



T & D

Smart Grid

Renewables Integration

Co-Located Conferences
November 19-20, 2019 • Palm Springs, CA

Program Guide

T&D Day 1: November 19, 2019

7:00-8:15 Registration & Breakfast

Session Chairs: *George Watt, CEATI International*

8:15-8:30	CEATI International Welcome	<i>Andrew Barrett & Jason Ivall, CEATI International</i>
8:30-8:45	Conference Track Overview	<i>Eric Valois, John Fuerth & John Sabiston, CEATI International</i>
8:45-9:15	Driving Transformation in the California Electric Utility: Opportunities, Challenges, and SCE's Path Forward	<i>Paul Grigaux, Southern California Edison</i>
9:15-9:45	High RES Integration in Europe: How to Manage and Lessons Learned	<i>Gerda De Jong, TenneT</i>
9:45-10:30 Break		
10:30-11:15	To Be Announced	<i>To Be Announced</i>
11:15-12:00	Study of Machine Learning Applications in Transmission and Distribution Asset Inspection	<i>Jason Pfaff & Joseph Dong, Power Engineers</i>

12:00-1:30 Lunch

Transmission: Methodologies for Improving Transmission Inspections

Session Chairs: *Scott Simons, Manitoba Hydro
Anders Dahl, Snohomish PUD*

1:30-2:00	LineRanger Technology: The Next Evolution in Transmission Line Robotics <i>Nicolas Pouliot, Hydro Quebec</i>
2:00-2:30	Guidelines & Utility Experience for Infrared Inspection of Lines <i>Kurtis Martin-Sturmey, METSCO Derrick Brydges, Linewise Aerial</i>
2:30-3:00	Aerial Surveying and The Transmission Grid of the Future <i>Tony Palizzi & Mike Briggs, Fugro Jeremy Cress, AEP</i>

3:00-3:45 Break

3:45-4:15	Development of a Digital Twin for Transmission Line Asset Health <i>Nathan Pinney, LineVision</i>
4:15-4:45	Integration of UAV Technology Into Transmission Line Inspection, Maintenance, and Construction <i>Travis Watts, Southern Company</i>
4:45-5:15	Ameren's Transmission Asset Management UAV Program <i>Michael Kurecki, Ameren</i>

Distribution: Methodologies for Improving Distribution Inspections

Session Chairs: *Robert Harris, NRECA
James Conway, Exelon*

1:30-2:00	Better Pole Inspection ROI Leveraging Risk Management <i>Ronnie Flannery, Effigis</i>
2:00-2:30	Use of Drones for Inspection <i>Stanley McHann, NRECA</i>
2:30-3:00	Wearable Technology for Inspections <i>Vidya Vankayala, Powetech Labs</i>

3:00-3:45 Break

3:45-4:15	Reduced Maintenance for Submersible Transformers <i>Jane Shin, ConEdison Joel Kern, ABB</i>
4:15-4:45	Underground Cable Management System <i>Sarajit Banerjee, Kinectrics Michael Strykiwsky, SaskPower</i>
4:45-5:15	Strategies for Line Capacitor Bank Monitoring <i>Wayne Hartmann, Beckwith Electric</i>

5:30-7:00 Exhibitor Networking Reception

Engage with over 40 exhibitors and sponsors, as well as other key industry stakeholders, including utilities, service providers, consultants, and manufacturers.

Agenda is subject to change without notice.

T&D Day 2: November 20, 2019

7:00-8:00 Breakfast

Session Chair: *Eric Valois, CEATI International*

8:00-8:15 **Morning Announcements**

*George Watt,
CEATI International*

8:15-9:00 **Extending the Visibility of T&D Operations - Enabling Advanced Analytics to Enhance Reliability**

Andrew Zetlan, ABB

9:00-9:45 **Application of Artificial Intelligence (AI) and Machine Learning (ML) Within Utility Maintenance Program**

*Kimberly Laing,
Manitoba Hydro International*

9:45-10:30 Break

10:30-11:15 **Artificial Intelligence (AI) Augmented Transmission and Distribution Line Inspection**

*Janos Toth,
RecognElse Technologies*

11:15-12:00 **Resource Based Strategies for Improved Inspection and Maintenance Activities**

*Mike MacMillan,
Nova Scotia Power*

12:00-1:30 Lunch

Transmission: Strategies for Improving Maintenance Activities

Session Chairs: *Ed Watson, Southern Company & Mike Kurecki, Ameren*

1:30-2:00 **When Should Utilities Take a Broader View of Redefining a CAPEX Problem?**
Keith Sones, Valard & Peter Helland, Midgard Consulting

2:00-2:30 **Using Asset Management Platform for Integrating IT and OT Data and Improving Results Visualization**
Yury Tsimberg, Kinectrics

2:30-3:00 **Condition Assessment of Electrically Overstressed Insulators & Corona Rings**
Christian Bonilla, Powertech Labs

3:00-3:45 Break

3:45-4:15 **Management of Insulator Contamination Problems, Mitigation Methods and Innovative Predictive Maintenance of OH Lines**
Jean-Marie George, Sediver

4:15-4:45 **Thermal Mechanical Testing of Overhead Transmission Fittings**
Dan Stanton, DMC Power

4:45-5:15 **Value Based Decision Making; A Tool for Modernizing Maintenance Strategies**
Scott Simons, Manitoba Hydro

Distribution: Strategies for Improving Maintenance Activities

Session Chairs: *Mehrnoosh Janbakhsh, Saskatoon Power & Light & Sarah Hanson, EPCOR*

1:30-2:00 **Prioritizing Work to Drive Efficiencies**
Jimi Conway, Exelon

2:00-2:30 **Bundling Work to Reduce Maintenance Costs**
Dan Mastrocola, Hydro Quebec

2:30-3:00 **LED Street Lighting Cost Benefit**
Gordon Hayslip, Snohomish P.U.D.

3:00-3:45 Break

3:45-4:15 **Benchmarking and Data Analytics for Efficient Daily Operations**
Kaira Ellis, Eversource Energy on behalf of ARCOS

4:15-4:45 **Maintenance Optimization & Roadmap for SRP's Distribution Assets**
*Kurtis Martin-Sturmey, METSCO
Logan Tsinigine, Salt River Project*

4:45-5:15 **The Use of Health and Criticality Indices for Optimizing Short Term Maintenance Practices**
Bill Higinbotham, EA Technologies

Women in Power Networking Reception

5:30-7:00 All conference attendees are welcome to register and partake in the Women in Power Group's reception; however, please make sure to register ahead of time by emailing wip@ceati.com

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Break 9:45-10:30

Session 1: Data Management for Non-Meter Devices

10:30-11:00	Use Open-Source Tools to Manage Your Time Series Data Today and Tomorrow	<i>Brad Harkavy, LiveData Utilities</i>
11:00-11:30	Data Management for Non-Meter Devices	<i>Viktor Litvinov & Pavel Kovalenko, GRT</i>
11:30-12:00	Engineering the Data Architecture For the Modern Grid	<i>David Kreiss, Bridgewater Consulting Group</i>

Lunch 12:00-1:30

Session 2: Organization for IT Convergence with OT

1:30-2:00	"Times They Are a Changin'": A Journey of Business - BC Hydro Transformation and Automation	<i>Johainah Condillac & Valentina Dabic, BC Hydro</i>
2:00-2:30	Combining OT SDN and PRP Dramatically Improves the Performance and Security of ICS Networks	<i>Jason Dearien, Schweitzer Engineering Laboratories</i>
2:30-3:00	Developing the Next Generation Grid Modernization Engineers	<i>Jason Otwell & Ryan Lane, Burns & McDonnell</i>

Break 3:00-3:45

Session 3: AMI Deployment to Support Modern Grid Operation

3:45-4:15	BC Hydro Mesh Network Advancements to Support Outage Management	<i>Roham Bazarjani & Eugene Crozier, Powertech Labs Inc</i>
4:15-4:45	AMI Based Advanced Applications to Support Modern Grid Operations	<i>David Kreiss, Bridgewater Consulting Group</i>

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Smart Grid Day 2: November 20, 2019

7:30-8:25 Breakfast

Session 4: Forecasting the Impact of EV Charging Stations

8:25-8:30	Day Two Introduction	<i>John Fuerth, CEATI International</i>
8:30-9:00	Forecasting Methodologies for Transportation Electrification	<i>Brad Jensen & Joshua Loyd, Burns & McDonnell</i>
9:00-9:45	Managed EV charging at Workplace: a DEMRS Case Study	<i>Fahimeh Kazempour, Alectra Utilities</i>
9:45-10:30 Break		
10:30-11:00	Forecasting the Impact of EV Charging Stations	<i>Mubbashir Ali, Hatch</i>
11:00-11:30	Electric Nation: Impact of EVs on UK Distribution Networks & Solutions	<i>Paul Barnfather, EA Technology</i>
11:30-12:00	EV Charging and the Distribution System	<i>Gary Rackliffe, ABB</i>
Lunch 12:00-1:30		
1:30-2:15	DER Support for Optimum Load Leveling in Distribution Systems – EASE Project	<i>Sal Kahrobaee, Southern California Edison</i>

Session 5: Distribution Automation

2:15-3:00	Improving DER Hosting Ability from Voltage Rise Constraint	<i>Wayne Hartmann, Beckwith Electric</i>
Break 3:00-3:45		
3:45-4:15	Distribution Automation Architectures	<i>Francisco Neto & Bryant Webb, Burns & McDonnell</i>
4:15-4:45	Grid Modernization and the Integration of Renewable Generation	<i>Gary Rackliffe & John Barnick, ABB</i>
4:45-5:15	A More Reliable Grid Within a Secure Installation Using Power Electronics on 3PH Mixed-Use Feeders	<i>Chad Eckhardt, ERMCO-GridBridge & David Keith, Sandhills Utility Services LLC</i>
5:15-5:20	Concluding Remarks	<i>John Fuerth, CEATI International</i>

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9:45-10:30 Break

Session 1: Modelling and Forecasting for Scenario Planning

10:30-11:15	Utility Panel: Modelling Current and Future Utility Grids with High Penetration of Renewables	<i>TVA, AEP</i>
11:15-12:00	Market Operator Panel: Modelling Bulk Electricity Markets with High Penetration of Renewables	<i>AESO, IESO, TenneT ISO</i>
12:00-1:30 Lunch		
1:30-2:00	Analytic Techniques to Improve the Economic Intelligence of ISO Bids Along with Direct Override Control Signals to Further Advance Energy Storage Economics	<i>Gary Dorris, Ascend Analytics</i>
2:00-2:30	When, Where, Why, and How Much Energy Storage	<i>Randall Johnson, Acelerex</i>
2:30-3:00	Integration of Large Scale and Distributed Variable Energy Resources	<i>Dariush Shirmohammadi, GridBright</i>

3:00-3:45 Break

Session 2: Impacts on Grid Operations and Reliability

3:45-4:15	A Comprehensive Study Process for Renewables and Storage	<i>Doug Houseman, Burns & McDonnell</i>
4:15-4:45	Addressing Service Issues from Solar Customers Backfeeding and Mitigating Localized Intermittent Generation at the Grid Edge	<i>Chad Eckhardt, ERMCO-GridBridge & Grant Wiens, Fortis Alberta</i>
4:45-5:15	Advances in DER Interconnection Processes and Study Methods in ATCO	<i>Alexandre Nassif, ATCO</i>

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8:00-8:15	Morning Announcements	<i>Jason Ivall, CEATI International</i>
8:15-9:00	Grid Reliability with High Penetration of Renewables	<i>Rich Bauer, NERC</i>
9:00-9:45	Panel: Impacts of Renewables on Utility Operations and the Grid	<i>SDG&E</i>

9:45-10:30 Break

Session 3: Technologies and Applications for Mitigating Grid Impacts

10:30-11:15	Hydropower's Role in Integrating Renewables and Energy Storage	<i>Sam Bockenbauer & Marisol Bonnet, US DOE</i>
11:15-12:00	Battery Energy Storage Systems: Congestion-Based Hosting Capacity Analysis Techniques, and Analysis for Transmission Upgrades Deferral	<i>Sameh Kodsí, Teshmont Consulting</i>

12:00-1:30 Lunch

1:30-2:00	Battery Storage and Enhanced Gas Turbine Hybrid Installations	<i>Brent Buffington, Southern California Edison</i>
3:45-4:15	Dynamic VAR Controllers: A New Approach to Increase Solar Hosting Capacity in Distribution Grids	<i>Damien Tholomier, Varentec</i>
2:30-3:00	Utility Experience with Overhead Feeder Connected D-VAR VVO STATCOM for Renewable Integration and Power Quality Improvement	<i>Michael Ross, AMSC</i>

3:00-3:45 Break

3:45-4:15	Optimizing Usage of "End-of-the-Grid" DER Assets for Grid Services	<i>Eamon Hogg & Andrew Ingram, Southern Company</i>
4:15-4:45	DOE-Wide Strategy on Energy Storage Innovation, Manufacturing and Commercialization	<i>Alejandro Moreno, US DOE</i>
4:45-5:15	CEATI Work Plan for Renewables Integration	<i>Jason Ivall, CEATI International</i>

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