

4th Annual Northeast Power and Energy Conference The Westin Portland Harborview, Portland, Maine March 19 – 21, 2019





Dear Participant,

Welcome to the **4th Annual Northeast Power and Energy Conference (NEPEC)**. We are so pleased to be offering this event in the southern part of the great State of Maine. We are happy to have some friends from southern New England as well as New York attend this year's conference. We are also excited for you to enjoy the city of Portland and its many restaurants, shops, and entertainment options. Speaking of entertainment, we hope you will join us for the **off-site event on Tuesday evening** and the **Wednesday evening reception** at the hotel. These will provide a great opportunity to meet new people who are key stakeholders in the power and energy industry.

We have a great program – it's built on the foundation of contributions by all attendees, past and present. The topics vary and we truly believe that there is something for everyone attending this conference. You'll learn about how current issues are being solved as well as how an evolving power system is providing challenges and opportunities for all. The electric energy supply is one of the most complex systems humanity has created and we hope that the conference gives you some tools to help keep this complex system running smoothly.

As any engineer will tell you, continuous improvement is an essential part of getting better. As the conference proceeds, please make notes of any critiques you can provide; good or bad. We appreciate your time in helping to make this conference better

Thank you for attending **NEPEC**.

Have a great time and keep a lookout for next year's conference.

Sincerely,

David Stelmach, OMICRON & Paul Villeneuve, UMaine

Agenda

Tuesday | March 19, 2019

12:00	Registration
1:00	Welcome and Agenda Overview David Stelmach, OMICRON Paul Villeneuve, UMaine
1:15	Opening Remarks Dr. Dana Humphrey, University of Maine
1:30	Keynote: New England Clean Energy Connect (NECEC): A new HVDC Transmission Link Between Quebec and Maine Justin Tribbet, Engineering Leaders Bernardo Escudero, AVANGRID Networks
2:15	Coffee Break and Tech Talk
2:45	Intelligent Disturbance Monitoring in the Modern Substation Kevin Mahoney, Casco Systems
3:30	Challenges to Operating the Power System in a Changing Industry Chris Root, Vermont Electric Power Company
4:15	Fundamentals of Phase Shifting Transformers Brandon Davies, Supervisor – System Protection, TRC Solutions
5:00	Ask the Experts Panel Discussion Moderated by Dave Stelmach, OMICRON and Paul Villeneuve, UMaine
5:30	Special Offsite Event Pat's Pizza



Wednes	day March 20, 2019
08:00	Registration and Breakfast
08:30	Welcome and Agenda Overview David Stelmach, OMICRON Paul Villeneuve, UMaine
08:45	Keynote: Hardware-in-the-Loop Testing for Microgrids and Other Advanced Control Systems Michael Barber, SEL
9:30	Coffee Break and Tech Talk
10:00	Integrating Renewable Energy into the New England Power Grid: Opportunities and Challenges Michael Henderson, ISO-NE
10:45	IEC 61850: It's All About the Files, Not the Drawings Paul Robinson, National Grid
11:30	Lunch
12:30	Increase in Distribution Protection Technology Presents New Project Process Tim Callahan, Eversource
1:15	NERC CIP – The High Impact of Low Impact in 2019 Nick Lauriat, N&ST Kevin Mahoney, Casco
2:00	Coffee Break and Tech Talk
2:30	Lesson Learned Testing Microprocessor Relays Bharadwaj Vasudevan, ABB
3:15	Voltage Sag Problems and Mitigation in Industrial Control Systems Jalil Houari, ConED
3:45	PV Distributed Generation Protection David Morrissey, American Electrical Testing
4:30	Ask the Experts Panel Discussion Moderated by Dave Stelmach, OMICRON and Paul Villeneuve, UMaine
5:00	Evening Reception "Top of the East", The Westin Portland Harborview

Agenda

Thursday | March 21, 2019 08:00 Registration and Breakfast

08:30 Welcome and Agenda Overview Charles Sweetser, OMICRON

08:45 Keynote:

Digital Grid: How do we Make Sense of Today's Sensing?

Howard Self, ABB

09:30 Real World Experience in CT Sizing
Ben Wong, New York Power Authority

10:15 Coffee break and Tech Talk

10:45 Dry Type Current Transformers and Combined Electronic Voltage and Current Transformers (eVCT) – An Alternative Approach and Proven Technology for Extreme Service Conditions

Bob Middleton, RHM International
Haizhen Wang, RHM International

11:30 Meter Correction Based on Measured Data Farhana Choudhury, Electro Industries Ben Clark, OMICRON

12:00 Ask the Experts Panel Discussion
Moderated by Charles Sweetser, OMICRON

12:30 Adjourn



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Your event contacts

Parisa Jalalipour

Marketing Events Coordinator OMICRON electronics Corp. USA 3550 Willowbend Blvd Houston TX 77054 | USA

Tel. +1 713 212 6224 Tel. +1 713 830 4660

parisa.jalalipour@omicronenergy.com

David Stelmach

OMICRON electronics Tel. 781-626-3126 david.stelmach@omicronenergy.com

Paul Villeneuve

University of Maine Tel. 207-581-2271 paul.villeneuve@maine.edu