1) Introduction of Members and Guests

Rich York

See S09HVCBa1.pdf

2) Approval of Minutes of Previous Meeting

Rich York/Rod Sauls

Approved with revision to correct typographical error in C37.011 minutes...

3) Discussion of IEEE patent policy

Rich York

WG Chairs were reminded to make sure and review the IEEE patent policy at the beginning of every meeting.

4) Membership (See S09HVCBa2.pdf)

	Utility	Manufacturer	Independent /	Guests	Total Membership
			Consultants/Corresponding		
Current	22	22	13		57
membership					
Attendance	13	8	6	13	40

5) Chairman's Report

Rich York

Chairman (Rich York): richyork@ieee.org 724-696-1555 Secretary (Rod Sauls): rodsauls@ieee.org 205-257-4143

All WG Chairs are requested to maintain the AMS roster for the WG.

• Ken Edwards mentioned that IEEE has developed a roster system similar to the AMS system. It is not mandatory that the AMS system be used for WG rosters.

Reminder to everyone to review posted meeting minutes.

 Please review WG meeting minutes and make sure any comments or concerns were documented. If you do not feel that your comments were adequately addressed and it's not identified on the minutes, please note that and make the WG aware of the situation so it can be duly noted.

6) Reports of Working Groups

a) Technical Paper Reviews

Jeff Nelson

- Over the past 15 months, 5 papers have been approved and 4 have been rejected while 7 are in various stages of review.
- There were 56 papers submitted with the majority of them coming from authors in the field of academia with relatively few from the manufacturing, testing and user arenas.
- The majority of the papers dealt with circuit breaker design or old information.

b) WG Activities

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Document	Title	SubCommittee	WG Chair	PAR	IEEE Status	Activity
C37.04-1999 Cor_1	IEEE Standard Rating Structure for AC High-Voltage Circuit Breakers Rated on a Symmetrical Current Basis	HVCB	Jeff Nelson	2007		Ballot closed and in comment resolution stage.
 The only 	rigenda was recirculated because the base doc y changes from the first ballot were editorial. lans to kickoff the C37.04 revision WG this fa			e recirculation in	cluded the base document a	nd closes on 5/15/09.
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		R2006	To be incorporated into new C37.04
No Activ	vity					
C37.04b-2008 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:	НVСВ	Kirk Smith		Approved 2008	Published on April 3, 2009
 Working 	ent was published on April 3, 2009. Congratu g Group met. HVCBa3.doc	lations went out to Ki	irk Smith.			
C37.062000 ANSI	American National Standard for SwitchgearAC High-Voltage Circuit Breakers Rated on a Symmetrical Current BasisPreferred Ratings and Related Required Capabilities	HVCB	Georges Montillet	2007	Disapproved Revcom 2009	D10 was disapproved by Revcom March 1009. Currently on Recirculation #4. 5/5/09- The WG voted to remove .06.1 info and recirc.
See S09A C37.0Motion	g Group met. HVCBa4.doc 16.1 TF was formed during the C37.06 WG mass made to form a WG to work on C37.06.1 will be recirculated (without C37.06.1 inform	revision by Jeff N. M		gman and subseq	quently approved	
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			The .06.1 info has been taken out of .06. A new WG is formed to revise C37.06.1 with K. Wallace as the Chair.

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	ce was formed in C37.06 meeting and met in the	ne second C37.06 m	neeting slot.		
	HVCBa11.doc				
	s created to be submitted by 5/7/09 in order to	be placed on June N	NESCOM schedule.		
 Will nee 	ed a meeting in the fall.				
	,				
C37.09-1999	IEEE Standard Test Procedure for AC	HVCB	Jeff Nelson	R2007	Corrigenda and Errata published.
	High-Voltage Circuit Breakers Rated on a				Revision to be undertaken.
	Symmetrical Current Basis				
 PAR app 	proved until the end of 2009 and should be com-	pleted by then.			
C37.09a-2005	Standard Test Procedure for AC High-	HVCB	Roy Alexander		Incorporated into new C37.09
Amendment to	Voltage Circuit Breakers Rated on a				
C37.09-1999	Symmetrical Current BasisAmendment				
	1: Capacitance Current Switching				
No Activ				,	
PC37.09b	Draft Standard Test Procedure for AC	HVCB	Kirk Smith	DAD overings 12/21/00	Draft to be sent to WG for
Amendment to	High-Voltage Circuit Breakers Rated on a	пусь	Kirk Silliul	PAR expires 12/31/09	review
C37.09-1999	Symmetrical Current BasisAmendment				Teview
C37.09-1999	2 Required TRV Values:				
• Workins	g Group met.				
	g Group met. HVCBa3.doc				
• See 309	nvCbas.doc				
C37.010-2005	IEEE Application Guide for AC High-	HVCB	TBD	R2005	Will need WG Chair
1999 in	Voltage Circuit Breakers Rated on a	11 , 02		142000	Will hood We chair
IEEExplore	Symmetrical Current Basis				
	cument will need some action in 2010. A reque	est for a volunteer to	Chair the WG was made		
	e is interested, please let Rich York or Rod Sau		o chan the Was made.		
ii unyon	o is interested, pieuse for riteri 1 oik of riou but	is know.			
C37.011-2005	IEEE Application Guide for Transient	HVCB	Denis Dufournet		Active
	Recovery Voltage for AC High-Voltage				PAR to revise will be applied for
	Circuit Breakers Rated on a Symmetrical				after approval of .04b & .06.
	Current Basis				
Working	g Group met with 10 Guests and 13 Members p	resent.	·	•	•
	HVCBa5.doc				
Will nee	ed 2 meeting slots in the fall.				
	9				
C37.012-2005	IEEE Application Guide for Capacitance	HVCB	Anne Bosma	R2005	Active
	Current Switching for AC High-Voltage				
	Circuit Breakers Rated on a Symmetrical				
	Current Basis				
 Was rev 	ised in 2005 and will need a revision by 2010.				
A Task	Force meeting will be held in the fall				
	·				· · · · · · · · · · · · · · · · · · ·

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C37.013-1997	IEEE Standard for AC High-Voltage Generator Circuit Breaker Rated on a Symmetrical Current Basis	HVCB	Bill Long	Approved 2009	R2008	PAR approved to revise and adopt as Dual Logo with IEC
Workin	g Group met.					
	ep is to combine C37.013 and C37.013a.					
	ng wants to have 4 mtgs/year					
	6					
PC37.013a	IEEE Standard for AC High-Voltage	HVCB	Bill Long	Approved	Approved	Incorporated in C37.013
	Generator Circuit Breaker Rated on a			2007		
	Symmetrical Current BasisSupplement					
	for generators 10 to 100 MVA					
• See C37	7.013 above.					
C37.015-1993	IEEE Application Guide for Shunt	HVCB	Anne Bosma	Approved	In Ballot	Ballot closes April 2009
R2006	Reactor Switching	пусь	Aille Dosilla	2008	III Danot	Ballot closes April 2009
	g Group met with 10 Members and 11 Guests	n attendance		2000		
	g Group met with 10 Members and 11 Guests he HVCBa6.doc	ii attenuance.				
		TPI (1 1'/ ' 1	1 12	1		
• Draft 6	was sent out for ballot which closed on 5/3/09.	The mostly editorial	comments were discussi	ea.		
C37.016-2006	Standard for AC High-Voltage Circuit	HVCB	Peter Meyer	Approved		TF formed to address dual logo
C31.010-2000			I CICI IVIC VCI	1 ippio ved		
Anne Be	Switchers rated 15.5 kV through 245 kV osma indicated that the IEC does want this doc	ument to have the Du	al Logo status, but lack o	of attendance for the I		issues in the rejection. There were not
 Anne Beenough accepted If it is a 	Switchers rated 15.5 kV through 245 kV osma indicated that the IEC does want this doc countries attending that offered to participate id by the IEC before the fall meeting.	ument to have the Dun the NWIP. It was n	nal Logo status, but lack on the control of the con	2009 of attendance for the I bjections and since he		issues in the rejection. There were not . The feeling is that by it should be
Anne Benough accepted If it is a PC37.017-20xx	Switchers rated 15.5 kV through 245 kV osma indicated that the IEC does want this doc countries attending that offered to participate id by the IEC before the fall meeting. accepted, we'll need 1 meeting in the fall. Bushings for HVCB and GIS	ument to have the Dun the NWIP. It was not have the NWIP. It was not have the NWIP.	al Logo status, but lack o	of attendance for the I		issues in the rejection. There were not
Anne Benough accepted If it is a PC37.017-20xx Working See S09	Switchers rated 15.5 kV through 245 kV osma indicated that the IEC does want this doc countries attending that offered to participate id by the IEC before the fall meeting.	ument to have the Dun the NWIP. It was not have the NWIP. It was not h	nal Logo status, but lack on the control of the con	2009 of attendance for the I bjections and since he		issues in the rejection. There were not . The feeling is that by it should be WG Formed. Completion
Anne Benough accepted If it is a PC37.017-20xx Working See S09	Switchers rated 15.5 kV through 245 kV osma indicated that the IEC does want this doc countries attending that offered to participate id by the IEC before the fall meeting. accepted, we'll need 1 meeting in the fall. Bushings for HVCB and GIS g Group met with 6 Members and 5 Guests in a DHVCBa7.doc have a draft out for balloting after the fall meet	ument to have the Dun the NWIP. It was not have the NWIP. It was not h	nal Logo status, but lack on the control of the con	2009 of attendance for the I bjections and since he		issues in the rejection. There were not The feeling is that by it should be WG Formed. Completion desired in 2009.
Anne Benough accepted If it is a PC37.017-20xx Working See S09 Plan to be	Switchers rated 15.5 kV through 245 kV osma indicated that the IEC does want this doc countries attending that offered to participate id by the IEC before the fall meeting. **accepted*, we'll need 1 meeting in the fall.** Bushings for HVCB and GIS **g Group met with 6 Members and 5 Guests in 19 HVCBa7.doc have a draft out for balloting after the fall meeting in the fall meeting i	ument to have the Dun the NWIP. It was not have the NWIP. It was not h	Devki Sharma	2009 of attendance for the I bjections and since he	e has 5 commitments	issues in the rejection. There were not The feeling is that by it should be WG Formed. Completion desired in 2009.
Anne Benough accepted If it is a PC37.017-20xx Working See S09 Plan to be	Switchers rated 15.5 kV through 245 kV osma indicated that the IEC does want this doc countries attending that offered to participate id by the IEC before the fall meeting. Inccepted, we'll need 1 meeting in the fall. Bushings for HVCB and GIS Group met with 6 Members and 5 Guests in a HVCBa7.doc have a draft out for balloting after the fall meeting of AC High-Voltage Circuit Breakers	ument to have the Dun the NWIP. It was not have the NWIP. It was not h	Devki Sharma	2009 of attendance for the I bjections and since he	e has 5 commitments	issues in the rejection. There were not The feeling is that by it should be WG Formed. Completion desired in 2009.
Anne Benough accepted If it is a PC37.017-20xx Working See S09 Plan to be	Switchers rated 15.5 kV through 245 kV osma indicated that the IEC does want this doc countries attending that offered to participate id by the IEC before the fall meeting. Inccepted, we'll need 1 meeting in the fall. Bushings for HVCB and GIS INCOMPART OF THE STANDARD OF THE STANDA	ument to have the Dun the NWIP. It was not have the NWIP. It was not h	Devki Sharma	2009 of attendance for the I bjections and since he	e has 5 commitments	issues in the rejection. There were not The feeling is that by it should be WG Formed. Completion desired in 2009.
Anne Benough accepted If it is a PC37.017-20xx Working See S09 Plan to b C37.081-1981 No Acti	Switchers rated 15.5 kV through 245 kV osma indicated that the IEC does want this doc countries attending that offered to participate id by the IEC before the fall meeting. Inccepted, we'll need 1 meeting in the fall. Bushings for HVCB and GIS INCOMPART OF THE GROUP STATE OF	HVCB/GIS attendance. HVCB	Devki Sharma	2009 of attendance for the I bjections and since he	R2007	issues in the rejection. There were not The feeling is that by it should be WG Formed. Completion desired in 2009. WG/TF will no longer be active
Anne Benough accepted If it is a PC37.017-20xx Working See S09 Plan to b C37.081-1981	Switchers rated 15.5 kV through 245 kV osma indicated that the IEC does want this doc countries attending that offered to participate id by the IEC before the fall meeting. Inccepted, we'll need 1 meeting in the fall. Bushings for HVCB and GIS INCOMPART OF THE STANDARD OF THE STANDA	ument to have the Dun the NWIP. It was not have the NWIP. It was not h	Devki Sharma	2009 of attendance for the I bjections and since he	e has 5 commitments	issues in the rejection. There were not The feeling is that by it should be WG Formed. Completion desired in 2009.
Anne Benough accepted If it is a PC37.017-20xx Working See S09 Plan to b C37.081-1981 No Acti	Switchers rated 15.5 kV through 245 kV osma indicated that the IEC does want this doc countries attending that offered to participate id by the IEC before the fall meeting. Incepted, we'll need 1 meeting in the fall. Bushings for HVCB and GIS INCOMPAGE Group met with 6 Members and 5 Guests in a phychaeta due to the fall meeting of AC High-Voltage Circuit Breakers Rated on a Symmetrical Current basis vity Supplement to C37.081-1981	HVCB/GIS attendance. HVCB	Devki Sharma	2009 of attendance for the I bjections and since he	R2007	issues in the rejection. There were not The feeling is that by it should be WG Formed. Completion desired in 2009. WG/TF will no longer be active

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HVCB Switchgear Subcommittee Minutes, 2009-05-06, Asheville, NC

R2006	IEEE Standard Methods for the Measurement of Sound Pressure Levels	HVCB	Leslie Falkingham	Approved Sept 2008		WG formed to revise for IEEE/IEC Dual Logo
	of AC Power Circuit Breakers			Sept 2000		IEC Work Item to be applied fo
	g Group met with 9 Members and 15 Guests in a PHVCBa8.doc	ttendance.				
C37.083-1999	IEEE Guide to Synthetic Capacitor Current Switching Test of AC High- Voltage Circuit Breakers	HVCB	TBD		R2006	WG/TF will no longer be active
No Acti	vity					
C37.10-1995 R2008 PC37.10	IEEE Guide for Diagnostics and Failure Investigation of Power Circuit Breakers	HVCB	Bill Bergman	Approved 2009		TF formed to coordinate with 1325
• See S09	g Group met with 25 Members and 14 Guests in PHVCBa9.doc proved on 3/19/09 the revision will include the c		eplacement of the former IE	EEE Std C37.10TM-	1995 and IEEE Std 132	25TM-1996
C37.10.1-2000	IEEE Guide for the Selection of Monitoring for Circuit Breakers	HVCB	Bill Bergman		R2006	
C37.11-2003	IEEE Standard Requirements for Electrical Control for High-Voltage Circuit Breakers Rated on A Symmetrical Current Basis	НVСВ	Paul Barnett	Approved 2008		WG to review proposed change to document
• See S09	g Group met with 7 Members and 12 Guests in a HVCBa10.doc in discussion centered around the molded case ci		dallowing electronic control	ls for circuit breake	rs.	
PC37.12	Guide for the Specification of AC High- Voltage Circuit Breakers American National Standard for AC	HVCB	Ken Edwards		Approved 2008	D12 approved by Revcom Dec 2008
ANSI C37.12-						
ANSI C37.12- 1991	High-Voltage Circuit Breakers Rated on a Symmetrical Current Basis— Specifications Guide					
	Symmetrical Current Basis— Specifications Guide					

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HVCB Switchgear Subcommittee Minutes, 2009-05-06, Asheville, NC

Std 1325-1996	IEEE Recommended Practice for Reporting Field Failure Data for Power Circuit Breakers	HVCB	Bill Bergman/Devki Sharma		R2008	Will be incorporated in C37.10
• See C3	37.10 above.					
C37.20.6	4.76 kV to 38 kV Rated Grounding and Testing Devices Used in Enclosures	ADSCOM joint HVCB/SA	T. W. Olsen 919-365-2208 t.olsen@ieee.org		APPROVED 2007	
No Ac	tivity					
C37.59	Requirements for Conversion of Power Switchgear Equipment	ADSCOM joint HVCB, SA, and LVSD	Pete Dwyer 610.296.1273 pete.dwyer@ieee.org		Approved 2007	
No Ac	rivity	l	<u> </u>	<u> </u>		
C57.142	Guide to Describe the Occurrence and Mitigation of Switching Transients Induced by Transformer and Switching Device Interaction	HVCB	Steve Lambert	Approved 2008		Ballot closed Feb 2009 and in comment resolution stage.
 Transf 	ng Group did not meet. Former Committee received 130 comments on the wG Committee comments were forwarded to To			and 10 were relate	ed to the Switchgear Comm	nittee.
C57.16	Standard Requirements, Terminology and Test Code for Dry-Type Air Core Series- Connected Reactors	Joint HVCB/Xfmr	Jeff Nelson			Working with Transformer Committee to approve joint WG for TRV information in document.
• Devki Comm	elson hasn't spoken with Transformer Committ Sharma attended the TC WG and they indicate tittee response back to them was that they were dwards has also provided the same comment from	d that they have reque out of their scope.	ested comments by the SC b	but have not seen		S.
TLF TF	Transformer Limited Faults	HVCB	Ken Edwards			
• Ken E	dwards is still getting some data vork will be rolled into the C37.06.1 revision.	1		ı		

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7) Reports of Task Forces

a) "Longer Line Fault" TRV CIGRE A3-19

Roy Alexander

Work completed last year and is just sitting at CIGRE Central Office with no report out as yet.

8) Reports of AdsCom WG/TF

a) Capacitance Switching TF

Neil McCord

- Neil McCord will be involved again. They had a meeting with 9 people in attendance.
- Working on combining documents
- Plan to ask for PAR on 5/7/09.

9) Reports of CIGRE

a) CIGRE circuit breaker performance survey CIGRE A3-06

Bill Bergman

- This work is done and results are being analyzed and should be finalized in August 09 meeting.
- Kirk Smith mentioned that a new CIGRE working group has been formed dealing with Vacuum Interrupters rated 72kV and above. Kirk Smith, Pete Meyer and Mietek Glinkowski are among the participants.
- Anne Bosma mentioned that a new CIGRE A3-26 working group has been formed dealing with faults near capacitor banks. Anne Bosma, Jeff Nelson and Mark McVeigh are among the participants.
- Ken Edwards passed along information from Mietek Glinkowski that there is new work pertaining to the life extension of circuit breakers taking place.

10) Old Business

a) ????

• Rich York made a request that all working group meeting minutes and information should be submitted to either Rich York or Rod Sauls within 2 weeks. The information should include the description to be inserted into the meeting booklet as well as whether a meeting slot will be needed for the Fall 09 meeting.

11) New Business

a) ????

- Leslie Falkingham began a discussion on the IEEE/IEC Dual Logo standard policy. Is the intent of the IEC to use IEC numbers and drop the IEEE standard numbering?
 - o Matt Ceglia said he believes it is the preference of the IEC to use a single number. Jodi Haasz currently processes requests to keep a dual numbering system in place.
 - o IEEE needs to express their view to change the policy.
 - o It needs to be discussed in HVCB and then brought up in the Main Committee meeting.
- Rich York indicated that the IEEE/IEC agreement has gone through several iterations and no one really seems to know exactly what is going on.
- Leslie Falkingham made a motion that HVCB needs to express the view that the IEEE preference and desire is to keep both IEEE and IEC standard numbers on Dual Logo standards.
 - o The motion was seconded and subsequently approved unanimously.

12) Future Meetings

a) Denver, CO Sept 27-Oct 1, 2009

b) Myrtle Beach, SC

April 25-29, 2010

- Leslie Falkingham had a question for the group from his wife.....What will the water temperature be in Myrtle Beach???
- Motion to adjourn.... Thanks for a good meeting!!

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