#### 1) Introduction of Members and Guests

**Rod Sauls** 

Member introductions

New member upgraded on the subcommittee:

Arben Bufi

Wes Wadsworth

## 2) Discussion of IEEE patent policy

**Rod Sauls** 

IEEE-SA patent slides shown to the group

## 3) Approval of Minutes of Previous Meeting

Rod Sauls/Mauricio Aristizabal

Approval of minutes of Las Vegas – Motion by John Webb, second by Dave Lemmerman.

### 4) Membership

	Utility	Manufacturer	Independent & Consultants	Corresponding Members	Total Membership	Guests
Current membership	22	21	7	3	53/50 for Quorum calc.	
Attendance	15	15	4	=	34	17

## 5) Chairman's Report

**Rod Sauls** 

Chairman (Rod Sauls): rodsauls@ieee.org 205-257-4143 Secretary (Mauricio Aristizabal): m.aristizabal@ieee.org 724-873-2606

## 6) Reports of Working Groups

### a) Technical Paper Reviews

Leslie Falkingham

Jeff Nelson is still the official technical representative, IEEE still hasn't updated officers. There are no new papers being reviewed by the subcommittee at this moment.

## b) WG Activities

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Document	Title	SubCommittee	WG Chair	PAR	IEEE Status	Activity
C37.04-1999	IEEE Standard Rating Structure for AC High-Voltage Circuit Breakers Rated on a Symmetrical Current Basis	HVCB	Jeff Nelson	To be requested by chair	Corrigendum 1 Published in 2009	2 <sup>nd</sup> draft will be circulated. Line faults and critical current task forces were created. Roy Alexander to chair both TF.
C37.04a-2003 Amendment to C37.04-1999	IEEE Standard Rating Structure for AC High-Voltage Circuit Breakers Rated on a Symmetrical Current BasisAmendment 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 BasisAmendment 2 Required TRV Values:	HVCB	Kirk Smith		Approved New Document DEC 2009	
C37.062009 ANSI	American National Standard for SwitchgearAC High-Voltage Circuit Breakers Rated on a Symmetrical Current BasisPreferred Ratings and Related Required Capabilities	HVCB	Georges Montillet		Published 2009	
C37.06.1-2000 ANSI	American National Standard Guide for High-Voltage Circuit Breakers Rated on a Symmetrical Current BasisDesignated "Definite Purpose for Fast Transient Recovery Voltage Rise Times"	HVCB	Keith Wallace (Bill Bergman)	PAR expires 12-31-2013		Bergman will char new TF to investigate natural frequency of transformers. Updating 1-Cos to 2 parameter TRV's
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 BasisAmendment 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 BasisAmendment 2 Required TRV Values:	HVCB	Kirk Smith		Approved April 2011	Published 05/17/2011 WG work has been completed
C37.010-2005 1999 in IEEExplore	IEEE Application Guide for AC High- Voltage Circuit Breakers Rated on a Symmetrical Current Basis	НVСВ	Helmut Heiermeier	PAR expires 12-31-2014	R2005	Working on the revision. Mike Skidmore new secretary, Sean Zhu new vice-chair
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 expires 12-31-2013		Working on resolution of comments. Approach 1 of TRV interpolation was voted and accepted by the WG.

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Document	Title	SubCommittee	WG Chair	PAR	IEEE Status	Activity
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 (Roy Alexander)	Approval for the PAR will be requested during this meeting	Reaffirmed 2011	A PAR will be requested to upgrade this discussion group to a formal WG
C37.013-1997	IEEE Standard for AC High-Voltage Generator Circuit Breaker Rated on a Symmetrical Current Basis	НУСВ	Bill Long	Approved until Dec 2013	R2008	Draft 1 almost complete, expected by end of summer
PC37.013a	IEEE Standard for AC High-Voltage Generator Circuit Breaker Rated on a Symmetrical Current BasisSupplement 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		
C37.017	Standard for Bushings for High Voltage (over 1000 Volts ac) Circuit Breakers and Gas Insulated Switchgear	HVCB GIS	Devki Sharma		Published March 2011	Work completed.
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	Must be reaffirmed before the end of 2011
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	New number approved by Nescom April-2011 62271-37-082	Current CDV will be upgraded to FDIS and circulated to WG
C37.083-1999	IEEE Guide to Synthetic Capacitor Current Switching Test of AC High- Voltage Circuit Breakers	НУСВ	TBD (Mel Smith)		R2006	Must be reaffirmed by the end of 2011. Mauricio Aristizabal to initiate the process.
C37.10-1995	IEEE Guide for Diagnostics and Failure Investigation of Power Circuit Breakers	HVCB	Bill Bergman	PAR expires 12-31-2013	R2002 & 2008 Draft 4.1 Balloted April 2011	
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.	
C37.10.1-2000	IEEE Guide for the Selection of Monitoring for Circuit Breakers	HVCB	Bill Bergman		R2006	1 negative ballot. New clause will be written to address safety and hazards concerns
C37.11-2003	IEEE Standard Requirements for Electrical Control for High-Voltage Circuit Breakers Rated on A Symmetrical Current Basis	HVCB	John Webb (Replaces Paul Barnett)	PAR Expires 12-31-2012		Draft 4 is undergoing comment resolution.

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Document	Title	SubCommittee	WG Chair	PAR	IEEE Status	Activity
C37.12	Guide for the Specification of AC High Voltage Circuit Breakers	HVCB	Ken Edwards		Approved Dec 2008	Needs to be updated after the consolidation of 04 and 06 is
ANSI C37.12-	American National Standard for AC					completed
1991	High-Voltage Circuit Breakers Rated on a					
	Symmetrical Current Basis—					
	Specifications Guide					
C37.12.1	Draft IEEE Guide for High Voltage	HVCB	Bill Bergman		Published March 2008	
	(>1000V) Circuit Breaker Instruction					
	Manual Content					
C37.20.6	4.76 kV to 38 kV Rated Grounding and	ADSCOM	T. W. Olsen		APPROVED 2007	
	Testing Devices Used in Enclosures	joint HVCB/SA				
C37.59	Requirements for Conversion of Power	ADSCOM	Pete Dwyer		Approved 2007	
	Switchgear Equipment	joint HVCB, SA,				
		and LVSD				
C37.122	Standard for High Voltage Gas-Insulated	SUB/GIS	Jon Brunke		Published Jan 2011	
	Substations Rated above 52 kV	Joint HVCB				
1712	Guide for Sulphur Hexafluoride (SF6)	SUB/SF6	Jeff Nelson	Expires Dec.	Comment resolution	To meet in Chicago
	Gas Handling for High Voltage (over	Joint HVCB		2010	Ballot closed	
	1000Vac) Equipment				23-Oct-2010	
C57.142	Guide to Describe the Occurrence and	SUB/HVCB	Steve Lambert		Published April 2011	
	Mitigation of Switching Transients					
	Induced by Transformer and Switching					
	Device Interaction					

# 7) Reports of Task Forces

a) C37.06.1 Calculated Vs. Measured Transformer Capacitances

Rod Sauls / Keith Wallace

# 8) Reports of AdsCom WG/TF

a) Capacitance Switching TF

Work is in progress.

Neil McCord

b) Fault Current Limiters Testing guide (C37.302)

Currentrly working on releasing draft 1.

Michael Steurer

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### 9) Reports of CIGRE

US is now the leading contributor in experts and WG members.

a) Status of the new Working Groups

Mietek Glinkowski

- b) CIGRE circuit breaker performance survey CIGRE A3.06 Bill Bergman Will meet in Vienna in September. A presentation will be shown to the members of this committee on the fall meeting in Nashville.
- c) CIGRE HV Vacuum CB WG (A3.27) Results of the Darmstadt meeting, April 2011.

Kirk Smith/Mietek Glinkowski

d) A3.26 Influence of shunt capacitor banks on circuit breaker fault interruption duties

Anne Bosma

### 10) Old Business

a) C37.082 renaming to IEC/IEEE 62271-37-082 Approved by Nescom

Rod Sauls

b) C57.16 Series reactor. Specifically annex F. Ken Edwards and Jeff Nelson Recirculation resulted in 3 negative votes. Minor comments, will soon be ready for recirculation.

## 11) New Business

- a) IEEE C37.122.1 Draft Guide for Gas-Insulated Substations Rated Above 52 kV
- b) IEEE C37.123 Draft Guide for Specifications for Gas Insulated, Electric Power Substation Equipment For both documents a straw poll was conducted among sub-committee members and unanimously was decided to recommend to ADSCOM a joint sponsorship from Substation and Switchgear committees.
- c) A new structure for the subcommittee meeting is proposed to include more educations/technical contents to the meetings. A suggestion from Joanne Hu to have a presentation on DC circuit breakers on the fall meeting was approved by the subcommittee.
- d) Jeff Nelson suggests to update and present the TRV tutorial on the next T&D and PES general meetings. The presenters from last time will be contacted by the subcommittee to request their participation.

#### 12) Future Meetings

a) Fall 2011: Nashville, TN

Oct. 9 - 12, 2011

b) Spring 2012: St. Pete Beach, FL

13) Motion to adjourn by John Webb, seconds Devki Sharma.

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