

Meeting Minutes

C37.01 Standard for HVDC Circuit Breakers

Chair: Steven Chen for Joanne Hu
Secretary: Carl Schuetz for Steven Chen
Time: 1:30 pm – 3:15 pm, April 11, 2022
Location: Hilton Bonnet Creek, Orlando FL
Participants: 25 participants, including 9 members and 16 guests

1. Agenda and Topics

- Introduction of members and guests
- IEEE SA patent policy review
- IEEE SA copyright policy review
- Approval of minutes of previous meeting
- Document Status
- The progress in IEC
- Call for task forces
- Schedule – focus on the tasks between now and the next Fall meeting

2. Introduction

Welcome and introduction by Steven Chen filling in for Joanne Hu, Chair of the WG. The roster is attached in the end of this meeting minutes as Attachment 1.

3. Review of IEEE SA Patent and Copyright Policies

IEEE SA Patent and copyright policies were presented and reviewed.
No patents or copyright claims were identified.

4. Approval of Minutes of Previous meeting

Approval of meeting minutes of the last meeting held online on April 19, 2021.

The meeting minutes was sent to all members and guests via e-mail and was posted on the IEEE PES Switchgear Committee website.

Motion to approve: Jeff Ward

Second: John Webb

5. Document Status

The chair presented a table that showed document major development milestones and progress made to reach those milestones. This session will focus on upcoming work and forming sub-groups to accomplish specific document tasks.

Question was asked regarding the need for a PAR extension. Document progress and the perceived need for a PAR extension will be assessed at the Fall 2022 session.

6. Progress in IEC Standards

Progress in five HVDC documents relevant to document development were shown by the chair.

IEC TS 62271-313 HVDC CB separated out the standard into high-voltage and medium-voltage ranges. High-voltage range is 100 kV to 800 kV. Medium voltage range starts above 1.5 kV to below 100 kV.

The IEC decision to separate the standard into high-voltage and medium-voltage portions was made by discussion received after drafts 1 and 2.

The majority of the existing HVDC projects is in the high-voltage category. The IEC high-voltage circuit breaker standard is scheduled to be completed by 2023.

7. Issues and Challenges

A slide was presented explaining what the present challenges are in developing the document.

Selection of insulation coordination stresses need to be studied further to define what the ranges and waveshapes are.

Another challenge is in defining the required tests, type, factory, field needed and the method of testing.

Further challenges include adding requirements for new circuit breaker components needed in DC current interruption.

8. Sub-working groups

A sign-up sheet has been generated to record contributors' information for different sections of the document. The intent is to assemble sub-groups and collect information for review / discussion to be held at the Fall session.

9. Schedule

The draft schedule was shared that includes a first draft completed in August and circulated for comments within the WG in September.

Request from a WG member of C37.30.7 to coordinate ratings of HVDC CB with HVDC Switches (C37.30.7).

Attachment 1 - Roster

Last Name	First Name	Affiliation	Role	Attendance
Ashtekar	Koustubh	JST Power	Guest	√
Ayers	Roy	Nashville Electric Service	Guest	
Barber	Gordon	Hubbell Power System	Guest	√
Balasubramanian	Ganesh	Eaton Corporation	Guest	
Bannink	Herman	KEMA Netherlands	Guest	
Bisewski	Bruno	RBJ Engineering Corp	Member	
Bosma	Anne	Hitachi ABB, Sweden	Guest	
Boyce	Russell	Eaton Corporation	Member	
Byron	Eldridge	Schneider Electric	Member	
Cary	Steve		Member	√
Caverly	David	Trench Ltd.	Guest	
Chen	Steven	Eaton Corporation	Vice Chair	√
Chhabra	Mohit	S&C Electric	Guest	
Christian	Michael	ABB	Member	√
Collette	Luke	Duquesne Light Co.	Guest	
Cosby	Bianca	San Diego Gas & Electric	Guest	
Di Michele	Federico	CESI	Member	
Edwards	Doug	Siemens, Wendell, NC	Guest	
Ekpoudom	Chris	Southern States	Guest	√
Fennell	Bruce	NES	Guest	√
Gao	Chong	GEIRI	Member	
Ghassemi	Mona	Virginia Tech	Member	
Hanna	Robert	JST Power	Guest	√
Heinrich	Christian	Siemens AG	Member	√
Hensberger	Jeremy	Mitsubishi Electric Power Products	Guest	
Hermosillo	Victor	GE Grid Solutions	Member	
Hu	Joanne	RBJ Engineering	Chair	Excused
Hunter	Jennifer	Mitsubishi Electric Power Products	Guest	
Hurst	Bill	GE Renewable Energy	Guest	√
Jagadeesan	Bharat	Southern States, LLC	Member	
Jarnigan	Christopher	Southern Company	Guest	√
Jovcic	Dragan	University of Aberdeen, UK	Member	
Kaminski	John	Siemens	Guest	
Leccia	Brad	Eaton	Guest	√
Leufkens	Paul	Power Projects Leufkens	Member	

Ling	Jane	GE Renewable Energy	Member	√
Liu	Hua Ying	Southern California Edison	Guest	
Lopez	Leo	WIKA Instruments	Guest	
Maleki	Zeinab			
Marshall	Vincent	Southern Company	Guest	√
Marx	Benjamin	Sargent & Lundy	Guest	
May	Steve	Southern Company Service	Guest	
Mehraeen	Shahab	Louisiana State University	Member	
Mucha	Martin	G&W Electric	Guest	√
Novak	Pavel	Schneider Electric	Guest	
Palazzo	Mirko	ABB	Guest	
Pellerito	Thomas	DTE Energy	Guest	√
Peterson	Andrew	ABB	Guest	
Phan	Lise	Pacific Gas and Electric Company	Member	
Polchinski	Craig	Mitsubishi Electric Power Products	Guest	
Razi-Kazemi	Ali	K. N. Toosi University of Technology	Guest	
Reid	Laura	Hubbell Power System	Guest	√
Reigart	Carl	Hubbell Power System	Guest	√
Riffe	Dave	Westinghouse Electric Company	Guest	
Ricciuti	Anthony	Eaton Corporation	Guest	√
Schuetz	Carl	American Transmission Company	Member	√
Scott	Jeff	Ameren		
Sharma	Devki	Energy	Guest	
Shen	John	Illinois Institute of Technology	Member	
Skidmore	Mike	AEP	Guest	
Stage	James	Dominion Energy	Member	
Swing	Donnie	Powell Industries	Guest	
Thomas	Christo		Guest	
Trichon	Francois	Schneider Electric	Guest	√
Usner	Joseph	AEP	Guest	√
Ward	Jeff	Doble Engineering Company	Member	√
Webb	John	ABB	Member	√
Weisker	Jan	Siemens Energy	Guest	
Woodyard	Terry	Siemens Industry	Guest	
Yu	Li	Eaton Corporation	Member	
Yuan	Zhao	Huazhong University of S&T	Member	
Zhang	Sheng	GEIRI	Member	
Zhang	Wei	Southern Company	Member	√
Zhou	Xin	Eaton	Guest	

Zia

Danish

UL LLC

Guest