

# 23rd Annual Georgia Tech Fault and Disturbance Analysis Conference

## April 27-April 28, 2020

Monday, April 27, 2020	
8:00 AM	<b>Registration</b>
8:30 AM	<b>Conference Opening - Welcoming Remarks</b> <b>A.P. Sakis Meliopoulos</b> Professor, School of Electrical and Computer Engineering, Georgia Tech <b>Doug Dunay</b> Georgia Power Corporation Transient Recorder Users Council <span style="float: right;">Chair,</span>
<b>Morning Session - Session Chair: Theo Laughner , Session Vice-Chair: Angelo Tempone</b>	
8:40 AM	<b>Automated Fault and Disturbance Analysis System for Solar Generation</b> <b>Gefei (Derek) Kou , Thomas Purcell, Robert Orndorff</b> Dominion Energy
9:20 AM	<b>A Most Unusual Event Analysis</b> <b>Frank Stacom</b> , Stacom Engineering Company <b>Ed McGann</b> , Vermont Electric Power Company
10:00 AM	<b>Break</b>
10:20 AM	<b>When is a Voltage Differential Relay (87V) not a Voltage Differential Relay?</b> <b>Dean Sorensen, Ankita Roy</b> National Grid
11:00 AM	<b>Event Investigation of 69 kV Double-Circuit Faults</b> <b>Amanvir Sudan</b> , Schweitzer Engineering Laboratories, Inc. <b>Ahsan Mirza, Christopher Bolton, Girolamo Rosselli, John Dixon</b> San Diego Gas & Electric
11:40 AM	<b>Best Paper Award, Recognitions</b>
11:50 AM	<b>Lunch - On Your Own</b>
<b>Afternoon Session - Session Chair: Greg Bradley , Session Vice-Chair: Tony Ranson</b>	
12:50 PM	<b>NERC Update</b> <b>Bob Cummings</b>
1:30 PM	<b>Fault Analysis and the Fourier Transform Explained</b> <b>Amir Makki, Maria Rothweiler, Softstuf Robert Orndorff, John Kotula</b> Dominion Energy
2:10 PM	<b>Break</b>
2:30 PM	<b>A National Infrastructure for Artificial Intelligence on the Grid</b> <b>Theo Laughner</b> PowerGRID-RX, Inc. <b>Sean Murphy, Michael Anderson</b> PingThings, Inc <b>Alexandra von Meier, Mohini Bariya</b> University of California Berkeley
3:10 PM	<b>Display and discussion of Actual Fault Records brought by participants</b> <b>Moderator:</b> Robert Orndorff
3:50 PM	<b>Break</b>
4:00 PM	<b>User Forum - Moderator:</b> Kyle Thomas/Danny Aramouni
5:00 PM	<b>Adjourn</b>

Tuesday, April 28, 2020	
<b>Morning Session - Session Chair:</b> Lori Hartzog, <b>Session Vice-Chair:</b> Marlin Browning	
8:00 AM	<b>Using High-Resolution Oscillography to Improve the Performance of Controlled Switching for Transformers</b> Ritwik Chowdhury, Brett Hampson, Schweitzer Engineering Laboratories, Inc. Vetti Bala Genesis Energy
8:40 AM	<b>Analysis of a Transformer Differential Relay Over-trip on an External Fault at National Grid</b> Yujie (Irene) Lu, Song Ji National Grid
9:20 AM	<b>Greatest Hits: A Compilation of My Favorite Waveform Disturbances</b> David Mueller, EnerNex
10:00 AM	<b>Break</b>
10:20 AM	<b>Proposal of a Novel Automation Methodology for Disturbances Analysis Process in XM, the Colombian Electrical System Operator</b> Nolasco de Jesus Orrego XM, Felipe Quintero Universidad de Medellin
11:00 AM	<b>Evaluation of Electrical Degradation in High Voltage Circuit Breaker Monitoring</b> Phillip Corliss, PMC Nicola Gariboldi Qualitrol Corporation, LLC
11:40 AM	<b>Lunch - On Your Own</b>
<b>Afternoon Session - Session Chair:</b> Tony Murphy , <b>Session Vice-Chair:</b> Irean Lu	
12:40 PM	<b>Utilization of PMU data through effective angle prediction algorithm for the prevention of wide area blackouts</b> Sarina Adhikari, David Mueller, Bob Zavadil, EnerNex, A CESI Company
1:20 PM	<b>Functional Testing of Disturbance Recording Systems in Digital Substations</b> Alexander Apostolov, OMICRON electronics
2:00 PM	<b>Analysis of the unexpected operations at a 345kV National Grid substation associated with capacitor bank switching-off operation</b> Song Ji, Yujie (Irene) Lu, National Grid
2:40 PM	<b>Break</b>
3:00 PM	<b>Harmonic Analysis of a wind power plant-A comparative analysis case study of modeling and measurement</b> Bikash Poudel, Chandra Pallem, David Mueller Enernex A CESI Company
3:40 PM	<b>A Power Utility in-house Automated Disturbance Recording System Using Protection IEDs, Modbus and Python</b> Maxwell Kwesi Graham, Emmanuel Dana Buedi Damodar, Karl Senanu Krause, Emmanuel Sarfo Kwaffo Power Distribution Services Ghana Limited
4:20 PM	<b>Case Studies in Analyzing Transformer Installation Faults</b> Sudipta Maiti Damodar Valley Corporation
5:00 PM	<b>Closing Remarks - Adjourn</b>

<b>Alternate Papers &amp; Coordinator: Chair</b> Rene Mendoza , <b>Vice-Chair</b> Danny Aramouni	
<b>Case Studies in Analysis of Transmission Line Faults</b> Sudipta Maiti Damodar Valley Corporation	
<b>Standards-based Measurements in a Multi-function DFR</b> Shane Haveron AMETEK Power Instruments	