



## General Information

### Women in Power Workshop (tutorial)

*Sunday, 21 July 2013, 8:00 AM–5:00 PM, MAR – Shaughnessy I*

This tutorial has been cancelled.

### PowerTech Labs Inc.

*Wednesday, 24 July 2013*

The departure time is incorrect on page 14 of the program. **The tour will depart at 12:30 PM.**

## Technical and Other Sessions

### Power System Operations Poster Session (poster)

*Monday, 22 July 2013, 5:00 PM–7:00 PM, VCC East – Exhibit Hall BC & Show Office*

The author list for the following paper has been updated to what is below.

GM0875, BPA's Experience of Implementing Remedial Action Schemes in Power Flow for Operation Studies

R. RAMANATHAN, Maxisys Inc

B. TUCK, BPA

J. O'BRIEN, BPA.

### Power System Dynamic Performance Poster Session

*Monday, 22 July 2013, 5:00 PM–7:00 PM, VCC East – Exhibit Hall BC*

The following papers will not be presented in the poster session since these papers are part of the *Identification of Electromechanical Modes in Power Systems Combo Session with PSDP Power System Stability Subcommittee Meeting Panel Session, 23 July 2013, 1:00 PM – 5:00 PM:*

GM0630, Linear Ringdown Analysis Methods

M. CROW, Missouri University of Science & Technology

J. SANCHEZ-GASCA, General Electric

J. CHOW, Rensselaer Polytechnic Institute

J. HAUER, Pacific Northwest National Laboratory

H. HUANG, Pacific Northwest National Laboratory

J. PIERRE, University of Wyoming

D. TRUDNOWSKI, Montana Tech University

L. VANFRETTI, KTH Royal Institute of Technology

N. ZHOU, Pacific Northwest National Laboratory

GM0702, Industry Responses to a Questionnaire on the Introduction, Performance and Usage of Modal Estimators in Practice

D. VOWLES, University of Adelaide

M. GIBBARD, University of Adelaide

GM1067, Practical Experience with Modal Estimation Tools at Swissgrid

M. LARSSON, ABB Switzerland Ltd.

W. SATTINGER, Swissgrid ag

L. SANTOS, ABB Switzerland Ltd.

R. NOTTER, Swissgrid ag

GM0649, Estimation of Electromechanical Oscillations in the Nordic Grid Using Ambient Data Analysis

L. VANFRETTI, KTH Royal Institute of Technology

V. PERIC, KTH Royal Institute of Technology

J. GJERDE, Statnett SF

### Smart Grid and FACTS (paper forum)

*Tuesday, 23 July 2013, 8:00 AM–12:00 PM, VCC West – West Meeting Room 208-209*

Session Chair Added: D. Houseman, Enernex

**Protection, Control and PMUs (paper forum)**

*Tuesday, 23 July 2013, 8:00 AM–12:00 PM, VCC West – West Meeting Room 211*  
Session Chair Added: M. Nagpal, BC Hydro

**Advanced Automation Tech Hydro Wind (panel session)**

*Tuesday, 23 July 2013, 8:00 AM–12:00 PM, MAR – Pinnacle III*  
The first Session Co-Chair's Affiliation has been added  
The second Session Co-Chair's last name was misspelled  
Co-Chair, D. Apps, BC Hydro  
Co-Chair, A. Moshref, BBA Engineering

**Algorithms and Tools for Managing Future Power Grids and Electricity Markets (panel)**

*Tuesday, 23 July 2013, 8:00 AM–10:00 AM, VCC East – East Meeting Room 2, 3 & Foyer S*  
Paper 2013GM1988 is removed from the panel session; it will be presented in the Power System Stability and Security (paper forum) on Wednesday, 24 July 2013, 8:00 AM–12:00 PM, VCC West – West Meeting Room 211 as paper 2013GM1065

**Protection, Control and PMUs (paper forum)**

*Tuesday, 23 July 2013, 8:00 AM–12:00 PM, VCC West – West Meeting Room 211*  
Spelling of Author's Affiliation is incorrect in the program  
Dr Panagis Vovos, University of Patras

**Intelligent OPF in an Uncertain and Variable Environment (panel)**

*Tuesday, 23 July 2013, 10:00 AM–12:00 PM, VCC East – East Meeting Room 8 & 15*  
*Panelist's Names for paper GM1002 have been corrected.*  
GM1002, Optimal Power Flow – R meets D  
B. STOTT, O. ALSAC

**Impacts of Renewable Energy Generation and Micro-Grids (paper forum)**

*Tuesday, 23 July 2013, 1:00 PM–5:00 PM, VCC West – West Meeting Room 211*  
Session Chair Added: C. Smith

**Power System Planning, Operation and Dynamic Performance (paper forum)**

*Tuesday, 23 July 2013, 1:00 PM–5:00 PM, VCC West – West Meeting Room 208-209*  
Session Chair Added: R. Chu, PECO Energy

**Identification of Electromechanical Modes in Power Systems (Combo Session with PSDP Power System Stability Subcommittee Meeting)**

*Tuesday, 23 July 2013, 1:00 PM–5:00 PM, MAR – Pinnacle III*  
The following presentation will be part of this session  
GM2526, Mode Meter Methods for Identification of Electromechanical Modes  
D. TRUDNOWSKI, Montana Tech  
J. PIERRE, University of Wyoming

**Transaction Presentations on Electric Machines (transactions paper)**

*Tuesday, 23 July 2013, 1:00 PM–5:00 PM, MAR – Point Grey*  
Session Chair Added: O. Mohammed, Florida International University

**Transaction Presentations on Electric Machines (transactions paper)**

*Tuesday, 23 July, 2013:00 PM–5:00 PM MAR – Point Grey*  
The following Paper will be presented in this session:  
GM0046, A Study on Rotor Surface Losses in Small-to-Medium Cylindrical Synchronous Machine  
D. Hiramatsu; T Tokumasu; M. Fujita; M. Kakiuchi; T. Otaka; O. Sato, K. Nagasaka

**Power System Dynamic Performance Committee Transaction Paper Session # 2**

*Tuesday, 23 July 2013, 1:00 PM–5:00 PM, VCC West – West Meeting Room 110*  
J. Milanovic, The University of Manchester, added as session chair

**Power System Planning, Operation and Dynamic Performance**

*Tuesday, 23 July 2013, 1:00 PM–5:00 PM, VCC West – West Meeting Room 208-209*  
B. Chowdhury, University of North Carolina, added as Session Chair

**Power System Planning, Operation and Dynamic Performance (paper forum)**

*Tuesday, 23 July 2013, 1:00 PM–5:00 PM, VCC West - West Meeting Room 208-209*

Author names have been corrected to what is below.

SREEJITH. S, National Institute of Technology  
SISHAJ P SIMON, National Institute of Technology  
N P PADHY, IIT Roorkee

**Impacts of Geomagnetic Disturbance (GMD) Events on Electric Power Systems (super session – panel)**

*Tuesday, 23 July 2013, 1:00 PM–5:00 PM, VCC East – East Meeting Room 1 & Foyer S*

Change in the title of the presentation below:

Modeling Geomagnetically Induced Currents – The Evolution in Techniques over the last 30 years  
D. Boteler, Natural Resources Canada

**Hands-on Activities for Pre-Engineering Outreach (panel)**

*Tuesday, 23 July, 1:00 PM–5:00 PM VCC West – West Meeting Room 119-120*

The Affiliation for the Session Chair is incorrect in the program, it should be Washington State University

Chair: A. Srivastava, Washington State University

**Basic Tutorial on Gas Insulated Lines (tutorial)**

*Wednesday, 24 July 2013, 8:00 AM–5:00 PM, REN – Salon C*

This tutorial has been cancelled

**Power System Stability and Security (paper forum)**

*Wednesday, 24 July 2013, 8:00 AM–12:00 PM, VCC West – West Meeting Room 211*

Session Chair Added: B. Chowdhury, University of North Carolina

**DC Applications and Electric Vehicles (paper forum)**

*Wednesday, 24 July 2013, 8:00 AM–12:00 PM, VCC West – West Meeting Room 208-209*

Session Chair Added; W. Litzemberger

**DC Applications and Electric Vehicles (paper forum)**

*Wednesday, 24 July 2013, 8:00 AM–12:00 PM, VCC West – West Meeting Room 208-209*

Paper GM1792, Configurations and Earthing of HVDC Grids *will not be presented in this session; it will be presented in the following panel session: The New Transmission Level – Smart European Overlay Grid (panel), Wednesday, 24 July 2013, 8:00 AM–11:00 AM, VCC East – East Meeting Room 7*

**DC Applications and Electric Vehicles (paper forum)**

*Wednesday, 24 July 2013, 8:00 AM–12:00 PM, VCC West – West Meeting Room 208-209*

Paper 2013GM535 *will not be presented in this session; it will be presented in the following panel session: The New Transmission Level – Smart European Overlay Grid (panel), Wednesday, 24 July 2013, 8:00 AM–11:00 AM, VCC East – East Meeting Room 7*

**Innovation and Advancements in Protection, Automation and Control for Evolving Power Systems (super session – panel)**

*Wednesday, 24 July 2013, 8:00 AM–12:00 PM, VCC East – East Meeting Room 1 & Foyer S*

*The paper listed below will be presented in this super session*

GM2206, Optimizing Wide Area Measurement System Architectures with Advancements in Phasor Data Concentrators (PDCs)

M. KANABAR, GE Digital Energy  
M. ADAMIAK, GE Digital Energy  
J. RODRIGUES, GE Digital Energy

**FERC Order 1000 – Regional and Interregional Transmission Planning and Cost Allocation (panel)**

*Wednesday, 24 July 2013, 8:00 AM–12:00 PM, REN – Ballroom I*

Update to presenter list.

**Panelists:**

- 1) Chris Mensah-Bonsu, “*FERC Order 1000 – Key Touch Points*,” California ISO
- 2) Henry Chao, “*NYISO Order 1000 Compliance: Regional & Interregional Topics*,” New York ISO
- 3) Paul F. McGlynn, “*Overview of PJM’s FERC Order 1000 Compliance*,” PJM Interconnection,
- 4) Ron Chu, “*A PJM Consensus Transmission Cost Allocation Method for Order 1000 Compliance*,” PECO-Energy Company
- 5) Marsha H. Smith, “*A State Regulator’s View of FERC Order No. 1000*,” Idaho Public Utilities Commission
- 6) Jay Caspary, “*What’s Beyond FERC Order 1000*,” Southwest Power Pool

- 7) Laura Rauch, "MISO Compliance with Order 1000," Midwest ISO
- 8) Warren Lasher, "Transmission Planning in the ERCOT Region," ERCOT
- 9) Michael Henderson, "ISO New England's Plans for Compliance with Order 1000," ISO-New England
- 10) Neil Millar, "Transmission Planning at the California ISO and FERC Order 1000," California ISO:

**Distributed Energy Resources and Demand Response (paper forum)**

*Wednesday, 24 July 2013, 1:00 PM–5:00 PM, VCC West – West Meeting Room 211*

Session Chair Added: K. Hedman

**Energy Efficiency and System Reliability (paper forum)**

*Wednesday, 24 July 2013, 1:00 PM–5:00 PM, VCC West – West Meeting Room 208-209*

Session Chair Added: M. Ortega-Vazquez, UW

**Planning for Environmental Retirements and Renewable Integration (panel session)**

*Wednesday, 24 July 2013, 1:00 PM–5:00 PM, MAR – Shaughnessy II*

The panelist list has been updated to what is below:

- Paul McGlynn, General Manager, PJM Planning to talk about PJMs effort and perspective-PJM Compliance Filing
- Henry Chao or John Buechler, New York ISO
- Matt Tackett, Midwest ISO perspective
- Neil Millar, California ISO
- Warren Lasher, ERCOT
- Jay Caspary, SPP
- Gil Bennet of NALCOR
- Mike Henderson, ISO New England
- Xiaokang Xu, S&C Electric Company
- Sundar R Venkataraman, GE Energy

**Flexible Infrastructure — A Necessary Ingredient for the Renewable Energy**

**Future (panel)**

*Wednesday, 24 July, 2:00 PM–5:00 PM VCC West – West Meeting Room 120*

*The Following presentation will not be presented:*

"Utilizing demand side flexibility to balance renewables in the Pacific northwest", C. Ashley, EnerNOC,

**Flexible Infrastructure — A Necessary Ingredient for the Renewable Energy Future (panel)**

*Wednesday, 24 July 2013, 2:00 PM–5:00 PM, VCC West – West Meeting Room 120*

Panelists updated:

GM1102, Spanish Experience of Flexibility from Storage Technologies - Will now be presented by A. Moltó, Red Elctrica de Espana

**Control of Converter Interfaced DER Connected at Distribution Networks (panel session)**

*Wednesday, 24 July 2013, 3:00 PM–5:00 PM, REN – Port of Vancouver*

The author's name for paper GM2475 below is misspelled in the program; the correct listing is below GM2475, Coordinated dispatch of dispersed energy sources for voltage control in distribution systems

T. VAN CUTSEM, University of Liège

**Smart Grid 203: Distribution System (tutorial)**

*Thursday, 25 July, 8:00 AM–12:00 PM MAR – Pinnacle I*

Room changed to Mar – Pinnacle I

**Distribution Overcurrent Protection and Coordination (tutorial)**

*Thursday, 25 July, 8:00 AM–12:00 PM MAR – Ambleside I*

Room Changed to MAR – Ambleside I

**Planning and Implementation Transactions Papers (transactions paper)**

*Thursday, 25 July 2013, 8:00 AM–12:00 PM, MAR – Shaughnessy*

Session Co-Chair added: Dr. X. Feng, ABB

**Power System Equipment (paper forum)**

*Thursday, 25 July 2013, 8:00 AM–12:00 PM, VCC West – West Meeting Room 208-209*

Session Chair Added: M. Sedlak

**Power System Analysis, Computing and Economics Committee Poster Forum (paper forum)**

*Thursday, 25 July 2013, 8:00 AM–12:00 PM, VCC West – West Meeting Room 211*

Session Chair Added: P. Hines, UVM

**Transmission System Efficiency and Reliability Improvements Super Session**

*Thursday, 25 July 2013, 8:00 AM–12:00 PM, VCC East – East Meeting Room 2, 3*

Panelists and Topics added:

- Lessons Learned from the EPRI Efficient Transmission Case Study Collaborative
  - Alberto Del Rosso – Electric Power Research Institute
- Transmission Efficiency Implications of Developing an EHV Overlay
  - Jim McCalley – Iowa State University
- Utilization of Low loss Conductors to Reduce Transmission Losses
  - Danna Liebhaber – Bonneville Power Administration
- Utilization of Dynamic Ratings Application in ERCOT for increasing Transmission Utilization
  - Sarma (NDR) Nuthalapati – Electric Reliability Council of Texas
- Topology Control for System Efficiency – Simulations on PJM Real Time Markets
  - Pablo Ruiz – The Brattle Group
- Synchrophasor-based voltage stability assessment at Entergy
  - Adam Wigington – Electric Power Research Institute
- On-line Dynamic Stability Assessment for Operating with 50% and Higher Wind Penetration
  - Michael Kelly – EirGrid
- Use of HVDC Transmission to Deliver Wind Energy
  - Jay Caspary – Southwest Power Pool

**Wind and Solar Power (paper forum)**

*Thursday, 25 July 2013, 1:00 PM–5:00 PM, VCC West – West Meeting Room 208-209*

Session Chair Added: H. Johal, G.E.

**Geomagnetic Disturbances, Micro-Grids and Power System Analysis (paper forum)**

*Thursday, 25 July, 2013 1:00 PM–5:00 PM VCC West – West Meeting Room 211*

Session Chair Added: W. Cassel

**Unit Scheduling and Market Topics (transactions paper)**

*Thursday, 25 July, 1:00 PM–5:00 PM VCC West – West Meeting Room 112*

Paper GM2430, Real Option Valuation of FACTS Investments Based on the Least Square

Monte Carlo Method Transaction Number: TPWRS-00168-2010 will no longer be presented in this session, it will now be presented in the following session:

*Renewable Resource Operations (transactions paper)*

*Tuesday, 23 July, 8:00 AM–12:00 PM VCC West – West Meeting Room 112*

**Open Source Tools for Smart Grid Applications (panel)**

*Thursday, 25 July 2013, 3:00 PM–5:00 PM, VCC East – East Meeting Room 7*

Session Chair information has been updated to what is below

L. Vanfretti, KTH Royal Institute of Technology

F. Milano, University College Dublin

D. Lavery, Queen's University Belfast

**Linkage between Energy and Water (panel)**

*Thursday, 25 July 2013, 3:00 PM–5:00 PM, MAR – Shaughnessy II*

Panelist information has been added:

Significance of Water for Energy needs  
RUPCHAND, Tamil Nadu Electricity Board

Planning/Integrating Energy & Water  
M. LUIKEN, Lambert College

Economics of Water Resources Planning  
A. BRANSO, Worly Parsons, Vancouver

Regulations on Water and Energy  
J. CARMICHAEL, Metro Vancouver, American Water Works Association,

## **Committee and Other Entity Meetings**

### **Non-Committee**

- Australian Professors of Power Engineering Committee Meeting  
*Wednesday, 24 July 2013, 2:00 PM–4:00 PM, REN – Port of Macau*  
This meeting was added after the program was generated

### **Electric Machinery**

- EMC WG-10 Revision of IEEE 112  
*Sunday, 21 July 2013, 1:00 PM–5:00 PM, REN – Port of Hong Kong*  
Meeting Cancelled
- EMC WG-9 Guide to Testing Permanent Magnet  
*Sunday, 21 July 2013, 8:00 AM–12:00 PM, REN – Port of Hong Kong*  
Meeting Cancelled

### **Power & Energy Education**

- Student Meetings Subcommittee  
*Tuesday, 23 July 2013, 1:00 PM - 3:00 PM VCC East – East Meeting Room 18*  
This meeting has been relocated to and the time has changed to:  
*Tuesday at 11:45AM-12:45PM lunch meeting at [Mahony & Sons](#) (located to the west of the convention center).*

### **Power System Dynamic Performance**

- CIGRE Working Group on C4.605 Modeling and Aggregation of Loads in Flexible Power Networks  
*Sunday, 21 July 2013, 1:00 PM–5:00 PM, REN – Port of New York*  
Title changed to: CIGRE Working Group on C4.603 Analytical Techniques and Tools for Power Balancing Assessment

### **Transmission and Distribution Committee**

- **Transmission & Distribution Administrative Committee**  
*Thursday, 25 July 2013, 8:00 AM–11:00 AM, REN – Ballroom II*  
Time updated to 8:00 AM–11:00 AM
- **PQ – Power Disturbance Analytics WG**  
*Tuesday, 23 July 2013, 10:30 AM–12:00 PM, VCC West – West Meeting Room 113*  
Meeting start time changed to 10:30 AM
- **Overhead Lines – ANSI C29 TF**  
*Thursday, 25 July 2013, 8:00 AM–5:00 PM, REN - Port of New York*  
The meeting room was incorrect in the program – the correct room is REN - Port of New York  
The start time is 8:00 AM