### 1) Introduction of Members and Guests

Mauricio Aristizabal

Member introductions:

Introduction of new members:

Don Steigerwalt - Duke Energy

Membership Status Update

## 2) Approval of Minutes of Previous Meeting

Mauricio Aristizabal / Mike Skidmore

Approval of minutes of San Antonio, TX: Corrected Quorum Count

Moved: Anna Bosma Second: Sushil Shinde Unanimous approval

## 3) Membership

	Utility	Manufacturer	Independent & Consultants	Corresponding Members	Total Membership	Guests
Current membership	18	27	4	9	57/49 for Quorum calc.	59
Attendance	12	16	3	0	31	15

## 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 16th.

## 5) Reports of Working Groups

a) Technical Paper Reviews

Leslie Falkingham

b) WG Activities

S14 HVCB Agenda 1 of 6

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	Mike Crawford requested 2 or 3 sessions for Fall 2014 Meeting
C37.04-1999 Cor 1-2009	IEEE Standard for Rating Structure for AC High-Voltage Circuit Breakers Corrigendum 1	НУСВ	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	НVСВ	Kirk Smith	Included on PC37.04 PAR	Document Expires 12/31/2018	
C37.062009 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	НVСВ	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
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 12-31-2015	Document Expires 12/31/2018	Sushi Shinde extended Par until 2015
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	Goal is to Ballot by end of 2015. Document to be completed 2017 Needs 3 sessions for Fall 2014
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	НVСВ	Roy Alexander		Reaffirmed 2007 Document Expires 12/31/2018	

S14 HVCB Agenda 2 of 6

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	The PAR for the C37.010 expires 12-2015. This change has been accepted.
C37.011-2011	IEEE Guide for the Application of Transient Recovery Voltage for AC High- Voltage Circuit Breakers	НVСВ	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	PC37.012 the document has been approved by the Standards Board on March 27, 2014 Publication of the revised standard is expected in May 2015. The standard will remain active for 10 years
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	
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	
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		Document Expires 12/31/2018	Peter Meyer Accepted Chair position. Apply for PAR
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	TF to evaluate possible implementation of IEC 62271-101

S14 HVCB Agenda 3 of 6

Document	Title	SubCommittee	WG Chair	PAR	IEEE Status	Activity
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	НУСВ	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	НУСВ	Bill Bergman		Document Expires 12/31/2021	No Action
C37.10.1-2000	IEEE Guide for the Selection of Monitoring for Circuit Breakers	НУСВ	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	НУСВ	John Webb	PAR Extended to 12-31-2013	Reaffirmed 2003 Document Expires 12/31/2018	
C37.12-2008	IEEE Guide for Specifications of High- Voltage Circuit Breakers (over 1000 Volts)	НУСВ	Ken Edwards		Document Expires 12/31/2018	Ken requested meeting for Fall 2014. Need to start PAR
C37.12.1-2007	Draft IEEE Guide for High Voltage (>1000V) Circuit Breaker Instruction Manual Content	НУСВ	John Webb		Document Expires 12/31/2018	John Webb requested meeting for Fall 2014. Need to start PAR
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)			
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)			
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	
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		

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

## 6) Reports of Task Forces

a) Line Faults and Critical Currents

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) Sushil Shinde (Update: Is currently a working group and no longer considered a Task Force)

c) Joint Capacitor Paper on Transient Limiting Inductor Applications Roy Alexander

#### 7) Reports of AdsCom WG/TF

Capacitance Switching TF

Neil McCord

## 8) Reports of CIGRE

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

Albert Livshitz

b) JWG A3/B4.34 – Technical requirement for state of the art DC Equipment

**Denis Dufournet** 

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

Anne Bosma
Review comments in July next meeting planned for October

Review comments in July next meeting planned for October

d) A3.28 Switching phenomena and testing requirements for UHV and EHV equipment.

Denis Dufournet

Published as technical brochure TB 570

e) A3.29 Deterioration of ageing substation equipment Working group is progressing, bulletin at least 2 years out.

Ken Edwards

f) A3.30 Overstresses in S/E equipment. No update

Ken Edwards

#### 9) Old Business

- a) <a href="https://development.standards.ieee.org/my-site/open-ballot-invitations">https://development.standards.ieee.org/my-site/open-ballot-invitations</a>
- b) C37.014 was removed from list being monitored by subcommittee

#### 10) New Business

a) Presentation – NFPA-70E Overview (Thursday May 8, 2014 (12:00 to 3:30 PM) in Grand Republic B

Daleep Mohla

#### 11) Future Meetings

- a) Fall 2014: Ashville, NC September 21<sup>st</sup> 25<sup>th</sup>, 2014
- b) Spring 2015: Saint Pete Beach, FL April 26th 30<sup>th</sup>, 2015

S14 HVCB Agenda 5 of 6

c) Fall 2015: San Diego, CA September 20<sup>th</sup> – 24<sup>th</sup>, 2015

# 12) Adjourn