

25th Annual Georgia Tech Fault and Disturbance Analysis Conference

May 2-3, 2022

Monday, May 2, 2022	
8:00 AM	Registration
8:30 AM	Conference Opening - Welcoming Remarks A.P. Sakis Meliopoulos Professor, School of Electrical and Computer Engineering, Georgia Tech Lori Hartzog Georgia Transmission Corporation Chair, Transient Recorder Users Council
Morning Session - Session Chair: Doug Dunay , Session Vice-Chair: Luis Collazo	
8:40 AM	Case Studies for Utility Scale Solar Facility Performance and Power Quality Issues Anthony Murphy, David Deloach, Nathan Hooker, Jim Rossman, Jonathan Sides, Tennessee Valley Authority
9:20 AM	Infrastructure for Protection and Control of an Active Distribution System Sakis Meliopoulos, George Cokkinides, Georgia Tech Glenn Wilson, Southern Company Kenneth Wilhelm, Avista Utilities Rebecca Rye, Dominion Energy Saeed Lotfifard, Washington State University
10:00 AM	Break
10:20 AM	Using Secondary Voltage Data to Detect Struggling Distribution Transformers Theo Laughner, Lifescale Analytics Chris Bolig, Robert Price, Matthew Wilkin, Whisker Labs
11:00 AM	GTC Fault Trace Tool Case Studies Lori Hartzog, Georgia Transmission Corporation
11:40 AM	Best Paper Award, Recognitions
11:50 AM	Lunch - On Your Own
Afternoon Session - Session Chair: Greg Bradley , Session Vice-Chair: Tony Ranson	
12:50 PM	NERC Update Rich Bauer, NERC
1:30 PM	Learning from Power Signals Jonathan Boyd, Joshua Tyler, Alissa Coleman, Donald Reising The University of Tennessee at Chattanooga Anthony Murphy, Tennessee Valley Authority
2:10 PM	Break
2:30 PM	Disturbance Analysis and Monitoring using IEC 61850 Sampled Values Data in Digital Substations Nuwan Perera, Rene Midence, Anderson Oliveira, ERLPhase Power Technologies Ltd.
3:10 PM	Display and Discussion of Actual Fault Records Brought by Participants Moderator: Robert Orndorff
3:50 PM	Break
4:00 PM	User Forum - Moderator: Angelo Tempone
5:00 PM	Adjourn

Tuesday, May 3, 2022	
Morning Session - Session Chair: Jon Goodson, Session Vice-Chair: Irene Lu	
8:00 AM	Voltage Unbalance in a Changing Grid Grace Piercy, David Deloach, Justin Kuhlers, Anthony Murphy, Tennessee Valley Authority
8:40 AM	Locating Complex Double-Line-to-Ground Faults: Theory and Field Case Study Steven Chase, Sumit Sawai, Schweitzer Engineering Laboratories, Inc. Doug Taylor, Avista Utilities
9:20 AM	High-Density Distributed Sensor Network For Monitoring Grid Events Theo Laughner, Lifescale Analytics Robert King, Good Company Bob Marshall, Whisker Labs
10:00 AM	Break
10:20 AM	Architecture, Modeling and Role of Digital Fault Recorders in Digital Substations Adriano Pires, Annelise Bittencourt, Igor Cruz, Harsh Vardhan, General Electric
11:00 AM	Double-Ended Traveling-Wave Fault Locating Without Relay-to-Relay Communications Greg Smelich, Jesús Cruz, Richard Kirby, Yusuf Zafer Korkmaz, Gianfranco Patti, Schweitzer Engineering Laboratories, Inc. David López Cortón, Jorge Vaquero Melado, Red Eléctrica de España
11:40 AM	Lunch - On Your Own
Afternoon Session - Session Chair: Theo Laughner , Session Vice-Chair: Shane Haveron	
12:40 PM	Data Sources for Fault and Disturbance Analysis in IEC 61850 Based Digital Substations Alexander Apostolov, Omicron Energy
1:20 PM	Synchrophasor Analysis of Grid Events (SAGE): PMU Based Tool for the Real Time Control Room Security Desk Sudeep Mohanan, Raghava Malapati Venkata Dharun, Ganesh T R, Kumar S P, Suresh V, POSOCO
2:00 PM	Voltage Transformer Failure Prediction With Synchrophasor Data Md Arif Khan, Joshua Wold, Greg Zweigle, Jared Bestebreuer, Schweitzer Engineering Laboratories, Inc. Matthew Rhodes, Salt River Project
2:40 PM	Break
3:00 PM	Analysis of the Unexpected Operations of Line POTT Scheme During Remote 345kV Bus Fault Isolation Song Ji, Irene Lu, Michael Gregg, Dylan Dean, National Grid
3:40 PM	UHS Relay Testing for Optimal Protection of a Long 345 kV Line with Series Compensation Matthew Lewis, Lonestar Transmission, LLC Richard Kirby, Schweitzer Engineering Laboratories, Inc. Scott Cooper, OMICRON Electronics Corporation
4:20 PM	Transmission Line Parameter Estimation Using Traveling-Wave Fault Location Data Arun Shrestha, Sathish Kumar Mutha, Schweitzer Engineering Laboratories, Inc
5:00 PM	Closing Remarks - Adjourn

Alternate Papers & Coordinator: Chair Robert Orndorff ,Vice-Chair Danny Aramouni	
	Finding Faults Fast Saves Money and Improves Service Ricardo Abboud, Artur Hoff, Renan Bernardes, Paulo Lima, Schweitzer Engineering Laboratories, Inc.
	Transformer Loss of Life Monitoring – an Overview and Review of In-service Installations Highlighting Achieved Benefits Alex Piatniczka, Mike Kockott, Sergiu Paduraru, Galina Antonova, Hitachi-Powergrids