

1) Introduction of Members and Guests

Mauricio Aristizabal

Member introductions

Presentation of new members of the subcommittee:

Li Liu
John Hall
Lucas Collette
Steven Chen
Cody Brehm

2) Approval of Minutes of Previous Meeting

Mauricio Aristizabal / Mike Skidmore

Approval of minutes of San Diego, CA:

3) Membership

	Utility	Manufacturer	Independent & Consultants	Corresponding Members	Total Membership	Guests
Current membership	16	26	7	6	55/49 for Quorum calc.	55
Attendance	9	19	2		30	17

4) Chairman's Report

Mauricio Aristizabal

Chairman (Mauricio Aristizabal): m.aristizabal@ieee.org 724-696-1431
Secretary (Mike Skidmore): mikeskidmore@ieee.org 614-552-1472

- WG chairs need to email minutes of their WG meetings to the subcommittee secretary no later than May 10th.

5) Reports of Working Groups

a) Technical Paper Reviews

Leslie Falkingham

b) WG Activities

HVCB Switchgear Subcommittee Agenda, 5-1-2013, Galveston TX

Document	Title	SubCommittee	WG Chair	PAR	IEEE Status	Activity
PC37.04	Standard for Ratings and Requirements for AC High Voltage Circuit Breakers with Rated Maximum Voltage above 1000 V	HVCB	Jeff Nelson	PAR Expires 12-31-2015	Reaffirmed 2006 Document Expires 12/31/2018	
C37.04-1999 Cor 1-2009	IEEE Standard for Rating Structure for AC High-Voltage Circuit Breakers Corrigendum 1	HVCB	Jeff Nelson		Document Expires 6/17/2019	
C37.04a-2003	IEEE Standard Rating Structure for AC High-Voltage Circuit Breakers Rated on a Symmetrical Current Basis: Amendment 1 Capacitance Current Switching	HVCB	Roy Alexander	Included on PC37.04 PAR	Reaffirmed 2006 Document Expires 12/31/2018	
C37.04b -2008	IEEE Standard for Rating Structure for AC High-Voltage Circuit Breakers Rated on a Symmetrical Current Basis Amendment 2: To Change the Description of Transient Recovery Voltage for Harmonization with IEC 62271-100	HVCB	Kirk Smith	Included on PC37.04 PAR	Document Expires 12/31/2018	
C37.06.-2009 ANSI	IEEE Standard for AC High-Voltage Circuit Breakers Rated on a Symmetrical Current Basis - Preferred Ratings and Related Required Capabilities for Voltages Above 1000 V	HVCB	Georges Montillet	Included on PC37.04 PAR	Document Expires 9/11/2019	Might need amendment to address error in tables 6 and 7 for SLF reference
PC37.06.1	Recommended Practice for Preferred Ratings for High-Voltage (>1000 volts) AC Circuit Breakers Designated Definite Purpose for Fast Transient Recovery Voltage Rise Times	HVCB	Sushil Shinde	PAR Expires 12-31-2013	Document Expires 12/31/2018	Sushil Shinde replaced Keith Wallace as the chair
PC37.09	IEEE Standard Test Procedure for AC High-Voltage Circuit Breakers Rated on a Symmetrical Current Basis	HVCB	Xi Zhu		Reaffirmed 2007 Document Expires 12/31/2018	PAR preliminarily approved by NESCOM on 4/26/2013
C37.09-1999 /Cor 1-2007	IEEE Standard Test Procedure for AC High-Voltage Circuit Breakers Rated on a Symmetrical Current Basis - Corrigendum 1	HVCB	Georges Montillet		Document Expires 12/31/2018	
C37.09a-2005 Amendment to C37.09-1999	American National Standard Test Procedure for AC High-Voltage Circuit Breakers Rated on a Symmetrical Current Basis Amendment 1: Capacitance	HVCB	Roy Alexander		Reaffirmed 2007 Document Expires 12/31/2018	

HVCB Switchgear Subcommittee Agenda, 5-1-2013, Galveston TX

Document	Title	SubCommittee	WG Chair	PAR	IEEE Status	Activity
C37.09b-2010	IEEE Standard Test Procedure for AC High-Voltage Circuit Breakers Rated on a Symmetrical Current Basis -- Amendment 2: To Change the Description of Transient Recovery Voltage for Harmonization with IEC 62271-100	HVCB	Kirk Smith		Document Expires 12/8/2020	
PC37.010	Application Guide for AC High-Voltage Circuit Breakers > 1000 Vac Rated on a Symmetrical Current Basis	HVCB	Helmut Heiermeier	PAR expires 12-31-2014	Reaffirmed 2005 Document Expires 12/31/2018	Ballot closed April 19, 2013
C37.011-2011	IEEE Guide for the Application of Transient Recovery Voltage for AC High-Voltage Circuit Breakers	HVCB	Denis Dufournet		Document Expires 12/31/2021	
PC37.012	IEEE Application Guide for Capacitance Current Switching for AC High-Voltage Circuit Breakers	HVCB	Anne Bosma	PAR expires 12-31-2015	Reaffirmed 2011 Document Expires 3/31/2021	Comment resolution of ballot closed March 27, 2013
C37.013-1997	IEEE Standard for AC High-Voltage Generator Circuit Breakers Rated on a Symmetrical Current Basis	HVCB	Bill Long		Reaffirmed 2008 Document Expires 12/31/2018	See P62271-37-013
C37.013a-2007	IEEE Standard for AC High Voltage Generator Circuit Breakers Rated on a Symmetrical Current Basis - Amendment 1: Supplement for Use with Generators Rated 10-100 MVA	HVCB	Bill Long		Document Expires 12/31/2018	See P62271-37-013
C37.015-2009	IEEE Guide for the Application of Shunt Reactor Switching	HVCB	Anne Bosma		Document Expires 12/9/2019	
PC37.016	Standard for AC High Voltage Circuit Switchers Rated 15.5kV through 245kV	HVCB	Peter Meyer (Randy Dotson)	PAR expires 12-31-2013	Document Expires 12/31/2018	
C37.017-2010	IEEE Standard for Bushings for High-Voltage [over 1000 V (ac)] Circuit Breakers and Gas-Insulated Switchgear	HVCB-GIS	Devki Sharma		Document Expires 9/30/2020	
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)		Reaffirmed 2007 Document Expires 12/31/2018	Study group to evaluate possible implementation of IEC 62271-101
C37.081a-1997	Supplement to IEEE Guide for Synthetic Fault Testing of AC High Voltage Circuit Breakers Rated on a Symmetrical Current Basis	HVCB	TBD (Mel Smith)		Reaffirmed 2007 Document Expires 12/31/2018	See C37.081
C37.082-1982	IEEE Standard Methods for the Measurement of Sound Pressure Levels of AC Power Circuit Breakers	HVCB	Leslie Falkingham		Reaffirmed 2006 Document Expires 12/31/2018	See P62271-37-082

HVCB Switchgear Subcommittee Agenda, 5-1-2013, Galveston TX

Document	Title	SubCommittee	WG Chair	PAR	IEEE Status	Activity
C37.083-1999	IEEE Guide for Synthetic Capacitive Current Switching Tests of AC High-Voltage Circuit Breakers	HVCB	TBD (Mel Smith)		Reaffirmed 2007 Document Expires 12/31/2018	See C37.081
C37.10-2011	IEEE Guide for Investigation, Analysis, and Reporting of Power Circuit Breaker Failures	HVCB	Bill Bergman		Document Expires 12/31/2021	
1325-1996	IEEE Recommended Practice for Reporting Field Failure Data for Power Circuit Breakers	HVCB	Devki Sharma		Superseded by release of C37.10-2011	Will be removed of the monitored list by Fall 2013
C37.10.1-2000	IEEE Guide for the Selection of Monitoring for Circuit Breakers	HVCB	Dave Mitchell	PAR Expires 12-31-2016	Reaffirmed 2006 Document Expires 12/31/2018	
PC37.11	Standard Requirements for Electrical Control for AC High-Voltage (>1000V) Circuit Breakers	HVCB	John Webb	PAR Extended to 12-31-2013	Reaffirmed 2003 Document Expires 12/31/2018	Comment resolution of ballot closed April 7, 2013
C37.12-2008	IEEE Guide for Specifications of High-Voltage Circuit Breakers (over 1000 Volts)	HVCB	Ken Edwards		Document Expires 12/31/2018	Study group was approved to begin work on guide by the fall of 2013
C37.12.1-2007	Draft IEEE Guide for High Voltage (>1000V) Circuit Breaker Instruction Manual Content	HVCB	Bill Bergman		Document Expires 12/31/2018	A WG Needs be formed by the fall of 2013
C37.20.6-2007	4.76 kV to 38 kV Rated Grounding and Testing Devices Used in Enclosures	ADSCOM joint HVCB/SA	T. W. Olsen			
C37.59-2007	Requirements for Conversion of Power Switchgear Equipment	ADSCOM joint HVCB, SA, and LVSD	Pete Dwyer			
C37.122-2010	Standard for High Voltage Gas-Insulated Substations Rated above 52 kV	Joint SUB/SWG HVCB	Jon Brunke			
C37.122.3-2011 (was P1712)	IEEE Guide for Sulphur Hexafluoride (SF6) Gas Handling for High-Voltage (over 1000 Vac) Equipment	Joint SUB/SWG HVCB	Gordon van der Zel (Jeff Nelson)			
PC57.142-2010	IEEE Guide to Describe the Occurrence and Mitigation of Switching Transients Induced by Transformers, Switching Device, and System Interaction	TC/HVCB	R Degeneff (Steve Lambert)			Survey will be circulated among users of the document and as part of these minutes as S13HVCBa8.pdf
P62271-37-082	Standard for High-voltage switchgear and controlgear - Part 37-082: Measurement of sound pressure levels on alternating current circuit-breakers	HVCB	Leslie Falkingham	PAR Expires 12-31-2012		

Document	Title	SubCommittee	WG Chair	PAR	IEEE Status	Activity
P62271-37-013 (Replaces C37.013 and C37.013a)	Standard for AC High Voltage (rated above 1000 V) Generator Circuit Breakers for Use With Generators Rated 10 MVA or More	HVCB	Bill Long	PAR Expires 12-31-2013		Comment resolution of ballot closed March 28, 2013

Note: Only those working groups with PAR information are currently active.

6) Reports of Task Forces

a) Line Faults and Critical Currents

Roy Alexander / Xi Zhu

The task force recommendation to reference CIGRE brochure 408 for line faults and the IEC test procedure to identify and test critical currents will be incorporated on the next draft of PC37.04.

b) Transformer Natural Frequencies (TF for C37.06.1)

Bill Bergman

7) Reports of AdsCom WG/TF

a) Capacitance Switching TF

Neil McCord

8) Reports of CIGRE

- a) New Working Groups Mietek Glinkowski
- b) A3.26 Influence of shunt capacitor banks on circuit breaker fault interruption duties Anne Bosma
- c) CIGRE HV Vacuum CB WG (A3.27) Kirk Smith/Mietek Glinkowski
Tutorial will be presented tomorrow, May 1, 2013 after the Main Committee meeting
- d) A3.28 Switching phenomena and testing requirements for UHV and EHV equipment Denis Dufournet
Tutorial will be presented after the Fall 2013 Main Committee Meeting
- e) A3.29 Deterioration of ageing substation equipment Ken Edwards
- f) A3.30 Overstresses in S/E equipment. Ken Edwards

9) Old Business

- a) Possible (Subgroup) Task Force on HVDC breakers Leslie Falkingham
CIGRE WG currently working this subject, we will continue to monitor their progress and will follow-up with recommendation after their work is published
- b) <https://development.standards.ieee.org/my-site/open-ballot-invitations>
- c) TF (Subgroup) to evaluate possible implementation of IEC 62271-101 Mauricio Aristizabal

10) New Business

- a) Update on C37.04 TF for 3-phase line faults, critical currents, and SFL implications. Mauricio Aristizabal
- b) AMS Demonstration . Mauricio Aristizabal

11) Future Meetings

- a) Fall 2013: San Antonio, TX Sept. 15th – 19th, 2013
- b) Spring 2014: Lake Buena Vista, FL May 4th – 8th, 2014
- c) Fall 2014: Ashville, NC September 21st – 25th, 2014
- d) Spring 2015: Saint Pete Beach, FL April 26th – 30th, 2015
- e) Fall 2015: San Diego, CA September 20th – 24th, 2015

12) Adjourn

Motion to adjourn by Leslie Falkingham, seconds Anne Bosma.