

# **2011 IEEE Rural Electric Power Conference**

**(REPC 2011)**

**Chattanooga, Tennessee, USA  
10 – 13 April 2011**



**IEEE Catalog Number: CFP11RUE-PRT  
ISBN: 978-1-61284-057-4**

# 2011 IEEE RURAL ELECTRIC POWER CONFERENCE

## Chattanooga, TN

### Program Schedule

#### Sunday, April 10, 2011

- 1:00 PM – 6:00 PM    **Registration** (Convention Center)
- 10:00 AM – 4:00 PM    **Set Up Exhibits** (Convention Center – Banquet Rooms I/J/F/G)
- 1:00 PM – 3:00 PM    **Subcommittee Meetings as Scheduled** (Marriott Hotel)  
Computer Applications (East Room)  
Job Training and Safety (Board Room)  
NESC (Signal Mountain Room)  
Power Quality and Efficient Electric Use (West Room)  
Standards (Director's Room)  
NRECA T&D Underground (Lookout Mountain Room)
- 3:00 PM – 4:30 PM    **Committee Business Meeting** (Marriott Hotel - Tennessee River Room)
- 4:30 PM – 7:00 PM    **Vendor Display/Exhibitions & Reception** (Convention Center – Banquet Rooms I/J/F/G)

#### Monday, April 11, 2011

- 7:00 AM – 4:00 PM    **Registration** (Convention Center)
- 7:00 AM – 8:00 AM    **Breakfast Buffet** (Marriott Hotel- Plaza Ballroom)
- 9:00 AM – 4:00 PM    **Companion Tour: Chattanooga Aquarium & Southern Bell Riverboat**  
Depart from Marriott Hotel Lobby
- 8:30 AM – 9:00 AM    **Opening General Session** (Convention Center- Meeting Rooms 4/5/6)  
**Presiding:** Rhonda Whitaker-Hamm, REPC Chairperson  
**Keynote Speaker:** Robin E. Manning, Executive Vice President of TVA's Power System Operations
- 9:00 AM – Noon      **Technical Session "A"** (Convention Center- Meeting Rooms 4/5/6)  
**Moderator:** Rhonda Whitaker-Hamm
- 9:00 AM              **A-1 Electric Power and Energy Engineering Education in USA: A Status Report, Issues and Challenges**  
P. K. Sen, PhD, P.E., IEEE Fellow, Colorado School of Mines, Golden, CO
- 9:30 AM              **A- 2 Medium-Voltage Arc Flash in Open Air and Padmounted Equipment**  
T. A. Short, Senior Member IEEE, and M. L. Eblen, Senior Member IEEE
- 10:00 AM             **Break – Exhibit Area** (Convention Center- Banquet Rooms I/J/F/G)
- 10:30 AM             **A-3 Grounding Considerations for Large kVA Pad-mount Transformers**  
Ruwan Weeransundara, P.E., Member IEEE, ESC Engineering
- 11:00 AM             **A-4 Economics of a Small Renewable Generation System**  
Troy Knutson, P.E., Member IEEE, Cass County Electric Cooperative
- 11:30 AM             **IAS/PES A.P. Seethapathy Rural Electrification Excellence Award Presentation**
- 11:45 AM             **Break – Exhibit Area** (Convention Center- Banquet Rooms I/J/F/G)

# 2011 IEEE RURAL ELECTRIC POWER CONFERENCE

## Chattanooga, TN

### Program Schedule

#### Monday, April 11, 2011

- Noon – 1:00 PM      **Lunch** (Marriott Hotel- Plaza Ballroom)
- 1:00 PM – 4:30 PM    **Technical Session “B”** (Convention Center- Meeting Rooms 4/5/6)  
**Moderator:** Jerry Josken, Vice Chairman - REPC
- 1:00 PM                **B-1 Rural Energy Security Using Autonomous Micro-turbine Smart Grids**  
Eric T. Matson Ph.D., Anthony Smith, J. Eric Dietz Ph.D., Purdue University
- 1:30 PM                **B-2 Distribution System Analysis and the Future Smart Grid**  
R. F. Arritt, Member IEEE and R. C. Dugan, IEEE Fellow, EPRI
- 2:00 PM                **B-3 Real Time Evaluation and Operation of the Smart Grid Using Game Theory**  
Michael Swearingen, IEEE Member, Tri-County Electric Cooperative
- 2:30 PM                **Break – Exhibit Area** (Convention Center- Banquet Rooms I/J/F/G)
- 3:00 PM                **B-4 Report on Real-Time Grid Analysis Pilots**  
Wayne Carr, Greg Shirek, Milsoft Utility Solutions; Jim See, Owen Electric;  
and Steven Latham, South Plains
- 3:30 PM                **B-5 Integrated Volt/VAR Control on Rural Distribution Systems**  
David Farmer, P.E., Phillip Ingle and Stephanie H. Morgan, P.E., Members IEEE
- 4:00 PM                **B-6 Expansion of Distribution Automation with Communicating Faulted Circuit Indicators**  
Cameron Smallwood, P.E., Senior Member IEEE; Michael Lattner, E.I.T., Ted Gardner
- 4:30 PM                **Adjournment**
- 4:30 PM – 7:00 PM    **Vendor Display/Exhibitions & Reception** (Convention Center- Banquet Rooms I/J/F/G)

#### Tuesday, April 12, 2011

- 7:00 AM – 12:00 Noon **Registration** - (Convention Center)
- 7:00 AM – 8:30 AM    **Vendor Display/Exhibitions Tear Down/Clean Up** (Banquet Rooms I/J/F/G)
- 7:00 AM – 8:00 AM    **Breakfast Buffet** (Marriott Hotel- Plaza Ballroom)
- 8:30 AM-Noon        **Technical Session “C”** (Convention Center- Meeting Rooms 4/5/6)  
**Moderator:** Chris Brooks, Secretary - REPC
- 8:30 AM                **C-1 Using the IEEE Comprehensive Test Feeder**  
W. H. Kersting, Life Fellow IEEE, Milsoft Utility Solutions
- 9:00 AM                **C-2 High-Speed Communication-Assisted Tripping and Sectionalizing for Distribution Systems**  
Steven Turner, Member IEEE, Beckwith Electric
- 9:30 AM                **C-3 Advanced Distribution Reclosing Using Wireless Communications**  
Terrence Smith, P.E., Jakov Vico P.E., Craig Wester, Member IEEE, General Electric

**2011 IEEE RURAL ELECTRIC POWER CONFERENCE  
Chattanooga, TN**

**Program Schedule**

**Tuesday, April 12, 2011**

- 10:00 AM – 10:30 AM **Break Exhibit Area** Exhibit Tear Down/Clean Up After Break
- 10:30 AM **C- 4 Distribution Automation Systems with Advanced Features**  
Richard Greer AEP; Will Allen, Jim Schegg and Andrew Dulmage, SEL
- 11:00 AM **C-5 Implementing Fast, Configurable, Bolt-On, Self Healing Technology for Distribution Management Systems**  
Stef Budia, Cooper Power Systems
- 1:45 AM – 12:45 PM **Lunch** (Marriott Hotel- Plaza Ballroom)
- 12:45 PM **Invitation to 2012 REPC Conference in Milwaukee, Wisconsin**  
Jerry Josken, REPC Vice Chairman
- 1:00 PM – 3:00 PM **Technical Roundtable Session – “Report on Distribution Automations”**  
**Moderator:** Doug Turk, REPC Secretary Elect  
**Panelists:** Jim McClanahan, S & C Electric  
Stef Budia, Cooper Power Systems  
Craig Gerke, Jackson Purchase Electric Coop  
David Wade, Chattanooga EPB
- 3:00 PM – 3:30PM **Door Prizes – “You Must Be Present To Win”**  
**Closing Announcements**  
**Conference Adjournment**
- 3:30 PM – 5:00 PM **Review of RUS Bulletin #1728F-806 (Specifications and Drawings for Underground Electric Distribution) for Proposed Renumbering and Revisions (All Conference Attendees are Invited)**  
NRECA T & D Underground Subcommittee

**Wednesday, April 13, 2011**

- 8:00 AM - noon **Workshop – Demand Response Technologies, Integration to the Smart Grid and ISO Markets**  
(Marriott Hotel- Plaza A) Cooper Power Systems
- 8:00 AM **Workshop – SEL Technical Seminar (Marriott Hotel- Plaza B)**  
Schweitzer Engineering Laboratories, Inc.
- 8:00 AM - noon **Workshop – Distribution Volt/VAR Management** (Marriott Hotel- East Room)  
UC Synergetic