

1) Introduction of Members and Guests

Mauricio Aristizabal

Member introductions

Presentation of new members of the subcommittee:

Gilbert Carmona
Todd Irwin
Douglas Giraud
Carl Schuetz

2) Approval of Minutes of Previous Meeting

Mauricio Aristizabal / Mike Skidmore

Approval of minutes of Galveston, TX:

Moved: Dave Mitchell

Second: Ken Edwards

Unanimous approval

3) Membership

	Utility	Manufacturer	Independent & Consultants	Corresponding Members	Total Membership	Guests
Current membership	18	28	7	6	55/49 for Quorum calc.	59
Attendance	10	14	3		27	14

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 October 1st.

5) Reports of Working Groups

a) Technical Paper Reviews

Leslie Falkingham

Seeking better contributions2 of 35 papers submitted from US, 8 approved in total

b) WG Activities

HVCB Switchgear Subcommittee Agenda, 9-18-2013, San Antonio 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	First draft planned within a few weeks.
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	Needs amendment to address error in tables 6 and 7 for SLF reference First draft before Nov 1
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	
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	Submitted PAR in Spring of 2013. Corrected PAR title in May 2013 Assigned tasks for initial review Request 3 sessions Spring 2014 meeting.
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, 9-18-2013, San Antonio TX

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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	Work continues – various assignments to WG members 2 nd draft planned within next 2 months for working group circulation. Extension of PAR anticipated
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	Recirculation of ballot – closed on 9-11-13 Ballot comments reviewed – next draft to be circulated for ballot withing next few weeks
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 No further technical comments will be accepted. Will be recorded for consideration during next review. Oct 15 for next draft for IEEE submittal.
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	

HVCB Switchgear Subcommittee Agenda, 9-18-2013, San Antonio TX

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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	No progress made with IEC for dual logo as reported in Main Committee Spring of 2013. PAR was withdrawn. New revision should be considered Volunteers solicited for Ken to lead, Sushil Shinde + Todd Irwin. TF to meet in Spring 2014.
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	No plans to work on these documents. A TF of C37.09 will generate recommendations to incorporate synthetic test requirements from IEC 62271-101 into the new revision of C37.09
C37.081a-1997	Supplement to IEEE Guide for Synthetic Fault Testing of AC HVCB Rated on a Symmetrical Current Basis	HVCB	TBD (Mel Smith)		Reaffirmed 2007 Document Expires 12/31/2018	See C37.081
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	No action
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	2 nd draft reviewed. Volunteer members to consolidate contents and tables. 3 rd draft planned before Spring 2014 meeting.
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	Recirculation of ballot closed on 9-13-13 No meeting for spring.
C37.12-2008	IEEE Guide for Specifications of High-Voltage Circuit Breakers (over 1000 Volts)	HVCB	Ken Edwards		Document Expires 12/31/2018	Meeting needed for Spring 2014 PAR expected before spring meeting

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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 Falls under Q&R. Dave Mitchell to lead TF. TF to consider title revision to Recommended Practice?
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			Not in HVCB scope
C37.59-2007	Requirements for Conversion of Power Switchgear Equipment	ADSCOM joint HVCB, SA, and LVSD	Pete Dwyer			Not in HVCB scope
C37.122-2010	Standard for High Voltage Gas-Insulated Substations Rated above 52 kV	Joint SUB/SWG HVCB	Jon Brunke			HVCB asked to monitor.
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)			Monitor activity
C57.142-2010	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)			Transformer Committee expected to discuss next meeting. Monitor Activity
P62271-37-082	Standard for High-voltage switchgear and controlgear - Part 37-082: Measurement of sound pressure levels on AC HVCB'	HVCB	Leslie Falkingham		Document Expires 12/31/2023	No Action
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		See C37.013

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

6) Reports of Task Forces

- a) Line Faults and Critical Currents Roy Alexander
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.
Decision not to deal with critical currents and adopt IEC methodology.
- b) Transformer Natural Frequencies (TF for C37.06.1) Bill Bergman
Sushil Shinde to follow with Bill Bergman for status
- c) Joint Capacitor Paper on Transient Limiting Inductor Applications Roy Alexander
Plan to make a Technical Report instead of paper. Revised draft planned by end of October 2013. Hope to publish to website Spring 2014.

7) Reports of AdsCom WG/TF

- Capacitance Switching TF Neil McCord
Working document in progress. Commitment to send to WG members within 2-3 weeks.
Hope to get out for ballot before Spring 2014 meeting. PAR extension request planned.

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
Technical brochure planned. Plan to meet in spring
- c) CIGRE HV Vacuum CB WG (A3.27) Kirk Smith/Mietek Glinkowski
Tutorial was presented, May 1, 2013 after the Main Committee meeting
No more WG meetings planned. Final report by end of year.
- d) A3.28 Switching phenomena and testing requirements for UHV and EHV equipment. Denis Dufournet
A tutorial will be presented after the Fall 2013 Main Committee Meeting for TRV on HV circuit breakers.
Final draft in October 2013, plan to publish late 2013 early 2014. 250 page documents
550kV & 800kV. CB section on TRV.
- e) A3.29 Deterioration of ageing substation equipment Ken Edwards
Working group progress, bulletin at let 2 years out.
- f) A3.30 Overstresses in S/E equipment. Ken Edwards

9) Old Business

- a) <https://development.standards.ieee.org/my-site/open-ballot-invitations>
- b) IEEE Senior membership application. Mauricio Aristizabal
Senior Member requirements presented. Need to increase and raise profile of committee.

10) New Business

- a) C37.016 – No progress with IEC dual logo – HVCB should consider another revision
TF planned
- b) C37.14 - Standard for Low-Voltage DC Power Circuit Breakers Used in Enclosures

11) Future Meetings

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

12) Adjourn