

Minutes of Meeting
C37.09 Standard Test Procedure for AC High-Voltage Circuit Breakers
with Rated Maximum Voltage above 1000 V

Session: Monday October 15th, 2018 10:15 to 11:45 AM

Agenda

- Call to order, Introductions, Members & Guests Sign in
- IEEE-SA Patent Policy Compliance
 - MOM Approval
- Project Status and Outlook
- Confirmation of WG Approval of Submittal to RevCom
- IEEE-SA iMeetCentral Desk Website:
- Future Work
- Others

Call to order, Introductions, Members & Guests Sign in

Chair: Need make vote so quorum is needed.

Quorum

Membership count: 40 members listed on roster. There are four excused absences (40/44 possible attendees). Quorum needed 20. Count based on roster was 22, **quorum was reached**.

IEEE-SA Patent Policy Compliance

Chair: patent policy presented. No remarks by working group.

MOM Approval

Chair:

Reminder that documents are available at IEEE-SA central desk website.

(Doc.172) Lake Buena Vista Meeting posted and emailed out by Mike Skidmore on 5/6/2018
Move John Webb, Second James van de Ligt. All voted in favor, minutes approved.

Project Status and Outlook

Two months after the spring meeting's discussion on open items, recirculation 3 was done in July. Ballot 94% approval 38 comments. Worked on resolution. Recirculation 4 was done in September. 99% approval, one negative vote remained. Could initially not contact member, changed employment. No answer to e-mail communications. Could not change to positive vote.

23 editorial comments, one was repeat comment. IEEE editors may consider recommendations to address these comments.

September 25th document submitted to RevCom. Introduction portion will be updated by chair. New revision to be sent to IEEE. Questions? None.

Chair presented statistics of various ballots. Approval went from 80 to 99% over past two years.

Confirmation of WG Approval of Submittal to RevCom

Recirculation 4 approval rate 99%. WG has been informed of RevCom submittal after Recirculation 4. Submitted on September 25, 2018. Can still be recalled if any objection from WG member.

Motion for WG to confirm approval of submission to RevCom.

Move to approve submittal to RevCom John Webb. Second James van de Ligt. All voted in favor.

IEEE-SA iMeetCentral Desk Website:

Chair: 180+ key documents from the WG are on website. Can be used to retrieve any of them.

Future Work

Document still not perfect. Improvements can be made. The following recommendations will be forwarded to a WG in the future for consideration.

- Coverage of 420 kV and 1100 kV in order to have a truly international standard
- Dielectric check tests after short-circuit breaking tests (waveform and voltage level) to possibly align with IEC 62271-100
- MV metalclad circuit breakers test enclosure

Others

List of meetings since Fall 2012 in San Diego, CA.

Questions or Comments? None made

Motion to Adjourn: John Webb.

Meeting adjourned, thank you for all work of the members.

First Name	Last Name	Company	Role	10/15/2018 Kansas City, MO
Janet	Ache	G&W Electric	Guest	X
Syed Shahab Uddin	Ahmed	Siemens Energy Inc	Guest	
Roy	Alexander	RWA Engineering	Member	
Natasha	Alvarado	IEEE Standards Association	Guest	
Mauricio	Aristizabal	ABB	Member	X
Brad	Armstrong	Meramec Instrument Transformer Co.	Guest	X
Koustubh	Ashtekar	Eaton Corporation	Guest	
Aasim	Atiq	Siemens Industry	Guest	
Georges	Auguste	Ameren MO	Guest	X
Roy	Ayers	Nashville Electric Service	Guest	
Katrin	Baeuml	Schneider Electric	Guest	
Herman	Bannink	KEMA Netherlands	Guest	
Paul	Barnhart	Underwriters Laboratories	Guest	
Amildo	Barrio	Parsons	Guest	
George	Becker	POWER Engineers	Guest	
Robert	Behl	ABB	Member	
Billings	Stan	Retired	Member	
Gautami	Bhatt	Bechtel OGC	Guest	X
Jean-Marc	Biasse	Schneider Electric	Guest	
Marcus	Bonner	GE	Guest	
Anne	Bosma	ABB AB	Member	
Michael	Boulus	PSE&G	Guest	X
Douglas	Brandt	Eaton Corporation	Guest	
Cody	Brehm		Guest	
Andrew	Brignac	Entergy	Guest	
Jeffrey	Britton	Phenix Technologies, Inc.	Guest	
Jeffrey	Brogdon	Georgia Transmission	Guest	
Steven	Brown	Allen & Hoshall	Guest	X
Raymond	Browning	FirstEnergy Corp.	Guest	
John	Brunke	Dr. John H. Brunke, P.E.	Guest	
Arben	Bufi	Hitachi T&D Solutions, Inc.	Member	X
Ted	Burse	Powell Industries, Inc	Member	X
Eldridge	Byron	Schneider Electric	Member	
Donald	Cantrelle	Georgia Power	Guest	
Gilbert	Carmona	Southern California Edison	Guest	
Stephen	Cary	ABB	Member	X

Steven	Chen	Eaton Corporation	Member	X
Wayne	Cheng	B C Hydro	Guest	
Vincent	Chiodo	HICO	Guest	X
Jeonghwan	Cho	HICO America	Guest	
Andrew	Chovanec	GE Power	Guest	X
Chih	Chow	PEPCO	Member	
Michael	Christian	ABB	Guest	
Roggero	Ciofani	Altalink	Guest	
Robert	Cohn	Powercon Corp.	Guest	
Lucas	Collette	Duquesne Light	Member	X
Dave	Collette	Mitsubishi Electric	Guest	
Brad	Connor	Xcel Energy	Guest	X
Michael	Crawford	Mitsubishi Electric	Member	X
Jason	Cunningham	Southern States, LLC	Guest	X
David	Dart	NOJAPower	Guest	
Jerod	Day	Vacuum Interrupters, Inc.	Guest	
Daniel	Delfino	General Electric	Guest	
Patrick	Di Lillo	Consolidated Edison Co. of NY, Inc.	Member	X
Jeffrey	Door	The H-J Family of Companies	Guest	X
Denis	Dufournet	Retired	Member	
Edgar	Dullni	ABB	Guest	
Kirk	Duncan	Hitachi T&D Solutions	Guest	X
Bernie	Dwyer	PECO	Guest	
John	Eastman	Franklin Electric- Grid Solutions	Guest	
Alexander	Ebbert	HICO America	Guest	
Ken	Edwards	FirstEnergy Corp.	Member	
Doug	Edwards	Siemens Industry, Inc.	Guest	
Emily	Eftink	Burns & McDonnell	Guest	X
Rob	Eichelberger	Eaton	Guest	X
Tanner	Esco	Eaton Corporation	Guest	X
Leslie	Falkingham	Vacuum Interrupters Limited	Member	
Majid	Fathi	Qualitrol	Guest	
David	Feldmann	HICO America	Guest	
Howard	Fennell	Nashville Electric Service	Guest	
Philip	Fentress	Memphis Light, Gas & Water Div	Guest	
Thomas	Field	Engergy	Guest	
Sergio	Flores	Schneider Electric Inc. USA	Guest	X
Robert	Foster	Megger	Guest	
Paul	Fox	Schneider Electric	Guest	
Raymond	Frazier	Ameren	Guest	X
Richard	Frye	Eaton	Guest	

Didier	Fulchiron	Schneider-Electric	Guest	
Elizabeth	Gall	MEPPI	Guest	
Sivakumar	Ganesh	ENMAX Corporation	Guest	
Douglas	Giraud	Powell Industries	Member	
Anne	Good	Netshape Technologies, Inc.	Guest	
Paul	Grein	Circuit Breaker Sales, Co, Inc, - GroupCBS	Guest	X
Martin	Greschner	HIGHVOLT Prueftechnik Dresden GmbH	Guest	
John	Hall	Tennessee Valley Authority	Guest	X
Jeffrey	Hanson	Schneider Electric	Guest	
Helmut	Heiermeier	ABB	Member	
Christian	Heinrich	Siemens AG	Guest	X
Travis	Heintzelman	Burns & McDonnell	Guest	X
Charles	Hendrickson	Arizona Public Service Company	Guest	
Jeremy	Hensberger	Mitsubishi Electric Power Products Inc.	Guest	X
Victor	Hermosillo	GE Grid Solutions	Vice-Chair	X
William	Higinbotham	EA Technology LLC	Guest	
Tyler	Holp	Eaton	Guest	
Alexander	Hoover	Siemens Industry	Guest	
Jingxuan (Joanne)	Hu	RBJ Engineering Corporation	Member	
Carl	Hummel	HICO America	Guest	
Jennifer	Hunter	MEPPI	Guest	
Roy	Hutchins	Southern Company Services	Member	X
Todd	Irwin	GE Grid Solutions	Member	X
Anton	Janssen	Liander	Guest	
Christopher	Jarnigan	Southern Company Services	Guest	X
Joseph	Jasinski	ITC Holdings Corp.	Guest	
David	Johnson	Self-Employed	Guest	X
Cory	Johnson	Bonneville Power Administration	Guest	X
Jacob	Joseph	Toshiba International Corporation	Guest	
Wolfgang	Jung	Siemens AG	Guest	
Mangu	Kang	HICO America	Guest	
Jayamali	Kasige	Crown Technical Systems	Guest	
Thomas	Keels	Salt River Project	Guest	
Nicholas	Keihn	Schneider Electric	Guest	
Amir	Khosravi	BC Hydro	Guest	
JaeHyun	Kim	HICO America/Hyosung	Guest	X
Jinho	Kim	HICO America	Guest	
SangTae	Kim	HICO/HYOSUNG	Guest	X

Hong Jun	Kim	HICO	Guest	
Boris	Kogan	Schneider Electric	Guest	
Sandeep	Kulkarni	CG	Guest	
Robert	Kuntz	HICO AMERICA	Guest	
Carl	Kurinko	ABB Inc.	Guest	
James	Lagree	Eaton	Guest	
Stephen	Lambert	Shawnee Power Consulting, LLC	Guest	
Scott	Lanning	S&C Electric	Guest	X
Matthew	Lawrence	Doble Engineering	Guest	
Brad	Leccia	Eaton	Guest	X
HaeKyu	Lee	HICO America	Guest	
Shawn	Lee	HICO America	Guest	
David	Lemmerman	PECO/Exelon	Guest	
Werner	Lesse	Siemens AG	Guest	
Paul	Leufkens	Power Projects Leufkens	Guest	
Wangpei	Li	Eaton	Guest	
Qian	Li	Powertech Labs INC.	Guest	
Hua Ying	Liu	Southern California Edison	Member	
Li	Liu	Eaton	Guest	
Albert	Livshitz	CE Power Engineered Services	Member	
Bjorn	Lofgren	Siemens Energy	Guest	
Russell	Long	Retired	Member	
Chunming	Ma	Burns and McDonnell	Guest	X
Antonio	Mannarino	PSE&G	Guest	
Vincent	Marshall	Southern Company Services	Guest	X
Gary	Martin	Entergy	Guest	
Ricardo	Martinez	CFE-LAPEM	Guest	
Peter	Marzec	S&C Electric Co.	Guest	X
Joel	Mathewson	Siemens	Guest	
Steven	May	Southern Company Services	Guest	X
Frank	Mayle	Technibus, Inc.	Guest	
James	McBride	JMX Services, Inc.	Guest	
Neil	McCord	KEC Precision	Member	X
Timothy	McGee	Siemens Energy	Guest	
Steven	Meiners	GE	Guest	
Peter	Meyer	S&C Electric Company	Guest	
Dave	Mitchell	Dominion Energy	Guest	X
Arthur	Molden	AMEESCO	Guest	
Terry	Monahan	Schneider Electric	Guest	
Oscar	Montano	Salt River Project	Guest	
Tom	Mulcahy	Dominion Virginia Power	Member	

Volney	Naranjo	GERS USA	Guest	
Raj	Nayar	Siemens Energy Inc.	Guest	
Jason	Neal	HICO America	Guest	
Jeffrey	Nelson	Tennessee Valley Authority	Guest	
Joachim	Oemisch	Siemens AG	Guest	
T	Olsen	Retired, formerly with Siemens Industry, Inc.	Member	
Nicholas	Orlando	IEEE-SA	Guest	
Miklos	Orosz	Myers Controlled Power	Guest	
Luis	Osorio	The H-J Family of Companies	Guest	
Mary	Owens	Eaton	Guest	
Justin	Palmer	ELECTRONSYSTEM MD	Guest	X
Molson	Parvin	CB&I	Guest	
Amit	Patel	GE	Guest	
Shawn	Patterson	US Bureau of Reclamation	Guest	
Mark	Pattison	H-J Family of Companies	Guest	
Thomas	Pellerito	DTE Energy	Member	X
Alan	Peterson	Utility Service Corporation	Guest	
Andrew	Peterson	ABB	Guest	X
Mark	Peterson	Xcel Energy	Guest	X
Lise	Phan	Pacific Gas and Electric Company	Guest	
John	Phouminh	PEPCO HOLDINGS, INC.	Guest	X
Anton	Poeltl	ABB	Guest	
Iulian	Profir	Rockwell Automation	Guest	
Ahmad	Qasem	Bechtel	Guest	
Syed	Rahman	The United Illuminating Company	Guest	
Samala Santosh	Reddy	Powell Industries	Guest	
Frank	Ricard	FirstPower Group LLC	Guest	
Anthony	Ricciuti	Eaton Corporation	Member	X
Bobby	Rich	Dominion Virginia Power	Guest	X
Dave	Riffe	Westinghouse Electric Company	Guest	
Julian	Rizo	Xcel Energy	Guest	
Brian	Roberts	Southern States, LLC	Guest	X
Jon	Rogers	Siemens Energy, Inc	Guest	X
Ian	Rokser	Eaton Corp	Guest	
Ben	Rosenkrans	Eaton Corporation	Guest	
Leonel	Santos	Schneider Electric	Guest	
Roderick	Sauls	Southern Company Services	Member	
Victor	Savulyak	DNV GL KEMA Laboratory	Guest	X
Robert	Sazanowicz	The United Illuminating Company	Guest	
Chase	Schaben	Burns & McDonnell	Guest	X

Daniel	Schiffbauer	Toshiba International Corporation	Member	X
Carl	Schneider	Schneider Electric	Guest	
Carl	Schuetz	American Transmission Company (ATC)	Member	X
Jon	Schumann	American Transmission Company	Guest	X
Moin	Shaikh	Siemens	Guest	
Jesse	Shank	POWER Engineers	Guest	
Jim	Sharkey	EPRI	Guest	
Devki	Sharma	Entergy	Member	
Harish	Sharma	Southern Company	Guest	
Sushil	Shinde	ABB Inc.	Member	
John	Shullaw	Retired	Guest	
Dean	Sigmon	Eaton Corporation	Member	
Sunita	Singh	Bechtel OG&C	Guest	
Michael	Skidmore	AEP	Secretary	X
Christopher	Slattery	FirstEnergy	Guest	
Robert	Smith	Retired	Member	
Hongbiao	Song	Bechtel	Guest	
Hongbiao	Song	GE	Guest	
Erin	Spiewak	IEEE	Guest	
Kresimir	Starcevic	DNV GL KEMA Laboratories	Guest	
Don	Steigerwalt	Duke Energy	Guest	X
David	Stone	DTS Technical Services	Guest	
Donald	Swing	Powell Industries	Guest	
Dragan	Tabakovic	Meramec Hubbell Power Systems	Guest	X
Humayun	Tariq	American Electric Power	Guest	
Henk	te Paske	KEMA Netherlands	Guest	X
Jey	Thayalan	Schneider Electric	Guest	
Michael	Titus	Schneider Electric	Guest	
Jean-Marc	Torres	EATON	Guest	
Jean-Marc	Torres	Eaton Corporation	Guest	
Vernon	Toups	Siemens	Member	X
Francois	Trichon	Schneider Electric	Guest	
Karla	Trost	G&W Electric	Guest	
Richard	Trussler	Schneider Electric	Guest	
Jordan	Tsvetanoff	First Energy	Guest	X
James	van de Ligt	CANA High Voltage Ltd.	Member	X
Nick	Vonfeldt	Ameren Missouri	Guest	
Michael	Wactor	Powell Industries, Inc	Guest	
Wes	Wadsworth	Hitachi HVB, Inc.	Guest	
Jeffrey	Ward	Doble Engineering Company	Guest	X
Robert	Warren	DNV GL - KEMA Laboratories	Guest	

John	Webb	ABB	Member	X
Casey	Weeks	Siemens Energy	Guest	
Jan	Weisker	Siemens AG	Guest	
Jerry	Wen	BC Hydro	Guest	
Matt	Westerdale	Bureau of Reclamation	Guest	X
William	Wilkie	Eaton	Guest	
Matthew	Williford	Schneider Electric	Guest	
Barnes	Wilson	Avista Utilities	Guest	
Torsten	Wirz	ABB AG	Guest	
Joseph	Wisnewski	UL LLC	Guest	
Terrance	Woodyard	Siemens Industry Inc.	Member	X
Ang	Xiao	3M company	Guest	
Lisa	Yacone	IEEE-SA	Guest	
Larry	Yonce	Eaton Corporation	Guest	
Dong Sun	Yoon	HICO America	Guest	
Richard	York	Mitsubishi Electric Power Products Inc.	Guest	X
Colin	Younce	Burns & McDonnell	Guest	X
Marcus	Young	Mitsubishi Electric Power Products, Inc.	Guest	X
Li	Yu	Eaton Corporation	Guest	
Jiong	Zhang	MEPPI	Guest	
Wei	Zhang	Hitachi T&D Solutions, Inc.	Guest	X
Xi	Zhu	GE Energy Management	Chair	X

"X" = attended meeting in Kansas City