

**IEEE Switchgear Assemblies Subcommittee Meeting
Fall 2023 Agenda
Catamaran Resort, San Diego, CA
Thursday, 8:00-9:45 AM, October 12, 2023**

The meeting was called to order by SA S/C Chair, D. Moser, at 8 AM on October 12, 2023:

Attendance

- Members: 29 of 39 members present – Quorum was met.
- Guests: 28
- Total: 57

Attendance list is recorded at the end of the meeting minutes.

1. Introduction of Members and Guests

Members and guests introduced as recorded below.

2. Reviewed IEEE Patent, Copyright slides, and reminder against commercial topics

Verbal call for any issues– none identified.

3. Approval of Meeting Agenda

The Fall 2023 agenda Revision 2 was presented for review.

Motion to approve by D. Hrncir, Second by M. Lafond.

Motion approved by unanimous consent.

4. Approval of SA S/C Meeting Minutes

[S23_SA_SC_Minutes_R00.pdf](#)

Minutes (link above) from the Spring 2023 meeting were posted on-line.

Motion to approve meeting minutes by D. Hrncir, Second by M. Lafond.

Motion approved by unanimous consent.

5. Working Group, Task Force, Study Group & Ad Hoc Status Reports

- a. C37.20.1 - IEEE Standard for Metal-Enclosed Low-Voltage (1000 Vac and below, 3200 Vdc and below) Power Circuit Breaker Switchgear**
Mike Lafond: Meeting minutes are provided. Verbal update of WG activities.

WG met with quorum. Draft 6 comments reviewed with good progress. Ad-hoc formed to review short circuit testing and wording on wiring clauses. Plan for ballot after next meeting. May need PAR extension but plan to complete a successful ballot ahead of PAR expiration.

PAR expires 12-31-2024. Documents posted in iMeet Central.

Actions for SA S/C Chair: No further action required.

- b. C37.20.3 - IEEE Standard for Metal-Enclosed Interrupter Switchgear (1 kV-48.3 kV)**
Ron Hartzel: No meeting was held. Verbal update of WG activities.

Secretary sent out links and document is publishing.

Motion made for disbanding working group by R. Hartzel. Motion approved by unanimous consent.

Actions for SA S/C Chair: No further action required.

- c. C37.20.4 - IEEE Standard for Indoor AC Switches (1 kV-52 kV) for Use in Metal-Enclosed Switchgear**

Bob Cohn: Minutes are provided. Verbal update of WG activities.

WG met with quorum. WG targeting a ballot as soon as possible this year after comment review. Added meeting for Thursday morning to complete comment review.

Motion made for 20.4 to go to ballot by B. Cohn. Motion approved by unanimous consent.

PAR extension expires Dec 2023, extension has been submitted and will be reviewed at NESCOM meeting on Dec 5, 2023

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Actions for SA S/C Chair: No further action required.

- d. C37.20.6** - IEEE Standard for 4.76 kV to 48.3 kV Rated Ground and Test Devices Used in Enclosures

Ron Hartzel: Minutes are provided. Verbal update of WG activities.

WG met with quorum. Reviewed comments from first ballot. Formed ad hoc to review balance of comments. Plan for ad hoc to meet between meetings and hold a working group meeting to review ahead of recirculation ballot. Plan for ballot ahead of spring meeting.

Discussion on copyright process and difficulty of obtaining. Doug noted that training will be provided, and this may be discussed in ADSCOM.

PAR expires Dec. 31, 2025

Actions for SA S/C Chair: No further action required.

- e. C37.20.7** - IEEE Guide for Testing Switchgear Rated Up to 52 kV for Internal Arcing Faults

Dan Hrcir: Minutes are provided. Verbal update of WG activities.

WG met with quorum. Comments from ballot were reviewed and addressed in working group meeting. Will complete comment review and incorporate comments into draft ahead of a recirculation ballot.

PAR expires Dec 202?

Actions for SA S/C Chair: No further action required.

- f. C37.20.7.X** - Guide for Application, Installation, and Use of Switchgear Rated Up to 52 kV Tested for Internal Arc Faults

M. Lafond: Meeting minutes are provided. Verbal update of PAR SG activities.

PAR study group met and reviewed a draft PAR.

Draft PAR reviewed in subcommittee meeting. Reminder that plan is to remove Annex B from C37.20.7 once this guide is completed.

Motion to submit the PAR and form a working group as drafted by the working group by M. Lafond, second by P. Barnhart. Discussion around timing of working group based on other activity and deadlines at this time. Majority of members voted in opposition. No abstentions.

Hold draft PAR until such time as the subcommittee decides to move forward at a time that is more convenient.

Actions for SA S/C Chair: No further action required.

- g. C37.20.9a** - IEEE Standard for Metal-Enclosed Switchgear Rated 1 kV to 52 kV Incorporating Gas Insulating Systems

Terry Woodyard: Minutes are provided. Verbal update of Working Group activities.

WG met with quorum. Reviewed ad hoc work and new draft with working group for ballot request.

Noted that T. Woodyard has been appointed by subcommittee chair as temporary chair considering chair no longer able to perform duties. Dave Mitchell is now secretary. Standards chair has made this update in myProject as well.

Motion by T. Woodyard to request permission to submit for ballot. Motion approved by unanimous consent.

PAR expires Dec. 31, 2027

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Actions for the SA S/C Chair: No further action required.

- h. C37.20.10** - IEEE Standard for Definitions for AC (52 kV and Below) and DC (3.2 kV and Below) Switchgear Assemblies
Dan Delfino: Minutes are provided. Verbal update of WG activities

WG met with quorum. Incorporated comments into latest draft. Plan for ballot between meetings.

PAR expires Dec. 31, 2025

Actions for SA S/C Chair: No further action required.

- i. C37.21** - IEEE Standard for Control Switchboards
Christo Thomas: Minutes are provided. Verbal update of PAR Study group activities

WG met without quorum. Reviewed and discussed changes and plan to incorporate into another draft

Plan to hold online meeting or online ballot to approve agenda and last meeting minutes with quorum.

PAR expires Dec. 31, 2027

Actions for SA S/C Chair: No further action required.

- j. C37.23** - IEEE Standard for Metal Enclosed Bus
Jared Hines: Minutes are provided. Verbal update of WG activities.

WG met with quorum. Just met quorum by pulling in one member. Reviewed inputs from ad hocs and comments to draft 2. Plan for online ad hoc meetings and circulation of a new draft ahead of next meeting. Plan to review comments and incorporation into new draft toward a ballot after spring meeting.

Discussion around policy on first meeting granting membership and issues with second meeting attendance of members and quorum. Input from main committee leaders to manage rosters and find balance between open membership and quorum. Only allow for hybrid meetings for joint-sponsored standards.

PAR expires Dec. 31, 2024

Actions for SA S/C Chair: No further action required.

- k. C37.24** - IEEE Guide for Evaluating the Effect of Solar Radiation on Outdoor Metal-Enclosed Switchgear
Terry Woodyard: Minutes are provided. Verbal update of WG activities.

WG met with quorum. Reviewed incorporation of plan to go to ballot by Fall 2024.

PAR expires Dec. 31, 2026

Actions for SA S/C Chair: No further action required.

- l. C37.81** – IEEE Guide for Seismic Qualification of Class 1E Metal-Enclosed Power Switchgear Assemblies
Russell Boyce: Minutes are provided. Verbal update of SG activities.

First meeting of working group. Draft 1 will be placed in imeetcentral for comments.

PAR expires Dec. 31, 2027

Actions for SA S/C Chair: No further action required.

- m. C37.82** – IEEE Standard for the Qualification of Switchgear Assemblies for Class 1E Applications in Nuclear Power Generating Stations

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Russell Boyce: Minutes are provided. Verbal update of SG activities.

First meeting of working group. Draft 1 will be placed in imeetcentral for comments.

PAR expires Dec. 31, 2027

Actions for SA S/C Chair: No further action required.

- n. **C37.122.2** - IEEE Draft Guide for the Application of Gas Insulated Substations 1 kV to 52 kV (This is an ADSCOM document of interest to SA S/C members)

T. Woodyard: Minutes to be provided to ADSCOM. Verbal update of WG activities

T. Woodyard communicated that the document is in publishing and request to disband working group will be brought before ADSCOM today.

Actions for SA S/C Chair: No further action required.

6. Old Business

a. IEC Activities

No update.

Actions for SA S/C Chair: No further action required.

b. ACS C37 – General Update

No update.

Actions for SA S/C Chair: No further action required.

7. Membership

a. Senior Membership & Award for Young Professionals

Darryl Moser recognized recent members attaining senior status and encouraged all non-senior members to obtain senior membership status.

Senior Membership url:

http://www.ieee.org/membership_services/membership/senior/index.html

b. Switchgear Assemblies S/C Membership

Recognition of Chris French and Robert Burns for elevation to membership.

c. Main Committee Membership

D. Moser: New Main Committee member recommendations will be made by SA S/C to the Main Committee for consideration.

8. New Business

a. Start revisions to / seeking WG Chairs: – D. Moser

- 1. **C37.20.9** scheduled to begin activity in 2024

b. WG / Study Group Chairs – Required information

All 3 of the following need to be sent to the SA Subcommittee Secretary no later than Friday, November 3, 2023. darryl.moser@us.abb.com jaredkhines@ieee.org

- 1. **SA Document Status** – Required action – WG – Document Status & Website Synopsis.

- 2. **WG Meeting Room Requests** – Update “SA Document Status” report

D. Moser: WG, Study Groups and Ad Hocs - Please confirm meeting room requirements with Jared Hines. Meeting room requests are circulated in SA Document status. Be sure that room requests include expected participant size and number of sessions.

- 3. **Working Group Minutes**

c. ADSCOM – Items for SA S/C Chair to discuss at ADSCOM meeting

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Discussion on policy for not recording and plan to incorporate into first time meetings, orientation meetings, and a slide of policy on not recording

d. Main Committee Meeting Items – Review items to be presented

Total: 14 documents

Active PARs: 11 - C37.20.1, C37.20.4, C37.20.6, C37.20.7, C37.20.9a, C37.20.10, C37.21, C37.23, C37.24, C37.81, C37.82

2023 Ballot Activity: 2 – C37.20.6, C37.20.7

Upcoming PAR Activity: None

Not Active: 3 - C37.20.2, C37.20.3, C37.121

e. Upcoming Meetings

1. Spring 2024: Ft. Lauderdale, FL

2. Fall 2024: Oklahoma City, OK

3. Spring 2025: Orlando, FL

4. Fall 2025: Reno, NV

i. Note from D. Edwards that we will revert to traditional meeting times at Spring 2024 on Thursday with ADSCOM and Main Committee meetings moving back to Thursday morning and then use Fall 2023 schedule at next meeting.

b. Albert noted that a representative liaison from SA subcommittee to T&I subcommittee.

9. Adjourn

Meeting adjourned at approximately 9:39 AM.

Reported by:

Jared Hines

Switchgear Assemblies Subcommittee Secretary

October 12, 2023

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Attendance Record

First Name	Last Name	Company	Role	10/12/2023
Darryl	Moser	ABB	Chair	✓
Jared	Hines	Eaton Corp.	Secretary	✓
Paul	Barnhart	Underwriters Laboratories	Member	✓
Russell	Boyce	Eaton	Member	✓
Ted	Burse	Powell Industries, Inc	Member	✓
Clint	Carne	Schneider Electric	Member	✓
Alex	Cochran	No affiliation	Member	✓
Robert	Cohn	Powercon Corp.	Member	✓
Randall	Creach	Avail Switchgear Systems	Member	✓
Daniel	Delfino	ABB	Member	✓
Jeffrey	Door	The H-J Family of Companies	Member	✓
Doug	Edwards	Siemens Industry, Inc.	Member	✓
Sergio	Flores	Schneider Electric Inc. USA	Member	✓
Keith	Flowers	Siemens Industry, Inc.	Member	✓
Dave	Gohil	Avail Switchgear Systems	Member	✓
Lou	Grahor	Eaton Corporation	Member	✓
Ronald	Hartzel	Eaton Corporation	Member	✓
Dan	Hrncir	Eaton	Member	✓
Michael	Lafond	Underwriters Laboratories	Member	✓
Jeff	Mizener	Siemens Industry, Inc.	Member	✓
Terry	Neighbours	ABB Inc.	Member	✓
Mark	Roberson	Avail Bus Systems	Member	✓
Carl	Schneider	Schneider Electric	Member	✓
Dean	Sigmon	Self-affiliated	Member	✓
Garett	Sims	Eaton Corp.	Member	✓
Kevin	Sippel	Eaton Electric	Member	✓
Donald	Swing	Powell Industries	Member	✓
Christo	Thomas	Schneider Electric	Member	✓
Michael	Wactor	Powell Industries, Inc	Member	✓
Terrance	Woodyard	Siemens Industry Inc.	Member	✓
Koustubh	Ashtekar	JST Power Equipment	Guest	✓
Andreas	Bartels	Powell Industries	Guest	✓
Francis	Beauchemin	Hydro-Quebec	Guest	✓
Randy	Blake	Schneider Electric	Guest	✓
Christopher	Bridges	Eaton	Guest	✓
Robert	Burns	Eaton	Guest	✓
Sudarshan	Byreddy	Burns & McDonnell	Guest	✓

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First Name	Last Name	Company	Role	10/12/2023
Fiori	Coziuc	S&C	Guest	✓
Federico	Di Michele	CESI S.p.A.	Guest	✓
Arkadiusz (Erik)	Doroz	Eaton	Guest	✓
Marc	Foster	Schneider Electric	Guest	✓
Chris	French	Beta Engineering	Guest	✓
Erin	Hardy	Eaton	Guest	✓
Robert	Lau	nVent Hoffman	Guest	✓
J. Dakota	Leopard	Eaton	Guest	✓
Adrian	Lopez	Powell	Guest	✓
Josh	Lustig	Black & Veatch	Guest	✓
Kevin	McGlown	JST Power Equipment	Guest	✓
Ken	McKinney	UL	Guest	✓
Miklos	Orosz	Myers Controlled Power	Guest	✓
Owen	Parks	ABB	Guest	✓
Lalit	Patil	Eaton	Guest	✓
Mark	Pattison	The H-J Family of Companies	Guest	✓
Mark	Peterson	Xcel Energy	Guest	✓
Jeffery	Ricker	SCHNEIDER ELECTRIC	Guest	✓
Tim	Rohrer	Exiscan	Guest	✓
Wahaj	Saleem	Siemens	Guest	✓
Leonel	Santos	Schneider Electric	Guest	✓
Jen	Santulli	IEEE-SA	Guest	✓
Robert	Schuetz	Eaton	Guest	✓
Christopher	Slattery	FirstEnergy	Guest	✓
Lokesh	Solanki	ABB	Guest	✓
Bryan	Tatum	UL	Guest	✓
Andrew	Truman	Black & Veatch	Guest	✓
Marcelo	Valdes	ABB	Guest	✓
Jacob	Walgenbach	Siemens Industry, Inc.	Guest	✓
Jonathan	Wear	JST Power Equipment	Guest	✓
John	Webb	ABB	Guest	✓
Matt	Westerdale	US Bureau of Reclamation	Guest	✓
Eddie	Wilkie	Eaton	Guest	✓