Fault and Disturbance Analysis Conference

April 28-29 | Georgia Tech Global Learning Center | Atlanta





MONDAY, APRIL 28, 2014

8:00 AM

Registration - Georgia Tech Global Learning Center

8:30 AM

Conference Opening / Welcoming Remarks

A.P. Sakis Meliopoulos, Georgia Power Distinguished Professor, School of Electrical and Computer Engineering Marlin A. Browning, Chairman, Transient Recorder Users Council

Tribhuwan Choubey, Vice Chairman, Transient Recorder Users Council

MORNING SESSION:

MA (Georgia Tech Global Learning Center)

Session Chair: **Greg Bradley** Co-Chair: **R. Jeff Ricker**

8:40 AM

Locating Faults by the Traveling Waves They Launch

Ed Schweitzer, Schweitzer Engineering Laboratories, Inc.

9:20 AM

Summary Changes in 2013 IEE/IEC Dual Logo COMTRADE Standard

Jim Hackett, Member, Relaying Communications Subcommittee, Power System Relaying Committee Ratan Das, Chair, Relaying Communications Subcommittee, Power System Relaying Communications Subcommittee, Power System Relaying Committee

10:00 AM Break

10:20 AM

The BIG Picture – A Comprehensive Look at Automated Systems for Disturbance Analytics Using Open Source Software

Fred Elmendorf, Grid Protection Alliance

11:00 AM

Accuracy, Precision, Delays and Drift: How Good Is Your Time Reference?

Conrado Seibel, Benno Hornischer, Stephan Kock, SecuControl GmbH

11:40 AM

Best Paper Award Presentation

A.P. Sakis Meliopoulos, *Georgia Power Distinguished Professor, School of Electrical and Computer Engineering*

11:50 AM Lunch (on your own)

AFTERNOON SESSION:

MP (Georgia Tech Global Learning Center) Session Chair: **Alan D. Baker**

Co-Chair: Robert Orndorff

12:50 PM

NERC Update

Bob Cummings, *North American Electric Reliability Corporation*

1:30 PM

Improve Transmission Fault Location and Distance Protection Using Accurate Line Parameters

Hugo E. Prado-Félix, Víctor H. Serna-Reyna,

Comisión Federal de Electricidad

Venkat Mynam, Marcos Donolo, Armando Guzmán, Schweitzer Engineering Laboratories, Inc.

2:10 PM Break

2:30 PM

Diagnosis of Protection Misoperations Due to Mutually-Coupled Transmission Lines

Terry Bowman, Duke Energy

3:10 PM

Display and Discussion of Actual Fault Records Brought by Participants

Moderator: Robert Orndorff, Dominion Virginia Power

3:50 PM Break

4:00 PM

User Forum

Moderator: Theo Laughner, Tennessee Valley Authority

5:00 PM Adjourn



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TUESDAY, APRIL 29, 2014

MORNING SESSION:

TA (Georgia Tech Global Learning Center) Session Chair: **Jim Hackett** Co-Chair: **Andy A. Windham**

8:00 AM

The Role of IEC 61850 Reporting Faults and Disturbances Analysis

Alexander Apostolov, OMICRON Electronics

8:40 AM

20 Years and Counting: Deploying a System for Automated Analysis

Tomo Popovic, *XpertPower*Mladen Kezunovic, *Texas A&M*Donald Sevcik, Robert Lunsford, Brian Clowe, *CenterPoint Energy*

9:20 AM

Comparison of Methods to Determine Transmission Line Impedance

Kyle Thomas, Dominion Virginia Power

10:00 AM Break

10:20 AM

Update on State Estimation Based Object-Oriented DSE Based Protection

A.P. Meliopoulos, Liangyi Sun, Rui Fan, Georgia Institute of Technology

Paul Myrda, Electric Power Research

11:00 AM

Tutorial on Fault Locating Embedded in Line Current Differential Relays – Methods, Implementation, and Application Considerations

Omar Avendano, Portland General Electric Elizabeth Godoy, Comisión Federal de Electricidad Bogdan Kasztenny, Normann Fischer, Héctor J. Altuve, Bin Le, Schweitzer Engineering Laboratories

11:40 AM **Lunch** (on your own)

AFTERNOON SESSION:

TP (Georgia Tech Global Learning Center) Session Chair: **Tony Napikoski** Co-Chair: **Dave Bertagnolli**

12:40 PM

Computer-Aided Fault Analysis Dedicated to the Power Transmission System

Ryszard Kowalik, Denis Kobler, Institute of Power Engineering Warsaw University of Technology, Systems Europe

1:20 PM

Automatic Identification of Non-Compliant Fault Records

David Cole, Peter Glover, Colm White, Qualitrol L.L.C.

2:00 PM

Analysis of Cascading Operations for Adjacent Line Faults at National Grid

Y. Irene Lu, National Grid

2:40 PM Break

3:00 PM

How the Use of Non-Intrusive Sensors Facilitate NERCs Regional Reliability Standard (PRC-002)

Don Bukart, Consolidated Edison of New York

3:40 PM

Fault Experiences in a Transmission Line with Series Compensation

Yofre Jacome, Francisco Torres, COES – Peru

4:20 PM

Comparison of Analog Measurements Between Merging Units and Conventional Acquisition Systems

Carlos Alberto Futra, Igor Cruz, Tiago Franzen, Rafael Rosar Matos, Fernando Costa Neves, Reason Tecnologia S.A. Gilmar Krefta, Companhia Paranaense de Energia S.A. (COPEL)

5:00 PM Adjourn

ALTERNATE PAPERS:

Enhanced Distribution Feeder Fault Location Scheme liia Voloh, GE Digital Energy

Why IEC61850 Process Bus Will Change Your Life? Carlos Alberto Dutra, Sérgio Luiz Zimath; Jacqueline Gisele Rolim Reason Tecnologia S.A, Universidade Federal de Santa Catarina