





to the
IEEE/PES
Switchgear Committee
Fall 2011 Meeting

Welcome to Nashville!

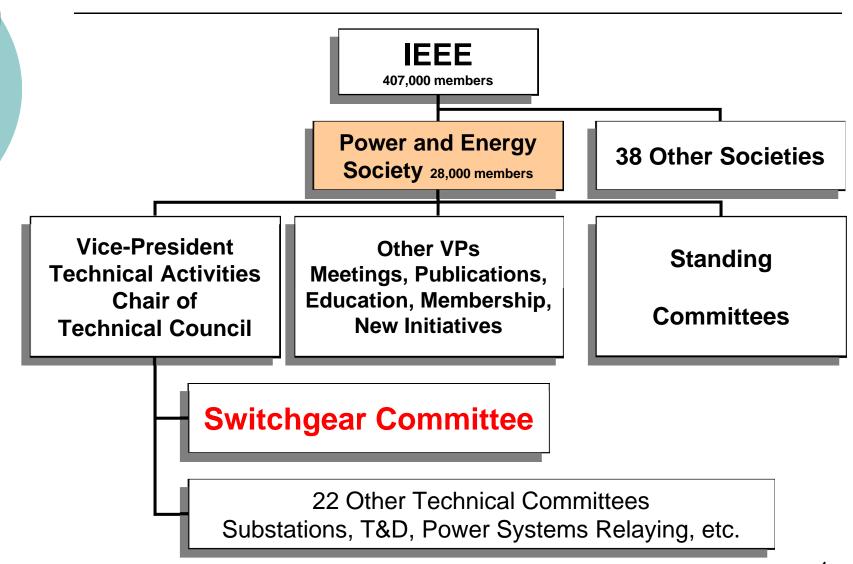
- Orientation Welcome
 - Newcomers
 - AND ...
 - Experienced Veterans!
- What are these mysterious "C37" things?

Ted Olsen, Vice ChairSwitchgear Committee

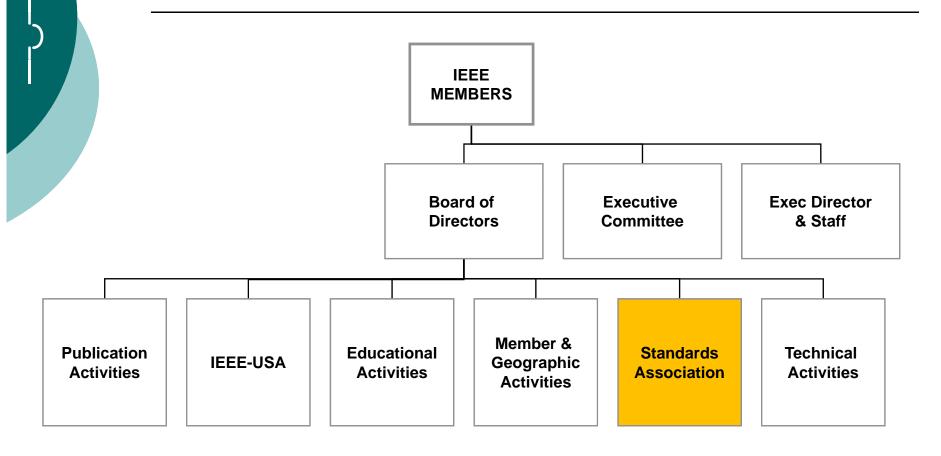
Topics of Discussion

- Owhere do we fit in?
- Scope
- Officers
- Organization
- Activities
- Standards Process
- Subcommittee Organization
- Frequently Asked Questions

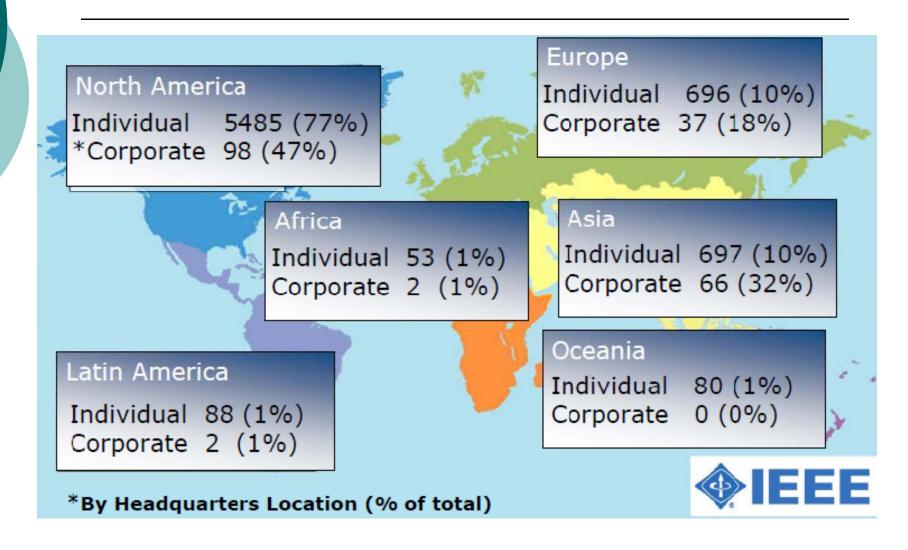
Where do we fit in?



IEEE Organization



IEEE-SA Global Membership (Dec 2010)





Switchgear Committee Scope

Treatment of matters in which the dominant factors are the design, construction and operation of devices or assembled gear to establish (make), interrupt, or change connections in any electric circuit under normal or abnormal conditions, including the following:

Switchgear Committee Scope

- Automatic reclosers and sectionalizers
- Current limiting devices
- Fuses and cutouts
- Gas-Insulated Switchgear a.k.a., GIS
- Insulation, insulators and hardware for switchgear
- Metal-enclosed buses and all buses included in switchgear assemblies
- Power circuit breakers
- Switches, including pad-mounted switches
- Switchgear assemblies
- Switchgear devices

Matters relating to switchgear or switchgear devices for applications covered by another technical committee if emphasis is on particular requirements of the application.

Switchgear Committee Officers

Ken Edwards

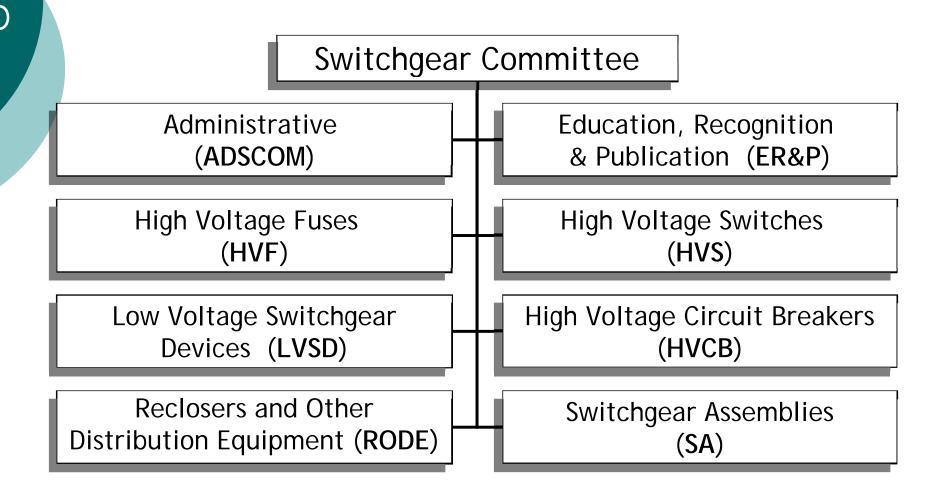
Chair/Registrar Main Committee

Ted Olsen Vice Chair

Paul Sullivan
Secretary/
Treasurer

Mike Wactor
Vice Chair
Standards
Coordinator

Organization





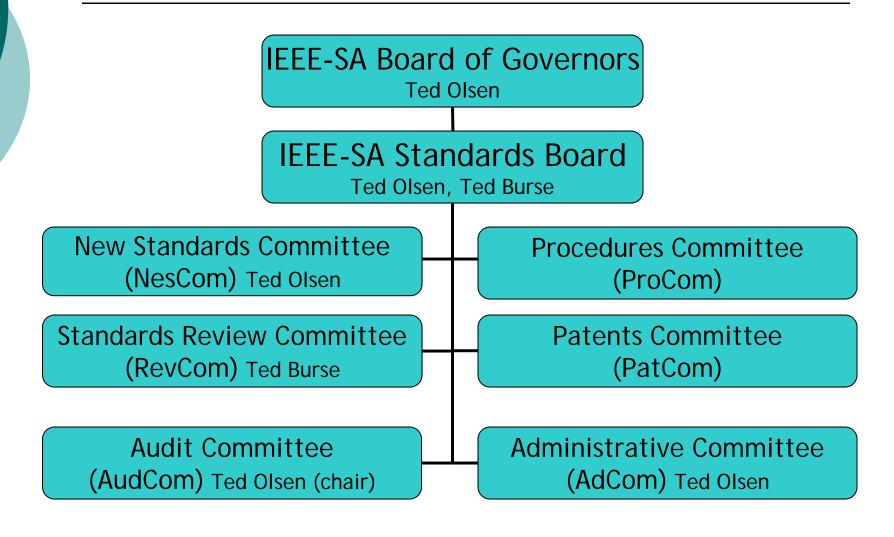
Activities

- Create & Maintain IEEE Switchgear Standards (including Standards, Guides, and Recommended Practices)
- Prepare and Review Technical Papers
- Organize Technical Sessions
- Recognize Contributions of Members
- Further the Art of Power Engineering

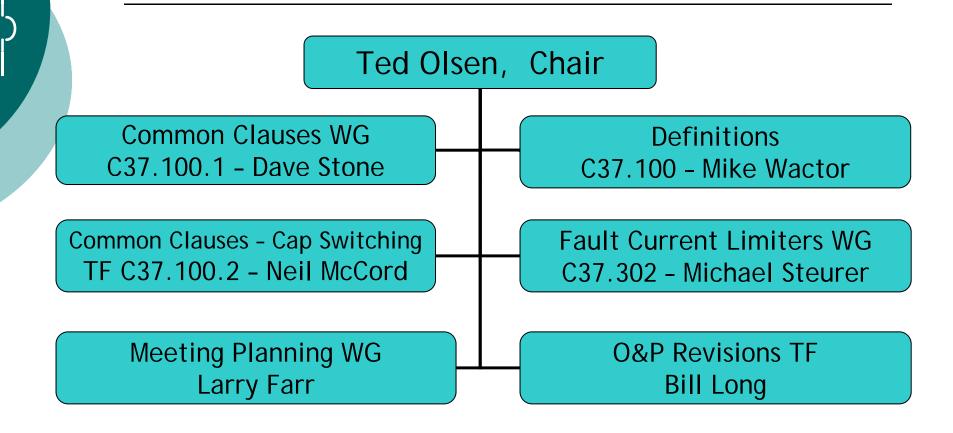
Standards Process

- Create PAR Project Authorization Request and submit to IEEE-SA New Standards Committee (NesCom)
 - http://standards.ieee.org/develop/
- Form Working Group Create Document
- Issue Invitation to join Ballot Group to overall Ballot Pool, a subset of IEEE Standards Association. [IEEE-SA]
- Finalize Ballot Group and ballot document
- Revise document and recirculate negative ballots as needed to reach a consensus
- Package final balloted draft and backup for IEEE-SA Review Committee (RevCom) & approval by IEEE Standards Board
- Publish as IEEE or IEEE/ANSI Standard
- (Beginning 2012) Standard must be revised within 10 years - no more reaffirmations at 5year intervals

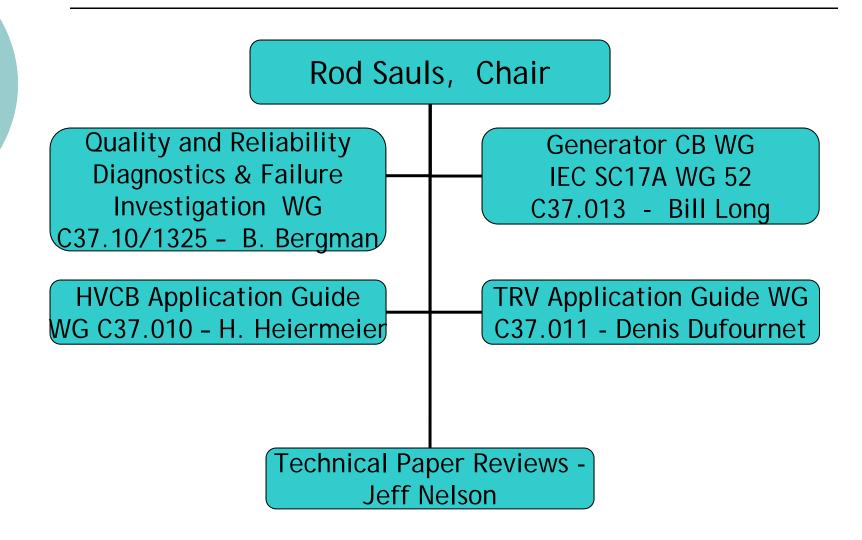
IEEE Standards Association (IEEE-SA)



(ADSCOM) Administrative Subcommittee



(HVCB) High Voltage Circuit Breaker Subcommittee (1 of 2)



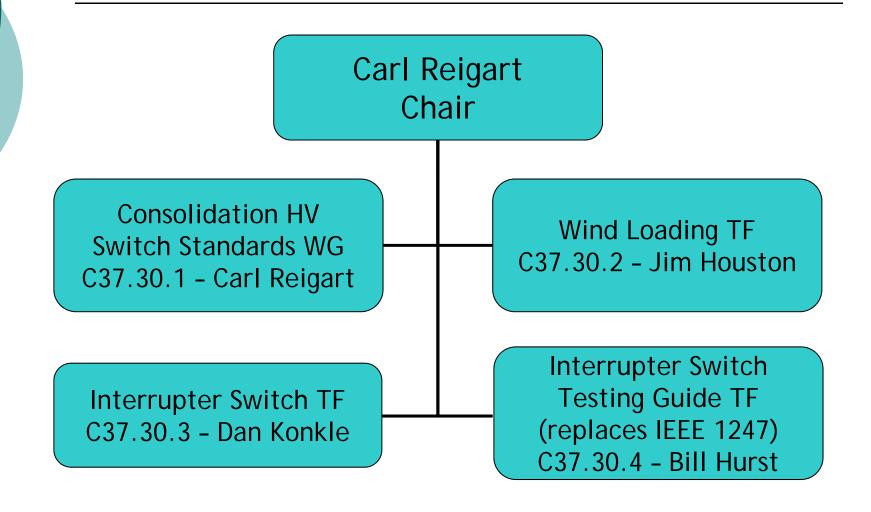
(HVCB) High Voltage Circuit Breaker Subcommittee (2 of 2)

Rod Sauls, Chair **HVCB Rating Structure WG HVCB Control Circuits WG** C37.04 - Jeff Nelson C37.11 - John Webb 3φ line faults, critical currents, **HVCB Definite Purpose CBs** & SFL testing limitations for Fast RRRV WG C37.06.1 - Keith Wallace TF - Roy Alexander Sound Pressure Levels WG **Guide for Capacitor Switching** C37.082/ WG C37.012 - Anne Bosma SC17A WG 53 IEC 62271-37-082 - Leslie Falkingham

(HVF) High Voltage Fuses Subcommittee

Dr. John G. Leach Chair **Fuse Specifications** Fuse Standards WG Standards WG C37.48.1 - John Leach C37.47 - Mark Stavnes Fuse Standards WG C37.40 series - John Leach

(HVS) High Voltage Switch Subcommittee



(LVSD) Low Voltage Switchgear Devices Subcommittee

Keith Flowers Chair LV DC Power Circuit Trip Devices for AC and **Breakers** General Purpose DC LV WG C37.14 - Keith Flowers **Power Circuit Breakers** WG C37.17 - Jeff Mizener LV AC Power Circuit LV Power Circuit Breakers -**Breakers - Amendment Preferred Ratings** WG C37.13a WG C37.16 - Allan Morse **Doug Edwards**

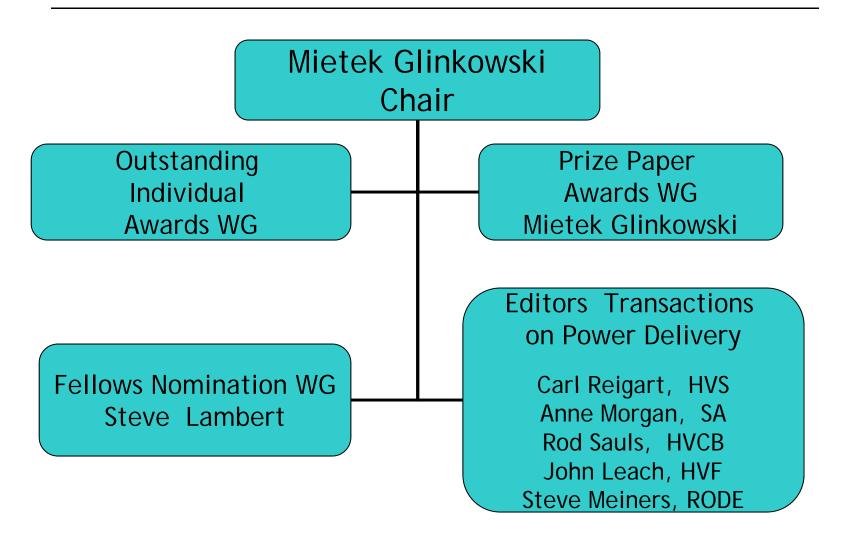
(RODE) Reclosers and Other Distribution Equipment Subcommittee

Steve Meiners, Chair Controls for Distribution Solid Dielectric Equipment **Equipment TF** WG C37.68 - Don Parker Francois Soulard Recloser WG Underground Switchgear WG IFC MT 47 C37.74 - Steve Meiners C37.60 - Dave Stone Sectionalizers WG **Capacitor Switches** C37.63 WG C37.66 - Harold Hirz Dave Stone/Craig Befus

(SA) Switchgear Assemblies Subcommittee

Anne Morgan, Chair MV Metal-Fnclosed Metal-Clad Switchgear Interrupter (MEI) Switchgear WG C37.20.2 - Mike Wactor WG C37.20.3 - Chuck Ball Testing for Switches for MV **Internal Arcing Faults** ME Switchgear WG C37.20.7 - Mike Wactor WG C37.20.4 - Chuck Ball **Guide for Unit Substations** LV DC Traction Power WG C37.121 - Jim Smith Switchgear C37.20.8 - Ted Burse **Metal-Enclosed Bus** C37.23 - Ed Peters

(ERP) Education, Recognition & Publication Subcommittee



Why are some standards identified as ANSI standards, some IEEE, and some IEEE/ANSI? (1 of 3)

- ANSI standards are those APPROVED by one of the processes of the American National Standards Institute.
- ANSI does NOT create standards, but accredits Standards
 Development Organizations [SDOs, of which there are over 270]
 such as IEEE, NEMA, UL, and ASTM, by approval of procedures
 that conform to ANSI "Essential Requirements"
- After approval in the IEEE-SA process, IEEE-SA submits approved IEEE Standards to ANSI for recognition as ANSI Standards.

Why are some standards identified as ANSI standards, some IEEE, and some IEEE/ANSI? (2 of 3)

- During ANSI review, the standard is subject to public comment (comments are infrequent).
- With <u>rare</u> exceptions, ALL IEEE Switchgear Standards are recognized as ANSI standards, even if the copy available from IEEE-SA does not say so.
- ANSI audits each SDO for compliance with the Essential Requirements, usually every five years.
- NEMA, UL, ASTM, etc. and other ANSI-accredited SDOs are subject to the same rules that ANSI applies to IEEE-SA.

Why are some standards identified as ANSI standards, some IEEE, and some IEEE/ANSI? (3 of 3)

- o ANSI recognizes three methods:
 - organization, e.g., IEEE
 - accredited committee, e.g., ASC C37, ASC C2, etc.
 - accredited canvass, e.g., NETA.
- In the view of many in the Switchgear Committee, the accredited canvass method is not as effective as the accredited organization method, as the canvass method may submerge views of interested parties.

Are Working Group Meetings Open?

- Generally, <u>ALL</u> IEEE PES Switchgear Committee meetings are OPEN to all who register for the meetings. Observers are encouraged and welcome to attend.
- There are a <u>few</u> meetings of other groups and of certain committees, marked with " * " on the schedule, which are by invitation only.

Are any meetings **CLOSED**?

- YES. Meetings, marked with " * " on the schedule, which are by invitation only:
- Most IEC, CIGRÉ and STL meetings are restricted in this way, and observers are welcome ONLY at the pleasure of the chair.
- The ER&P meeting is closed.
- Visitors are welcome at STLNA meetings,
 however, please discuss your desire to attend with the chair in advance, to be sure we have enough chairs.

How do I become a member of a ballot pool?

You do NOT have to be a member of the Switchgear Committee to review and ballot Switchgear Committee standards.

- You DO have to join the IEEE-Standards Association, IEEE-SA (IEEE member + \$49 for 2012)
- Create an IEEE-SA web account (no cost)
- Include the Switchgear Committee in your interest profile
- Respond to ballot group invitations when issued, joining those ballot groups in which you have an interest. Joining a ballot group imposes an obligation to participate.

How do I become a member of a Working Group?

- Choose a subject you would like to work on
- Go to the Working Group Meeting
- Make the chair aware that you want to be a Working Group member
- Volunteer for an assignment (and complete it on time)
- Working Group membership is at the discretion of the chair

How do I become a member of a Subcommittee?

- Become a productive member of a Working Group or Task Force over a continuing period
- Ask the WG or TF chair to nominate you, for Subcommittee member
- Subcommittee membership is at the discretion of the chair

How do I become a member of the Main Committee?

- Be a productive member of a subcommittee for at least two years, and attend Main Committee meetings (at least four of last six)
- IEEE Standards Association (IEEE-SA) membership is required for all Switchgear Main Committee members (\$49 in 2012)
- Ask the Subcommittee chair to nominate you for membership in the Main Committee
- Main Committee membership is at the discretion of the chair

Why do some peoples name badges have RED LINES on them?

- These people are Officers of the Committee, including Subcommittee Chairs
- Feel free to ask them questions about how the committee operates.

How about the Green Letters on the badges?

 These letters indicate which activities the attendee selected during registration.

What is AMS?

- AMS is the Association Management System.
- This system keeps track of all of our members and guests.
- It is a mailing system and meeting registration system also.
- You enrolled to register for this meeting.
- The following slides will show some common mistakes.
- Please do not create a new profile if you cannot find your password, contact Ken Edwards and he can help.
- E-mail System Problems?

What is wrong with this Name Badge?

IEEE/PES

Switchgear Committee May 3 – 7, 2009

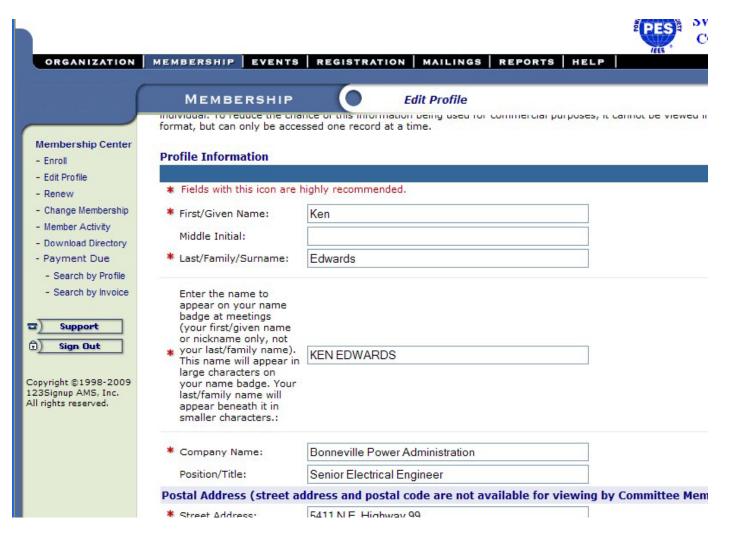


Bonneville Power Administration

Asheville, NC



This is where it came from.



For the Social Wednesday 6:15 PM

- Dinner and Entertainment General Jackson Showboat.
- Please meet in the lobby of the hotel at 5:15-5:30 PM. Buses will depart shortly after for the General Jackson Showboat.



Future Meetings

- Spring 2012 Apr 28–May 4, TradeWinds Island Grand, St. Pete Beach, FL
- Fall 2012 Sept 30-Oct 5, Catamaran Resort Hotel, San Diego, CA
- Spring 2013 (tentative) Galveston
- o Fall 2013 Will it be your city?

Thank YOU, Supporters

- ABB
- Alstom
- Cooper Power Systems
- Eaton
- G&W Electric
- HICO Hyosung
- Mitsubishi Electric
- NEMA
- Powell
- S & C Electric
- Schneider
- Siemens
- Southern States

Website

PLEASE Visit our website regularly to keep in touch

http://www.ewh.ieee.org/soc/pes/switchgear/index.htm

Wireless Access in Meeting Rooms

Wireless Internet access in each of our meeting rooms.

We have limited bandwidth,

so please, when you use the wireless,

get on and back off quickly

as a courtesy to the rest of the participants.

Use the Switchgear network Password: sparks