

1) Introduction of Members and Guests

Mauricio Aristizabal / Mike Skidmore

Member introductions:

Introduction of new members:

Stephen Cary
Tom Mulcahy

Membership Status Update

2) Approval of Minutes of Previous Meeting

Mauricio Aristizabal / Mike Skidmore

Approval of minutes of Lake Buena Vista, FL: all in favor, no negatives with corrections*:

Moved: Anne Bosma

Second: Roy Alexander

* spelling corrections to Anne Bosma and Sushil Shinde names.

3) Membership

	MEMBERS**	GUESTS	REQUIRED FOR QUORUM COUNT	TOTAL*
HVCB Committee Roster	61	63	≥ 50% membership at meeting (≥ 30 members)	124
Attendance Recorded Asheville, NC	30	22		52

*Count includes: Members, Guests, Corresponding Members, Chair, and Secretary

** Count includes: Members, Corresponding Members, Chair, and Secretary

4) Chairman's Report

Mauricio Aristizabal / Mike Skidmore

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

- WG chairs need to email minutes of their WG meetings to the subcommittee secretary no later than September 30th.

5) Reports of Working Groups

a) Technical Paper Reviews

Leslie Falkingham (John Webb)

Update provided by John Webb. Low IEEE technical paper participation of U.S. authors. Call for more contributions from U.S.

b) WG Activities

HVCB Switchgear Subcommittee Agenda, 9-24-2014, Asheville, NC

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	PAR expires 2015 – WG (M. Crawford) to file for PAR extension. WG must follow procedure to change chair
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	Will be pulled into .04 – no update needed
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	Will be pulled into .04 – no update needed
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	Will be pulled into .04 – no update needed
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 Mauricio Aristizabal	Included on PC37.04 PAR	Document Expires 9/11/2019	Needs amendment to address error in tables 6 and 7 for SLF reference - No update needed at this time - will be pulled into .04
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 12-31-2015	Document Expires 12/31/2018	C37.06.1 will not be pulled into C37.04 (possible timing issue on release of documents) Circulate 1 st draft by Fall of 2014 for comments. Recommended to file PAR extension (Fall of 2015 is too late to file)
PC37.09	IEEE Standard Test Procedure for AC High-Voltage Circuit Breakers Rated on a Symmetrical Current Basis	HVCB	Xi Zhu	PAR Expires 12/31/2017	Reaffirmed 2007 Document Expires 12/31/2018	On schedule, All documents needed by 12- 5-2014 for first draft. Goal is to Ballot by Fall 2015. Document to be completed 2017
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 Mauricio Aristizabal		Document Expires 12/31/2018	Will be pulled into .C37.09 – no update needed

HVCB Switchgear Subcommittee Agenda, 9-24-2014, Asheville, NC

Document	Title	SubCommittee	WG Chair	PAR	IEEE Status	Activity
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	Reviewed PAR for 100.2 and 09a will be pulled into 100.2 – C37.09 should reference 100.2 (intent of 100.2 was to pull together C37.66, .09a, 1247) There is no need to pull 09a into C37.09, unless C37.100.2 is not complete in time.
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	Will be pulled into .C37.09 – no update needed
PC37.010	Application Guide for AC High-Voltage Circuit Breakers > 1000 Vac Rated on a Symmetrical Current Basis	HVCB	Helmut Heiermeier	PAR expires 12-31-2015	Reaffirmed 2005 Document Expires 12/31/2018	The PAR for the C37.010 expires 12-2015. This change has been accepted. Draft 9 submitted on 8-29-14. Expect to ballot around November 2014. Comments to be addressed Spring 2015. (Fall 2015 is too late to extend PAR) – Need to extend PAR
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	Revision needed - align with the revised C37.04, C37.09 and with IEEE C37.06.1, also cover some items not covered presently in C37.011 e.g. (systems with compensated lines)/ Initial meeting Spring 2015, form study group.
PC37.012	IEEE Application Guide for Capacitance Current Switching for AC High-Voltage Circuit Breakers	HVCB	Anne Bosma		Document Expires 3/31/2021	PC37.012 the document has been approved by the Standards Board on March 27, 2014 Publication of revised standard expected in May 2015. The standard will remain active for 10 years.

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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		Re-circulation ballot July, 2014. Status: PASSED - IEEE is done but under review with IEC; and will then require recirculation ballot in IEEE
62271-37-082-2012	Standard for High-voltage switchgear and control gear - Part 37-082: Measurement of sound pressure levels on AC HVCB	HVCB	Leslie Falkingham		Document Expires 12/31/2023	Done - no update needed at this time
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	Was pulled into – C37.013 – no update needed
C37.015-2009	IEEE Guide for the Application of Shunt Reactor Switching	HVCB	Anne Bosma		Document Expires 12/9/2019	Anne - needs to start a PAR approximately Spring of 2015. Form study group for Spring of 2015
PC37.016	Standard for AC High Voltage Circuit Switchers Rated 15.5kV through 245kV	HVCB	Peter Meyer		Document Expires 12/31/2018	Peter Meyer Accepted Chair position. PAR submitted to NESCOM for their October Meeting. First meeting held, volunteers to review document.
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	Parts to be pulled into. 04 and .09. no action needed at this time
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	TF is needed to evaluate possible implementation of IEC 62271-101 – Need to establish a TF, motion K. Edwards, second M. Crawford. Contact Mauricio Aristizabal as chair.
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 – Document a part of C37.081 – will be reviewed by a TF
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 – Should go into 100.2 or refer back to 62271-101
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 needed at this time
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	On Track to be finished. Ballot after Spring 2015 meeting.

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PC37.11	Standard Requirements for Electrical Control for AC High-Voltage (>1000V) Circuit Breakers	HVCB	John Webb		Reaffirmed 2003 Document Expires 12/31/2018 12/31/2024	Ready to be submitted to REVCOM
C37.12-2008	IEEE Guide for Specifications of High-Voltage Circuit Breakers (over 1000 Volts)	HVCB	John Webb		Document Expires 12/31/2018	Need to start PAR – Request meeting slots for Spring of 2015

Document	Title	SubCommittee	WG Chair	PAR	IEEE Status	Activity
C37.12.1-2007	IEEE Guide for High Voltage (>1000V) Circuit Breaker Instruction Manual Content	HVCB	Ken Edwards		Document Expires 12/31/2018	Need to start PAR - Request meeting slots for Spring 2015. Elevate to a recommended practice instead of guide. No objections at HVCB meeting
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			Ballot in September 2014. Submit to REVCOM.
C37.59-2007	Requirements for Conversion of Power Switchgear Equipment	ADSCOM joint HVCB, SA, and LVSD	Dean Sigmon			Started Work. Two sessions with progress.
C37.122-2010	Standard for High Voltage Gas-Insulated Substations Rated above 52 kV	Joint SUB/SWG HVCB	Jon Brunke			Done - Published
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)			No update - need to verify status
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)			No update - remove from list

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

6) Reports of Task Forces

- a) Joint Capacitor Paper on Transient Limiting Inductor Applications Roy Alexander
Status - The Technical Report: "Transient Limiting Inductor Applications in Shunt Capacitor Banks" has been revised, incorporating Switchgear Committee comments, and is with the Capacitor Subcommittee for final approval and posting.

7) Reports of AdsCom WG/TF

- Capacitance Switching WG (PC37.100.2) Neil McCord
Sponsor ballot opened on 8-21-14. Did not reach 75%. Received 548 comments, covered 20% during meetings.

- Common Requirements WG (C37.100.1) David Stone
Voltage Table updates – alignment with IEC 62271-1 tables 2 and 4. Dave presented information to encourage WG to use common requirements when possible. Presentation attached to minutes of meeting.

8) Reports of CIGRE

- a) A3.32 – Non-intrusive methods for condition assessment Albert Livshitz
(Expect to publish in 2016)

- b) JWG A3/B4.34 – Technical requirement for state of the art DC Equipment Denis Dufournet
Three meetings, agreed on table of contents. Expected activity for 2 years (2016).

- c) A3.26 Influence of shunt capacitor banks on circuit breaker fault interruption duties Anne Bosma
Hope to start document by the end of 2014.

- d) A3.27 The impact of the application of vacuum switchgear at transmission voltages Arben Bufi
Published as technical brochure TB 408

- e) A3.28 Switching phenomena and testing requirements for UHV and EHV equipment. Denis Dufournet
Published as technical brochure TB 570

- f) A3.29 Deterioration of ageing substation equipment Ken Edwards
Working group is progressing, bulletin at least 2 years out.
No update

- g) A3.30 Overstresses in S/E equipment. Ken Edwards
To be completed by the end of 2014 or Spring 2015

9) Old Business

- a) <https://development.standards.ieee.org/my-site/open-ballot-invitations>

10) New Business

- a) Presentation Reminder - Tools for the Simulation of Internal Arc Effects in MV and HV Switchgear - (Thursday September 25, 2014 (11:45 AM to 1:15 PM))

Nenad Uzelac

11) Future Meetings

- a) Spring 2015: Saint Pete Beach, FL April 26th – 30th, 2015
- b) Fall 2015: San Diego, CA September 20th – 24th, 2015
- c) Spring 2016: Sonesta Resort, Hilton Head, SC April 25th – 29th, 2016

12) Adjourn