capital projects but which one will work for you? As public utilities seek to leverage limited internal resources to deliver increasing project workloads, the engineer-procure-construct (EPC) delivery model is increasingly being utilized for project execution. This session will focus on fundamental EPC principles and execution strategies and examine some of the benefits and risks of EPC. Discuss the EPC execution process from both the contractor and utility point of view.

*Andrew Jarvis, P.E., P. Eng, Vice President, EPC Projects, T&D Services, Burns & McDonnell, Kansas City, Missouri, and a representative from Nashville Electric Service, Tennessee*

2:45 – 3 p.m.

## Break



You can customize the conference for your own needs and I really like the **variety of breakout sessions.**

**MIKE ROYUK**

Distribution Superintendent  
Fremont Dept. of Utilities, Nebraska

3 – 4:15 p.m.

## Breakout Sessions

*Recommended CEUs .1 / PDHs 1.25 / CPEs 1.5*



### GIS: Much More than Location Mapping

Geographic Information Systems can take you to location mapping and beyond. With GIS data analytics, you can identify system vulnerabilities as well as real-time data on weather, crews, demand, and outages. Learn how one public power utility is using GIS data in powerful new ways to keep the lights on and workers safe and learn about all of the work that ESRI is doing to support GIS efforts for electric utilities. See how you can use GIS to up your game in asset management, inspection and maintenance, and outage prevention and response.

*Robin Britton, Director of Systems Control and Technology Systems, New Braunfels Utilities, Texas; and Bill Meehan, Director, Utility Solutions, ESRI, Redlands, California*



### Arc Flash and Protective Equipment: What's New

The technology around all things arc-rated has matured and many basic assumptions have been debunked. Is your utility up to speed or are you still following old rules that may expose your operations, people, and the network to undue risks? Come and get a refresher on arc flash concepts, regulations, personal protective equipment, new standards, and equipment application. Learn how to select and use the correct arc-rated clothing and equipment.

*Zarheer Jooma, P.E., IEEE (SM), Electrical Engineer, e-Hazard, Louisville, Kentucky*



### Ethics in Logistics: Get it Right the First Time

Examine the various dimensions of ethics in warehousing and procurement. The ground rules may seem simple—practice integrity, avoid conflicts of interest, treat suppliers equally and fairly, and comply with legal obligations. However, the challenge is to apply these principles practically and consistently. Discuss why ethics are important and how to "get it right the first time." Learn how to establish a code of ethics and get buy-in from staff as well as suppliers.

*Speakers TBD*



### State of the Waste: A Solid Waste and Coal Ash Regulatory Review



Dive into the latest regulations and concerns in disposal of solid waste from coal. Hear about the current state of EPA regulations. Examine a case study of coal ash impoundment and flooding and discuss potential implications for your utility.

*Susan Jackson, Manager, CCP & Waste Management, Santee Cooper, Moncks Corner, South Carolina; and Jim Roewer, Executive Director, Utility Solid Waste Activities Group, Washington, D.C.*





## Challenges and Benefits to Increasing Renewables: Find the Sweet Spot



As a public power utility, you want to be responsive to your community's needs and be a renewable friendly provider. However, trying to expand renewables in your portfolio is easier said than done. How much is too much of a good thing? How do you fully integrate renewables into your transmission or distribution? How do you account for variability in production, while ensuring reliability? Examine all the issues and refresh your renewables planning.

*Sean Hamilton, General Manager, Sterling Municipal Light Department, Massachusetts; and another public power case study TBD*

4:30 – 5:30 p.m.

## Operations and Reliability Power Hour

Join the Association's Reliability Team for an open discussion and overview of public power reliability and operations benchmarking metrics. Discuss the latest benchmarking data, share reliability stories, and help define the path forward for public power to continue to excel. Network with your peers over a drink (cash bar) during this informal and informative session.

*Featuring American Public Power Association staff and members*

6 p.m.  
Young  
Professionals  
Happy Hour

Meet up with other young professionals from public power utilities, affiliates, and partner organizations at a relaxing, fun, pay-your-own-way happy hour. Share a drink and discuss how to take on the future.

# Wednesday April 3

7:30 – 8:30 a.m.

## Networking Continental Breakfast

Network with your peers at this informal breakfast. There are no speakers or moderators.

8:30 – 10 a.m.

## Breakout Sessions

*Recommended CEUs .2 / PDHs 1.5/ CPEs 1.8*

Roundtable discussions are open only to employees of public power utilities, state/regional associations, and joint action agencies.



### Communications & Control Roundtable

Discuss system integration, IT/OT contracting, the impact of distributed energy resources and energy storage, and other pressing issues.



### Safety Roundtable

Join your peers in an open forum to discuss important safety issues impacting your utility.



### Supply Management Roundtable

Swap supply management tales and challenges with your colleagues and trade takeaways from your favorite conference sessions.



### Environmental Issues Roundtable: The Future of CO<sub>2</sub> Free Fuels



Join us for short presentations on the future of, and challenges related to, nuclear, biomass, integrated gasification combined cycle (IGCC), carbon capture and storage (CCS), etc.

*Skip Cofield, Generation Development & Technology Application, Southern Company, Birmingham, Alabama; other speakers TBD*



## T&D/System Planning Roundtable

Discuss critical T&D and system planning issues impacting your utility. Get an update on the Light Up the Navajo Nation initiative to begin to power more than 15,000 homes in the Navajo Nation that don't have electricity.



*Wally Haase, General Manager, Navajo Tribal Utility Authority, Fort Defiance, Arizona*

10 – 10:30 a.m.

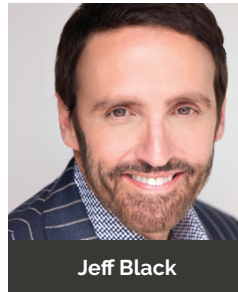
## Break

10:30 – Noon

## Closing General Session

### Powering Your Leadership Brand: Strengthen Your Communication Skills and Professional Presence

In today's competitive, transparent world you as a public power leader are required to demonstrate your authentic leadership brand every day. You have to convey compelling messages, manage difficult conversations, develop talent, drive shifts in culture and deliver strong performance, financial results, and outstanding customer service. Learn how you can enhance your confidence and communication skills and unleash your best self to leave a lasting impression on those around you.



Jeff Black

*Jeff Black, Founder & CEO, Black Sheep, Inc., South Carolina*

Noon

## Conference adjourns

# ACCREDITATION & CERTIFICATION



### Continuing Education Units

The American Public Power Association is accredited by the International Association for Continuing Education and Training (IACET) and is authorized to issue the IACET CEU.

### Professional Development Hours

The Association's educational practices are consistent with the criteria for awarding Professional Development Hours (PDHs) as established by the National Council of Examiners for Engineering and Surveying (NCEES). Course eligibility and number of PDHs may vary by state.



### Continuing Professional Education Credits

The American Public Power Association is registered with the National Association of State Boards of Accountancy (NASBA) as a sponsor of continuing professional education on the National Registry of CPE Sponsors. State boards of accountancy have final authority on the acceptance of individual courses for CPE credit. Complaints regarding registered sponsors may be addressed to the National Registry of CPE Sponsors, 150 Fourth Ave. N., Suite 700, Nashville, TN 37219-2417. Website: [www.nasbaregistry.org](http://www.nasbaregistry.org).

Earn up to 14.4 CPE credit hours for attending the conference (not including the preconference seminars). All sessions are intermediate-level, group-live offerings with no prerequisites and no advance preparation required. Areas of study will be listed on the Verification of Attendance form. For more information regarding administrative policies, such as clarification of requirements, complaints, and refunds, contact [EducationInfo@PublicPower.org](mailto:EducationInfo@PublicPower.org).



### Reliable Public Power Provider Designation

Participating in the Academy's conferences and seminars is an easy way to earn points toward the American Public Power Association's Reliable Public Power Provider (RP3) designation, recognizing public power utilities that demonstrate proficiency in four disciplines—reliability, safety, workforce development, and system improvement. For more information, visit [www.PublicPower.org/RP3](http://www.PublicPower.org/RP3).



# COLORADO SPRINGS



## COLORADO SPRINGS

Colorado Springs is where Katharine Lee Bates wrote the lyrics to America the Beautiful. Enjoy the awe-inspiring “purple mountains” (Colorado Rockies) and the “amber waves of grain” (Great Plains). Come ascend majestic Pikes Peak and admire the exquisite sandstone spires of the Garden of the Gods.

With more than 55 area attractions, including the U.S. Air Force Academy and one of the country's three Olympic training centers as well as museums, parks, a zoo, and more, you'll find no shortage of things to do. Whether you're looking for outdoor thrills or educational and cultural activities, the possibilities are limitless.

Discover more at [www.visitcos.com](http://www.visitcos.com).

## LOCATION & HOTEL

### CONFERENCE LOCATION

All conference events will be held at The Broadmoor Resort (1 Lake Avenue, Colorado Springs, CO 80906). Only use the reservation links, phone numbers, and discount codes at [www.PublicPower.org/E&O](http://www.PublicPower.org/E&O) under the “Hotel” tab.



### THE BROADMOOR RESORT

The Broadmoor has remained one of the most recognizable and celebrated hotels in the world. Opened in 1918, its distinctive blend of history, luxury, and genuine hospitality have made it the longest-running consecutive winner of the AAA Five-Diamond and Forbes Five-Star awards. The resort provides an unmatched selection of accommodations, activities, and experiences in the beauty and traditions of the American West. Whether it's ziplining, horseback riding, fly fishing, or a day at the spa, you'll find endless activities.

#### Room Rates

- **Group rate:** \$195 (Single/Double) per night (plus tax)
- **Check in:** 4 p.m.; **Check out:** Noon
- **Main telephone:** 719-623-5112
- **Parking:** Self-parking: \$23/night; Valet parking: \$30/night  
Daily: \$12/day

#### Reservations

- **Online:** Visit [www.PublicPower.org/EandO](http://www.PublicPower.org/EandO) under Hotel
- **Attendee group code:** American Public Power Association
- **Reservation telephone:** 800-755-5011
- **Reservation cut-off date:** March 7, 2019

*Rooms often sell out before the cutoff date, so make your reservations early. Contact Meeting Services at 202-467-2941 or [Meetings@PublicPower.org](mailto:Meetings@PublicPower.org), for help.*

#### Transportation

The hotel is approximately 11 miles from the Colorado Springs Airport (COS), or 88 miles from the Denver International Airport (DIA). Visit [www.broadmoor.com](http://www.broadmoor.com) for more information and directions.



# REGISTRATION

[www.PublicPower.org/EandO](http://www.PublicPower.org/EandO)

Register online or download a registration form you can email or mail.

## REGISTRATION FEES

American Public Power Association Member*		
	Through March 1	After March 1
Engineering & Operations Conference	\$775	\$825
Preconference Seminar (each)	\$350	\$400
Not Yet a Member		
	Through March 1	After March 1
Engineering & Operations Conference	\$1,550	\$1,600
Preconference Seminar (each)	\$700	\$750

*\*The Association member rate is extended to all Colorado Association of Municipal Utilities members.*

## CONTACT US

Visit [www.PublicPower.org/EandO](http://www.PublicPower.org/EandO) for program updates and to register online.

### Registration Questions

[Registration@PublicPower.org](mailto:Registration@PublicPower.org)  
202-467-2941

### Hotel Assistance

[Meetings@PublicPower.org](mailto:Meetings@PublicPower.org)  
202-467-2978

### Program Questions

[EandO@PublicPower.org](mailto:EandO@PublicPower.org)  
202-467-2921

### Sponsor Questions

Haley Herbst  
[HHerstb@PublicPower.org](mailto:HHerstb@PublicPower.org)  
202-467-2944

## NOT YET A MEMBER?

Join today and save \$775 on your conference registration. Call 202-467-2926 or email

[Membership@PublicPower.org](mailto:Membership@PublicPower.org) to learn more.



The education sessions combined with the networking opportunities provide for an **excellent return on the investment.**

### TODD DLOUHY

Manager, Procurement and Stores  
Lincoln Electric System, Nebraska

**Power up** to take on new challenges in  
reliability, safety, security, and innovation



2451 Crystal Drive  
Suite 1000  
Arlington, Virginia  
22202-4803

Standard  
Presorted  
U.S. Postage Paid  
Arlington, VA  
Permit No. 188

THE ACADEMY  
**Engineering  
& Operations  
Conference**  
2019

March 31 – April 03

Colorado Springs, Colorado