

SWITCHGEAR ASSEMBLIES SUBCOMMITTEE SA S/C
MINUTES OF THE FALL 2020 MEETING
Online Webex Meeting
October 7, 2020

The meeting was called to order by SA S/C Chair, T. Hawkins, at 1:32 PM CDT on October 5, 2020:

Attendance

Members: 29 present, 9 absent – Quorum was met.

Guests: 26

Total: 55

Attendance is recorded at the end of the meeting minutes. Membership and attendance are recorded in the 123 Signup system.

1. Introduction of Members and Guests

Members and guests introduced as recorded above.

2. Verbal call for essential patents – none identified

3. Approval of Meeting Agenda

The Fall 2020 agenda was presented for review.

Motion by M. Lafond to accept the revised meeting agenda as presented. Second by J. Mizener

Motion approved by consent of the SA S/C.

4. Approval of SA S/C Meeting Minutes

Link: <https://www.ewh.ieee.org/soc/pes/switchgear/minutes/2020-1/S20SAmiREV0.pdf>

Minutes (link above) from the Spring 2020 meeting were posted on-line.

Motion by M. Valdez to accept these meeting minutes; Second by D. Edwards

Motion approved by consent of the SA S/C.

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

a. C37.20.1 – PAR Study Group - IEEE Standard for Metal-Enclosed Low-Voltage (1000 Vac and below, 3200 Vdc and below) Power Circuit Breaker Switchgear

M. Lafond: Meeting minutes are provided.

M. Lafond: Verbal update of PAR Study Group activities. Motion by M. Lafond, PAR Study Group Chair, Second by D. Edwards *“Request for SA S/C to approve a PAR submission as recommended by the PAR Study group for a full revision of IEEE C37.20.1”*

Motion approved by consent of the SA S/C.

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

b. C37.20.2 – IEEE Standard for Metal-Clad Switchgear:

M. Wactor: Minutes are provided.

M. Wactor: Verbal update of WG activities.

Discussion that voltage level is not in the title or scope of the document so no PAR change is needed to move to 52 kV.

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

c. C37.20.3 – IEEE Standard for Metal-Enclosed Interrupter Switchgear (1 kV-38 kV)

R. Hartzel: Minutes are provided.

R. Hartzel: Verbal update of WG activities.

Motion by M. Lafond, Second by P. Barnhart: *“Change the voltage level of 38 kV up to 52 kV and request a change to the PAR”*

Motion approved by consent of the SA S/C.

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

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

B. Cohn: Minutes are provided.

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B. Cohn: Verbal update of WG activities.
Actions for SA S/C Chair: No further action required.

- e. **C37.20.6** - IEEE Standard for 4.76 kV to 38 kV Rated Ground and Test Devices Used in Enclosures
R. Hartzel: No PAR Study Group meeting held, PAR Study Group to meet online to develop the PAR for document revision, planning an eVote before the Spring 2021 meeting.
Actions for SA S/C Chair: No further action required.

- f. **C37.20.7** – IEEE Guide for Testing Switchgear Rated Up to 52 kV for Internal Arcing Faults – Corrigendum to add the instructions for initiating a two-phase fault
M. Wactor: No minutes are provided.
M. Wactor: Verbal update of activities. Ballot planned for the first part of 2021.
Actions for SA S/C Chair: No further action required.

- g. **C37.20.7** - IEEE Guide for Testing Switchgear Rated Up to 52 kV for Internal Arcing Faults
D. Hrcir: Minutes are provided for the PAR Study Group and the Working Group.
D. Hrcir: Verbal update of WG activities. The PAR Study Group met for an online meeting on August 4, 2020, the study group submitted a motion to approve the PAR and the proposed PAR language to SA S/C for approval. This was sent out to the members of Switchgear Assemblies S/C for a 10 day e-ballot plus a 5 day extension, the motion passed with 28 of 41 members approving, 0 disapproved and 0 abstained.
Actions for SA S/C Chair: Report to main committee that a C37.04 Task Force is being formed as part of the C37.20.7 WG activity.

- h. **C37.23** – IEEE Standard for Metal Enclosed Bus
J. Hines: Minutes are provided.
J. Hines: Verbal update of WG activities. They are forming two Ad Hoc - Cable bus and Arc-Resistant bus.
IEC committee responded to WG that they did not have enough participants and will contact after reforming the group.
Actions for SA S/C Chair: No further action required.

- i. **C37.121** – Guide for Switchgear - Unit Substations – Requirements
D. Moser: No WG meeting was held, the ballot was successfully completed and approved by RevCom and SASB on September 24, 2020.
The document will go through the IEEE editorial review before publication.
Actions for SA S/C Chair: No further action required.

- j. **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)
E. Byron: Minutes to be provided to ADSCOM.
E. Byron: Verbal update of WG activities.

6. Old Business

a. IEC Activities

E. Byron: Verbal update of IEC activities.
Actions for SA S/C Chair: No further action required.

b. ACS C37 – General Update

K. Flowers: Verbal report of ACS C37 activities.
Actions for SA S/C Chair: No further action required.

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- c. **Air Surrounding Cables** - Reminder for WG Chairs to remove “air surrounding cables” requirements from documents per Ad Hoc recommendation and previous SA S/C vote.

7. Membership

- a. **Senior Membership & Award for Young Professionals**

T. Hawkins: No new senior members.

Dave Gohil was recognized as an IEEE Life Senior Member

T. Hawkins: 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**

T. Hawkins: Recognized Donnie Swing, Rahul Jain, Clint Carne and Randy Creach as new SA S/C members.

- c. **Main Committee Membership**

T. Hawkins: New Main Committee member recommendations will be made by SA S/C to the Main Committee for consideration in the spring.

8. New Business

- a. **Start revisions to / seeking Working Group Chairs:**

- 1. **C37.20.10** - IEEE Standard for Definitions for AC (52 kV and Below) and DC (3.2 kV and Below) Switchgear Assemblies - Call for volunteers to lead the WG activities

- 2. **C37.21** – IEEE Standard for Control Switchboards or **C37.24** – IEEE Guide for Evaluating the Effect of Solar Radiation on Outdoor Metal-Enclosed Switchgear

T. Woodyard volunteered to chair C37.24

D. Edwards volunteered to chair C37.21, after review of expiration date, SA S/C Chair decided not to start this PAR Study Group at this time.

- 3. **Request from NEMA 8SG** - Utility Metering Compartments: K. Flowers reported for NEMA, request to start an Ad Hoc Group to determine if a guide or standard should be developed for standardization of utility metering compartments. E. Wilkie was mentioned as possible chair, Al Pruitt interested in serving on the Ad Hoc.

Actions for SA S/C Chair: Bring the subject to the Main Switchgear Committee for discussion.

- b. **WG / TF / Study Group Chairs – Required information**

All 3 of the following need to be sent to the SA Subcommittee Secretary no later than Friday, October 30, 2020. darryl.moser@us.abb.com; CC: tom.hawkins@ieee.org

- 1. **SA Document Status** – Required action – WG – Document Status & Website Synopsis – To SA S/C Secretary no later than Friday, October 30, 2020.

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

T. Hawkins: WG, Study Groups and Ad Hocs - Please confirm meeting room requirements with Darryl Moser. 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** – Submit to SA S/C Secretary no later than Friday, October 30, 2020.

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

No requests for ADSCOM

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

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Total: 14 documents

Active PAR's: 7 – C37.20.2, C37.20.3, C37.20.4, C37.20.7 corrigendum, C37.20.7, C37.23, C37.121

2020 Ballot Activity: 1 - C37.20.7 corrigendum

Upcoming PAR Activity: 2 - C37.20.1, C37.20.6

Not Active: 6 - C37.20.9, C37.20.10, C37.21, C37.24, C37.81, C37.82

1. **Request from NEMA 8SG** - Utility Metering Compartments: K. Flowers reported for NEMA, request to start an Ad Hoc Group to determine if a guide or standard should be developed for standardization of utility metering compartments. E. Wilkie was mentioned as possible chair, Al Pruitt interested in serving on the Ad Hoc.
Actions for SA S/C Chair: Bring the subject to the Main Switchgear Committee for discussion and solicit participation.
2. **C37.04** Task Force as part of the C37.20.7 WG activity
 - a. Showed interest in participating: John Webb
3. **Technology & Innovation Committee** call for participation
 - a. Influence of renewables on switchgear (will focus on part 1: Open gap 200% power frequency testing)
 - b. Special switchgear applications, not covered in the standards
 - c. Issue of aging equipment (end of life, diagnostics)
 - i. Showed interest in participating: Jack Harley, Doug Edwards

Upcoming Meetings

Spring 2021 (18 April – 23 April), Hilton Charlotte University Place, Charlotte, NC

Fall 2021 (10 Oct – 14 Oct), Peppermill Resort, Reno, NV

Spring 2022, Disney's Grand Floridian Resort, Orlando, FL (In negotiation)

Fall 2022, Portland, OR (in negotiation)

9. Adjourn

Meeting adjourned at 3:13 PM CDT.

Reported by:

Darryl Moser
Switchgear Assemblies Sub-Committee Secretary
October 7, 2020

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Attendance record: Note unregistered guests could not be recorded in the 123 Signup system

Role	First Name	Last Name	Company Affiliation
Chair	Tom	Hawkins	Siemens Industry, Inc.
Secretary	Darryl	Moser	ABB
Past Chair	Michael	Lafond	ABB
Member	Chris	Ambrose	Federal Pacific (Div. of Electro-Mechanical Corp.)
Member	Paul	Barnhart	Underwriters Laboratories
Member	Russell	Boyce	Eaton
Member	Ted	Burse	Powell Industries, Inc
Member	Eldridge	Byron	Schneider Electric
Member	Robert	Cohn	Powercon Corp.
Member	Jeffrey	Door	The H-J Family of Companies
Member	David	Dunne	Schneider Electric
Member	Doug	Edwards	Siemens Industry, Inc.
Member	Michael	Flack	Southern Company Services, Inc.
Member	Sergio	Flores	Schneider Electric Inc. USA
Member	Keith	Flowers	Siemens Industry, Inc.
Member	Paul	Gingrich	AZZ Switchgear Systems
Member	Sahadev	Gohil	AZZ Switchgear Systems
Member	Lou	Grahor	Eaton Corporation
Member	Ronald	Hartzel	Eaton Corporation
Member	Jared	Hines	Eaton Corp.
Member	Dan	Hrncir	Eaton
Member	Jeff	Mizener	Siemens Industry, Inc.
Member	Mark	Roberson	AZZ/Calvert
Member	Dean	Sigmon	Eaton Corporation
Member	Garett	Sims	Eaton Corp.
Member	Kevin	Sippel	Eaton Electric
Member	Paul	Sullivan	DuPont
Member	Michael	Wactor	Powell Industries, Inc
Member	Terrance	Woodyard	Siemens Industry Inc.
Guest	Randall	Creach	AZZ Switchgear Systems
Guest	Federico	Di Michele	CESI S.p.A.
Guest	Christopher	French	Eaton Corporation
Guest	Jason	Hollander	CHA Consulting, Inc.
Guest	Rahul	Jain	S&C Electric Company
Guest	Monique	La Terreur	STACE
Guest	James	Lagree	Eaton
Guest	David	Lemmerman	PECO/Exelon

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Guest	Alex	Lizardo	Cargill
Guest	Steven	May	Southern Company
Guest	Brian	ONeil	RMS Energy
Guest	Owen	Parks	ABB
Guest	Andrew	Peterson	ABB
Guest	John	Phouminh	PEPCO HOLDINGS, INC.
Guest	Al	Pruitt	The Durham Company
Guest	Paul	Rakus	Eaton
Guest	Ian	Rokser	Eaton Corp
Guest	Donald	Swing	Powell Industries
Unregistered			
Guest	Steve	Barbera	Arizona Public Service
Unregistered			
Guest	Jack	Harley	First Power Group
Unregistered			
Guest	Pat	Kula	Hubbell Power Systems
Unregistered			
Guest	Damian	Perrin	Entergy
Unregistered			
Guest	Noel	Smith	FortisAlberta
Unregistered			
Guest	Francois	Trichon	Schneider Electric
Unregistered			
Guest	Marcelo	Valdez	ABB
Unregistered			
Guest	Matt	Westerdale	Bureau of Reclamation