

**1) Introduction of Members and Guests**

Rod Sauls

Member introductions (Mention updated roster)

New member upgraded on the subcommittee:

- Paul Barnett
- Vincent Marshall
- Dave Mitchell
- Mirko Palazzo
- Francis Richard
- Tony Ricciuti
- Michael Skidmore

**2) Discussion of IEEE patent policy**

Rod Sauls

Slides shown and explained to the group

**3) Approval of Minutes of Previous Meeting**

Rod Sauls/Mauricio Aristizabal

Approval of minutes of Denver – Motion: Steven Lambert, seconds: John Webb

Approval of minutes of Myrtle Beach – Motion: Jeff Nelson, seconds: Roy Alexander

**4) Membership**

	Utility	Manufacturer	Independent / Consultants/Corresponding	Total Membership	Guests
Current membership	22	22	9/3	56/53 for Quorum calc.	
Attendance	15	14	4	33	15

**5) Chairman's Report**

Rod Sauls

Chairman (Rod Sauls): rodsauls@ieee.org  
Secretary (Mauricio Aristizabal): m.aristizabal@ieee.org

205-257-4143  
724-873-2606

- Reminder to everyone to review posted meeting minutes.  
After posting, an email will go out as an announcement
- Minutes to all WG meetings will be posted to the web in pdf format, unless otherwise specified

**6) Reports of Working Groups**

**a) Technical Paper Reviews**

Jeff Nelson

Leslie Falkingham has volunteered to take over Jeff Nelson responsibilities on the review committee

**b) WG Activities**

HVCB Switchgear Subcommittee Minutes, 2010-09-29, Las Vegas, NV

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<b>Document</b>	<b>Title</b>	<b>SubCommittee</b>	<b>WG Chair</b>	<b>PAR</b>	<b>IEEE Status</b>	<b>Activity</b>
C37.04-1999	IEEE Standard Rating Structure for AC High-Voltage Circuit Breakers Rated on a Symmetrical Current Basis	HVCB	Jeff Nelson	Needs to be updated with new scope and title	Corrigendum Published	WG is currently revising document to combine 04, 04b and 06. New task groups created for annexes
C37.04a-2003 Amendment to C37.04-1999	IEEE Standard Rating Structure for AC High-Voltage Circuit Breakers Rated on a Symmetrical Current Basis---Amendment 1: Capacitance Current Switching	HVCB	Roy Alexander		Reaffirmed 2006	
C37.04b Amendment to C37.04-1999	IEEE Standard Rating Structure for AC High-Voltage Circuit Breakers Rated on a Symmetrical Current Basis---Amendment 2 Required TRV Values:	HVCB	Kirk Smith		Approved New Document DEC 2009	
C37.06.-2000 ANSI	American National Standard for Switchgear--AC High-Voltage Circuit Breakers Rated on a Symmetrical Current Basis---Preferred Ratings and Related Required Capabilities	HVCB	Georges Montillet	2009	Approved Nov 2009 by REVCOM	
C37.06.1-2000 ANSI	American National Standard Guide for High-Voltage Circuit Breakers Rated on a Symmetrical Current Basis---Designated "Definite Purpose for Fast Transient Recovery Voltage Rise Times"	HVCB	Keith Wallace			New document will be circulated
C37.09-1999	IEEE Standard Test Procedure for AC High-Voltage Circuit Breakers Rated on a Symmetrical Current Basis	HVCB	Kirk Smith		R2007	
C37.09a-2005 Amendment to C37.09-1999	Standard Test Procedure for AC High-Voltage Circuit Breakers Rated on a Symmetrical Current Basis---Amendment 1: Capacitance Current Switching	HVCB	Roy Alexander		Published Will be incorporated into new C37.09	
PC37.09b Amendment to C37.09-1999	Draft Standard Test Procedure for AC High-Voltage Circuit Breakers Rated on a Symmetrical Current Basis---Amendment 2 Required TRV Values:	HVCB	Kirk Smith	PAR will expire in 2010		Recirculation of new draft and expects approval shortly and conclusion of the work.
C37.010-2005 1999 in IEEEExplore	IEEE Application Guide for AC High-Voltage Circuit Breakers Rated on a Symmetrical Current Basis	HVCB	Helmut Heiermeier		R2005	WG working on new topics. Control switching, line switching and reactor switching. A new PAR needs to be submitted
C37.011-2005	IEEE Application Guide for Transient Recovery Voltage for AC High-Voltage Circuit Breakers Rated on a Symmetrical Current Basis	HVCB	Denis Dufournet	PAR approved December Dec 2009	Balloted on the summer 98% return 92% affirmative	Needs to resolve interpolated TRV capability between 30 and 60% terminal faults.

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C37.012-2005	IEEE Application Guide for Capacitance Current Switching for AC High-Voltage Circuit Breakers Rated on a Symmetrical Current Basis	HVCB	Anne Bosma			Needs revised after approval of -06. Send an email to REVCOM and request one year extension until 06 is completed or submit a PAR next year
C37.013-1997	IEEE Standard for AC High-Voltage Generator Circuit Breaker Rated on a Symmetrical Current Basis	HVCB	Bill Long	Approved until Dec 2013	R2008	Mirko Palazzo (Secretary): Dual logo work. Target to have a committee draft by December 2010
PC37.013a	IEEE Standard for AC High-Voltage Generator Circuit Breaker Rated on a Symmetrical Current Basis---Supplement for generators 10 to 100 MVA	HVCB	Bill Long		Approved	
C37.015-1993	IEEE Application Guide for Shunt Reactor Switching	HVCB	Anne Bosma	Approved until 2012	Published Feb. 2010	
C37.016-2006	Standard for AC High-Voltage Circuit Switchers rated 15.5 kV through 245 kV	HVCB	Peter Meyer (Randy Dotson)	Approved until Dec 2013	TF formed to address dual logo issues. Disbanded.	Not pursuing as dual logo anymore. No interest from IEC. Verify status on next meeting
C37.017	Standard for Bushings for High Voltage (over 1000 Volts ac) Circuit Breakers and Gas Insulated Switchgear	HVCB GIS	Devki Sharma	PAR approved Sept 2008	2008 Balloted and awaiting Revcom approval	No meeting.
C37.081-1981	IEEE Guide for Synthetic Fault Testing of AC High-Voltage Circuit Breakers Rated on a Symmetrical Current basis	HVCB	TBD (Mel Smith)		R2007	
C37.081a-1997	Supplement to C37.081-1981	HVCB	TBD (Mel Smith)		R2007	
C37.082-1982	IEEE Standard Methods for the Measurement of Sound Pressure Levels of AC Power Circuit Breakers	HVCB	Leslie Falkingham	PAR approved Sept 2008		No meeting: WG on hold waiting for IEEE/IEC numbering agreement to continue work
C37.083-1999	IEEE Guide to Synthetic Capacitor Current Switching Test of AC High-Voltage Circuit Breakers	HVCB	TBD (Mel Smith)		R2006	
C37.10-1995	IEEE Guide for Diagnostics and Failure Investigation of Power Circuit Breakers	HVCB	Bill Bergman	Approved until Dec 2013	R2002 & 2008	Addressed negative ballot due to a legal term "defect" following IEEE legal advice, the term will be maintained and re circulate.
1325-2002	IEEE Recommended Practice for Reporting Field Failure Data for Power Circuit Breakers	HVCB	Bill Bergman			1325 will be withdrawn once C37.10 is published. IEEE
C37.10.1-2000	IEEE Guide for the Selection of Monitoring for Circuit Breakers	HVCB	Bill Bergman		R2006	New work will begin.

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C37.11-2003	IEEE Standard Requirements for Electrical Control for High-Voltage Circuit Breakers Rated on A Symmetrical Current Basis	HVCB	Paul Barnett	2008C		Reviewed comments and new draft will be recirculated.
C37.12 ANSI C37.12-1991	Guide for the Specification of AC High Voltage Circuit Breakers American National Standard for AC High-Voltage Circuit Breakers Rated on a Symmetrical Current Basis— Specifications Guide	HVCB	Ken Edwards		Approved Dec 2008 R2008	Needs to be updated after the consolidation of 04 and 06 is completed
C37.12.1	Draft IEEE Guide for High Voltage (>1000V) Circuit Breaker Instruction Manual Content	HVCB	Bill Bergman		Published March 2008	
C37.20.6	4.76 kV to 38 kV Rated Grounding and Testing Devices Used in Enclosures	ADSCOM joint HVCB/SA	T. W. Olsen t.olsen@ieee.org		APPROVED 2007	
C37.59	Requirements for Conversion of Power Switchgear Equipment	ADSCOM joint HVCB, SA, and LVSD	Pete Dwyer		Approved 2007	
C37.122	Standard for High Voltage Gas-Insulated Substations Rated above 52 kV	SUB/GIS Joint HVCB	Jon Brunke			A new draft is being circulated
1712	Guide for Sulphur Hexafluoride (SF6) Gas Handling for High Voltage (over 1000Vac) Equipment	SUB/SF6 Joint HVCB	Jeff Nelson	Expires Dec. 2010		A new invitation to ballot has been initiated
C57.142	Guide to Describe the Occurrence and Mitigation of Switching Transients Induced by Transformer and Switching Device Interaction	SUB/HVCB	Steve Lambert			It is being recirculated by the Transformer committee. Small update. Expecting dec revcom approval

**7) Reports of Task Forces**

- a. C37.016 Dual Logo Issue TF

Pete Meyer

Dual logo not being pursued by the WG anymore.

**8) Reports of AdsCom WG/TF**

- a) Capacitance Switching TF

Neil McCord

- b) Fault Current Limiters Testing guide

M. Steurer

## 9) Reports of CIGRE

- a) New Working groups looking for volunteers Mietek Glinkowski
  - 1) A3.29: Deterioration of Ageing Substation Equipment and Possible Mitigation Techniques
  - 2) A3.30: Impact of Overstressing of Substation Equipment
- b) CIGRE circuit breaker performance survey CIGRE A3.06 Bill Bergman  
Report will be released soon; the WG is still working on the data collected.
- c) Vacuum Interrupter WG Kirk Smith/Mietek Glinkowski  
A3.27 (title) 3<sup>rd</sup> meeting in August in Paris. Japan has a lot of experience since 1970; China working heavily on higher voltages. Next meeting will be held in Japan on April 2011.
- d) A3.26 (title) Influence of shunt capacitor banks on TRV, influence of inrush, configuration, Anne Bosma  
effect of current limiting reactor and recommendations. WG will meet 9/30/2010 and 10/1/2010 after the SWG main committee meeting.

## 10) Old Business

- a) IEEE/IEC Dual Logo program Rod Sauls, Jodi Haasz  
  
Jodi presented the details of the agreement between IEC and IEEE and circulated a document with examples and details of the agreement as it stands today. See F10HVCBa9.ppt for the presentation.  
  
Due to strong rejection to the examples on the document from some members of the SC, the IEEE staff recommends to retire pages with the related examples from the document and maintain only the first 4 pages that contain a summary of the current dual logo agreement between IEEE and IEC.
- b) C57.16 Series reactor. Specifically annex F. Ken Edwards and Bill Long.  
Replace Bill Long with Jeff Nelson

## 11) New Business

- a) Motion from Ken Edwards  
Seconds: None  
  
Motion to remove the document distributed by Jodi Haasz until a joint document developed by Ken and Jodi can be presented, as outlined on the minutes from Myrtle Beach.  
  
Motion un-seconded (does not go forward)  
Interested parties: Jeff Nelson, Ken Edwards, Steve Lambert,
- b) Motion to ask the question: Leslie Falkingham, Seconds: Roy Alexander  
Call of quorum was requested. Quorum verified. 27 members present.  
Yea 23, Nay: 1  
  
The question by Leslie goes forward to the committee.  
Call of quorum was requested. Quorum verified. 27 members present  
  
Motion to the subcommittee: To recommend to the main committee that the C37.082 document has the new number of 62271-37-082 be accepted. 23 yeas, 1 nay, 1 abstention. The following list corresponds to the voting members present and their vote. The motion is approved.

Alexander, R: Yea  
Aristizabal, M: Yea  
Bergman, W: Yea  
Bosma, A: Yea  
Cantrelle, D: Yea  
Chow, C: Yea  
Di Lillo, P: Nay  
Dufornet, D: Yea  
Edwards, K: Yea  
Falkingham, L: Yea  
Hu, J: Yea  
Jackson, R: Yea  
Johnson, C: Yea  
Liu, H: Yea  
Long, R: Yea  
Marshal, V: Yea  
Nelson, J: Yea  
Palazzo, M: Yea  
Pellerito, T: Yea  
Ricciuti, A: Yea  
Sherma, D: Abstain  
Skidmore, M: Yea  
Smith, R: Yea  
Webb, J: Yea  
York, R: Yea

## **12) Future Meetings**

- a) Spring 2011: Orlando, FL
- b) Fall 2011: Nashville, TN

May 15~19, 2011

## **13) Adjourn**