



October 4th – 5th, 2022

CEATI 

Distribution Conference

Planning and Operations Towards Net-
Zero Emissions

Event Overview

CEATI's Distribution Conference will focus on utility best practices, tools, and technologies to improve planning and operations and ensure business success in future markets moving towards net-zero emissions.

The event will feature presentations on the following themes:

- 1. Non-Wires Alternatives (NWA) to efficient and reliable operations**
 - Using NWA to prevent significant overloading of local distribution systems
 - Applying NWA solutions at the utility side and behind the meter
 - Pricing incentives to drive NWA solutions behind the meter
 - Monitoring and control of customer facilities
 - Success rate and performance of NWA
- 2. Electrification of Transportation - a threat or opportunity for distribution grids?**
 - Assessing the impact of accelerated EV charging demand on distribution grid infrastructure and operations
 - Preparation for distribution grid integration in an accelerated vehicle charging demand
 - International utility best practices for grid integration and operation of residential, commercial, and mass transportation electrification
 - Ensuring hosting capacity into local distribution systems, commercial and residential services, to prepare for EV integration
 - Using energy storage to compliment EV integrations
 - Barriers and enablers for utilities to meet customer needs
 - Matching distribution grid reliability to EV charging requirements
- 3. Distributed Energy Resources (DER)**
 - Preparation for DER integrations while minimizing the risks
 - Reviewing technical constraints that limit DER penetration rates on distribution feeders
 - International utility best practices to support greater DER penetration.
 - Modeling and controlling small scale DER such as rooftop solar
 - Grid modernization software and technologies to improve operations
 - Leveraging DER to defer distribution system upgrades
 - Distribution automation
- 4. Taking advantage of digital transformation to improve infrastructure asset management on distribution grids – improving the load factor of the grid**
 - Leveraging digital systems and technologies to make practical asset management decisions
 - Cost reduction of infrastructure condition assessment
 - Distribution grid reliability
 - Outage management
 - Power quality at the customer meter
 - Demand side management by shifting discretionary loads from peak to off-peak hours
- 5. Cyber security for the distribution grid**
 - IT/OT-related threats and mitigation techniques
 - Standards and guides utilities rely on to improve operational cybersecurity systems
 - Best practices of IT/OT system applications for distribution operations concerning cyber security
 - Cybersecurity maintenance requirements
 - Integrating intelligent distribution systems reliably to avoid cyber-attacks

Who Should Attend?

- Distribution electric utilities
- IT/OT technologists and specialists
- Consultants
- Equipment manufacturers and suppliers
- Research facilities and laboratories
- Academics

Why Exhibit?

- Showcase your products
- Generate highly qualified leads
- Generate credibility
- Cultivate relationships
- Maximize your brand exposure

This event is supported by the following member utilities:

American Electric Power
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Ellexicon Energy
Enbridge Gas Distribution
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San Diego Gas and
Electric
Saskatoon Light & Power
SaskPower
Seattle City Light
Southern California Edison
Tacoma Power
Tennessee Valley Authority
Toronto Hydro-Electric
System

Renaissance Esmeralda Resort

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All conference guests are eligible for a preferred rate of \$185 USD a night subject to availability. To receive this rate, please mention the group name CEATI International for the 2022 Distribution Conference. The preferred rate is only available until August 26th, 2022. Make reservations [online](#).

CEATI 2022 Distribution Conference – DAY 1

7:00-8:15 Breakfast

8:15-9:45 Welcome Plenary

- 8:15** **Opening Remarks**
Lizzie Smith, CEATI
- 8:30** **Keynote Presentation**
Anya Kamenetz, Award-Winning Journalist

9:45-10:30 Coffee Break

Session 1: Non-Wires Alternatives (NWA) to Efficient and Reliable Operations

- 10:30** **Panel - Projecting Priority Distribution Projects**
David Kreiss, Independent Energy Consultant
- 11:00** **Pathway to a Smarter Distribution System through Situational Awareness and Predictive Analytics**
Muhammad Humayun, EnerNex
- 11:30** **DERMS Implementation: EPCOR's Experience**
Shane Fraser, EPCOR

12:00-13:30 Networking Lunch

Session 2: Electrification of Transportation – A Threat or Opportunity for Distribution Grids?

- 13:30** **BC Hydro and Powertech Experiences with DC Fast Charging Infrastructure Deployment Program**
Anand Pariyath, Powertech Labs
- 14:00** **Forecasting Grid Capacity Impacts of Electric Vehicles**
Kurtis Martin-Sturmey and Mohamad Elsayi, METSCO Energy Solutions and Leonard Hyunh, ENMAX Power Corporation
- 14:30** **Results of Distribution Circuit Analysis for EV and Electrification Impacts**
Doug Houseman, Burns & McDonnell

15:00-15:45 Coffee Break

Session 3: Distributed Energy Resources (DER) Planning

- 15:45** **The Next Generation AMI System Will Dramatically Change the Way Utilities Operate and Manage Their Distribution Systems**
David Kreiss, Independent Energy Consultant
- 16:15** **Next Generation ADMS/DERMS for Distribution System Management and Optimization**
Robert Uluski, ESTA International
- 16:45** **The Importance of DER Grid Services Role in The Operational Planning**
Fathalla Eldali, NRECA

17:30-19:00 Networking Reception – Expo Hall

CEATI 2022 Distribution Conference – DAY 2

7:00-8:15 Breakfast

Session 4: Distributed Energy Resources (DER) Operations

- 8:15 **Taming the Wild World of Volts, VARs and Large-Scale Renewables**
Bryan Hobson, Idaho Power
- 8:45 **Customers' Needs and Expectations of Distribution Systems**
Joseph Zerdin, Hydro One
- 9:15 **Simulation Studies on Meta-Alert Systems**
Dr. Alex Levran, Electrical Grid Monitoring

9:45-10:30 Coffee Break

Session 5A: Taking Advantage of Digital Transformation to Improve Asset Management on Distribution Grids

- 10:30 **Data Analytics in EPCOR**
Sarah Hanson, EPCOR
- 11:00 **Accelerating Infrastructure Planning Using a Grid-wide Approach, Engineered Intelligence**
Ted Zalucki, Engineered Intelligence and Nathan Eklund, ENMAX
- 11:30 **Secure Methods to Support Grid Resiliency with Data-Driven Asset Management Applications**
Robert Otal, METSCO and Thor Jonsson, EthicalAI

Session 5B: Taking Advantage of Digital Transformation to Improve Operations on Distribution Grids

- 10:30 **Can Artificial Intelligence Support the Prevention of Large-Scale - Wildfires?**
Jonathan Beaty, Kiewit; Steve Hambric, eSmart Systems Inc., Parikshat Pathak, SMUD
- 11:00 **DER Challenges to Distribution Operation Requiring ADMS and DERMS Solutions**
John Barnick, Hitachi-Energy
- 11:30 **Envisioning the Future of Distribution: An Evolutionary Approach to Grid Modernization Planning**
David Anders, Hatch and Matthew Higgins, Toronto Hydro

12:00-13:30 Networking Lunch

Session 6: Cyber Security for the Distribution Grid

- 13:30 **DER Cybersecurity and Value at Risk Frameworks**
Anuj Sanghvi and Tami Reynolds, National Renewable Energy Laboratory
- 14:00 **Cyber Threat Landscape for Distribution Systems**
Megan J. Culler, Idaho National Lab
- 14:30 **Solving the Cybersecurity Rubik's Cube on the Distribution Grid**
Matt Sveinbjornson and Nathan Coutu, ATCO Electric

15:00-15:45 Coffee Break

Session 7: Closing Plenary

- 15:45 **Planning and Operation Towards Net Zero Emissions: Key Takeaways and Looking Towards the Future**
John Fuerth and Shawn Otal, CEATI
- 16:45 **Closing Remarks**
Ari Kelenson, CEATI