

**SWITCHGEAR ASSEMBLIES SUBCOMMITTEE
MINUTES OF THE SPRING 2013 MEETING**

**Hilton Palacio Del Rio, San Antonio, TX USA
September 18, 2013**

The meeting was called to order by Chair, J. Smith, at 1:30 PM on September 18, 2013 with the introduction of the following members and guest:

Attendance

Members: 27 present, 5 absent (0 excused) – Quorum was met

Guest: 31

Total: 58

Members Present (Affiliation):

C. Ball (S&C)	S. S. Gohil (AZZ/Central El.)	T. W. Olsen (Siemens)
P. Barnhart (UL)	D. Hrnrcir (Eaton)(1)	M. Orosz (Schneider)
J. Baskin (Federal Pacific)	A. Jivanani (GE)(1)	E. Peters (Powell)
T. A. Burse (Powell)	H. Josten (Siemens)	C. Schneider (Schneider)
E. R. Byron (Schneider)	M. Lafond (GE)	J. E. Smith (Eaton) - Chair
D. Edwards (Siemens) - Secretary	D. Lemmerman (PECO/Exelon)	P. Sullivan (Dupont)
L. Farr (Eaton)	F. Mayle (Technibus)	C. Tailor (Eaton)
M. Flack (Southern Co)	D. Mazumdar (Central)	M. Wactor (Powell)
K. Flowers (Siemens)	A. Morse (Eaton)	R. Warren (KEMA)

Members Absent (Affiliation):

J. Earl (ABB)	A. Patel (GE)	J. Toney (GE)(1)
A. Livshitz (Schneider)	H. Song (Bechtel)	* = Excused

Guests (Affiliation):

S. Benson (Volta)	T. Hawkins (Siemens)(1)	S. S. Reddy (Powell)
J. Cambell (Powell)	A. Jur (Eaton)	R. Rohr (Powell)
S. Cary (Eaton)	J. Kaminski (Siemens)	D. Riffe (Westinghouse)
R. Cohn (Powercon)	G. Martin (Entergy)	A. Rowell (Eaton)
D. Dunne (Schneider)	R. Martinez (XXXXX)	M. Seabrook (GE)(1)
D. Elliott (ABB)	S. Meiners (GE)	J. Shullaw (GE)
A. Gibbs (Schneider)	J. Mizener (Siemens)	D. Sigmon (Eaton)
P. Gingrich (AZZ/Central El.)	D. Moser (ABB)(1)	E. Spiewak (IEEE)
D. Giraud (Powell)	O. Parks (ABB)	R. Tanner (Schneider)
P. Glaesman (Reuel)	M. Parvin (CB&I)	
L. Grahor (Eaton)	A. Peterson (ABB)	

(1) = Membership status update

1. Approval of Meeting Agenda

Motion to approve agenda by Ted Burse, 2nd by Allan Morse, and was approved.

2. Introduction of members and guests

Members and guest introduced as recorded above.

3. Approval of the SA meeting minutes

Link: <http://www.ewh.ieee.org/soc/pes/switchgear/minutes/f12minutes/F12SAmi.pdf>

Minutes (link above) from the spring 2013 meeting from Galveston, TX were approved.

Motion to approve by Ted Burse, 2nd by Ted Olsen, and was approved.

4. Update Document Status

D. Edwards: The document status document was distributed to WG Chairs for updates during the meeting. Document status will be published with minutes from this meeting. This document includes request for meeting room request.

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5. Working Group Status Report

a. Task Force – SA S/C Common Clauses

T. Burse: No minutes are provided.

T. Burse: TF members were poled with unanimous agreement for needing the work on Switchgear Assemblies common clauses. Ted requested extension of another six (6) months for this work. This was approved.

T. Olsen: The task of adding definitions into each of the documents has been discussed. Instead, Ted Olsen requests considering moving the definitions into this SA Common Clauses document instead of splitting into of the document.

T. Burse: The Task Force will consider and provide a report on adding the appropriate definitions into the proposed SA Common Clauses document.

Deadline for new document is 2018. This deadline suggests that there is sufficient time to create this document.

Larry Farr and Ted Olsen volunteered to join the Task Force with the expansion of consideration of the Task Force, specifically adding the task of adding common definitions. After the S/C meeting, Carl Schneider volunteered as well.

The scope of the task force is to review the documents under the jurisdiction of the SA Subcommittee in order to identify common requirements for switchgear assemblies. A TF report will be generated and submitted to the Subcommittee for consideration and a decision on any next steps.

Subsequent to SA S/C Meeting: During ADSCOM meeting, motion was made and approved requesting participating in an ADSCOM Task Force to address definition issue with request for representation by each S/C. Doug Edwards and Ted Burse will provide the SA S/C representation.

Actions for SA S/C: None

b. C37.20.1 – Standard for Metal-Enclosed Low-Voltage Power Circuit Breaker Switchgear

T. Burse: Minutes are provided.

Reviewed initial of this WG's various Task Force groups' inputs. A 1st draft is being created for a single document. The schedule target is to have this 1st draft out for review in November 2013.

Actions for SA S/C: None

c. C37.20.2 – Standard for Metal-Clad Switchgear

M. Wactor: Minutes are provided.

The comments submitted were reviewed and corresponding changes made to the draft. The new draft will be D10 and this will be submitted to begin the balloting process. The objective is to submit the draft for mandatory editorial coordination and for sending out the invitation to join the ballot group by no later 31-October-2013.

T. Burse made motion for C37.20.2 to be submitted for ballot when the WG Chair has document ready, Paul Barnhart 2nd motion, and motion was approved unanimously.

Actions for SA S/C: None

d. C37.20.3 – Standard for Metal-Enclosed Interrupter Switchgear

C. Ball: Minutes are provided.

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Completed 2nd recirculation ballot with 16 comments, only three (3) comments required modification of the document. The document has been modified and a 10-day recirculation ballot should be initiated even this week (i.e. 2013-09-20).

Actions for SA S/C: None

- e. **C37.20.6** – 4.76 kV to 38 kV Rated Grounding and Testing Devices Used in Enclosures
T. Olsen: No minutes are provided.

No action or meeting was held. Ted Olsen to create PAR and have 1st meeting in Spring 2014, Orlando.

Actions for SA S/C: None

- f. **C37.20.7** – Guide for Testing Medium-Voltage Metal-Enclosed Switchgear for Internal Arcing Faults
M. Wactor: Minutes are provided.

Presentations were made on subjects of 1) wire size for arc initiation and 2) peak current requirements with reduced voltage testing.

Questions list was created and is being submitted STLNA. Goal is to answer question in 2 weeks.

The power laboratory representatives were asked to comment on:

- the frequency decline that they have experienced during tests
- whether the important criterion for test validity is the symmetrical current or peak current experienced in the test.

These questions will also be conveyed to the STLNA (Short-Circuit Testing Liaison for the Nations of the Americas) when they meet later on September 17.

Also discussed issues included:

- grounding during tests – no input had been received
- indicators and use of calorimeters

Reviewed comments and this will result in a Draft 5 (forecast mid-November). Then one more round of reviews by WG, and then move forward to ballot.

T. Olsen made motion for C37.20.7 to be submitted for ballot when the WG Chair has document ready, Keith Flowers 2nd motion, and motion was approved unanimously.

Actions for SA S/C:

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- g. C37.20.9 (Std # and PAR are pending) – Gas Insulated Switchgear Standard 1 kV to 52 kV**
E. R. Bryon: Minutes are provided

This is to be a Joint Sponsored standard with Substation Committee – X0 S/C. Substations Committee participated with two (2) participants.

The Title and Scope were modified. These were reviewed during the SA S/C meeting with slight modifications made. The details of the final Title and Scope are included in the Task Force meeting minutes.

Motion: Request using this title and scope and JSA document and submit for PAR.

Motion by E. Bryon, 2nd by L. Farr, and motion was approved unanimously.

Subsequent to S/C meeting: There will be a WG meeting held at the 2014 IEEE PES Joint Technical Committee Meeting (JTCM) in January in New Orleans.

Link: www.pestechical.org (Not updated at time of issuing these minutes).

Action for S/C: None required

- h. PC37.23 – Standard for Metal-Enclosed Bus**

A. Jur: Minutes are provided.

Comments were reviewed. Reporting on specific areas of interest:

Task Force on Cast Resin – Conclusion was not to add specific text for this type construction.

A Handling Guide will be added.

For coordination with low-voltage circuit breakers (C37.13) and switchgear (C37.20.1), voltages references will be revised the recent revisions up to 1000 V (nominal).

References to UL 857 will be removed.

Actions for SA S/C: None

- i. C37.24 – Guide for Evaluating the Effect of Solar Radiation on Outdoor Metal-Enclosed Switchgear**

L. Farr: Minutes are provided.

Working Group did not have meeting in San Antonio. Subsequent to fall 2013 meeting, research was conducted references for collecting data which will be incorporated into the revisions.

Actions for SA S/C: None

- j. C37.81 – Seismic Qualification of Class 1E Metal-Enclosed Power Switchgear Assemblies**

D. Riffe: Minutes are provided.

Combined meeting held for C37.81 and C37.82.

This was kick-off meeting for this group. Began drafting the PAR's for both documents.

Solicited additional membership.

Actions for SA S/C: None

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

D. Riffe: Minutes are provided.

See above comments for C37.81.

Actions for SA S/C: None

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I. C37.100 – Definitions

Ted Olsen: Correspondence was provided with a collection of potential definitions for review. There will be more discussions in ADSCOM and the Main Committee.

There was discussion (above in the Task Force – SA S/C Common Clauses section) to add this review to the Common Causes Task Force.

6. Old Business

a. IEC activities

Ted Burse: A questionnaire was circulated to the National Committees regarding 62271-200 in order to determine if the intent and application of 62271-200 is clear as published. The results of the questionnaire identified several areas of the Standard that could be improved. A decision was made at the plenary SC17C meeting held April 2013 in Delft to prepare a document for comment before the next plenary SC17C meeting in Tokyo, November 2014 where a decision on the next step will be made. MT14 has begun the effort of preparing the document.

b. ASC C37 – General update

T. Olsen:

Balloting should be in near future for C37.50 and incorporation of voltages up to 1000 V nominal in follow-up for changes in C37.13.

C37 NEMA documents continue to be available as free downloads.

7. New Business

a. Officer Succession

Thanks to Jim Smith for service as Chair of SA S/C.

Doug Edwards takes over as Chair – succession step up from Secretary.

Mike Lafond (mike.lafond@ieee.org) has volunteered and is appointed as Secretary.

b. SA Documents Status – Required action – review of proposed “SA Document Status” report

- i. C37.20.8 – This document was never published but is shown in the Document Status Report. Notation will be added, “No Document Published.”
- ii. C37.20.5 – This document was never published but is not shown in the Document Status Report. Discussions during the S/C meeting were also to add this document to the Document Status Report with notation “No Document Published.” After the S/C meeting, per discussions with Erin Spiewak (IEEE) and Ted Olsen, IEEE does not have any records associated C37.20.5 and thus this document number could indeed be used. Based on discussions with Erin Spiewak and Ted Olsen, the Document Status Report will mark C37.20.5 as “Not Used.”

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

- i. Officer Rotation
- ii. Document status is by review on-course.

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

J. Smith: Officer rotation

e. Meeting Rooms

D. Edwards: Request to WG Chairs, advise the Subcommittee Secretary concerning WG meeting room requirements (number of sessions (one session – 1 hr 45 min)) on the Document Status Report.

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f. Working Group Minutes

D. Edwards: Working group chairs should have their minutes emailed to Subcommittee Chair and Secretary no later than Friday, September 19, 2013, for publishing on the website.

Email addresses: doug.edwards@ieee.org and mike.lafond@ieee.org

g. Upcoming Meetings:

Spring 2014 (5 May – 8 May), Disney Contemporary Hotel, Orlando, FL USA

Fall 2014 (21 Sept – 25 Sept), Renaissance Hotel, Asheville, NC USA

Spring 2015 (27 Apr – 30 Apr), Tradewinds, St. Pete Beach, FL USA

Fall 2015 (20 Sept – 24 Sept), Catamaran Resort Hotel, San Diego, CA USA

8. Adjourn

Motion to adjourn by Ed Peters, 2nd by Mike Lafond, and motion was approved unanimously.
Meeting adjourned at 2:30 PM.

Reported by:

Doug Edwards
Switchgear Assemblies Sub-Committee Secretary
September 26, 2013