

**SWITCHGEAR ASSEMBLIES SUBCOMMITTEE
MINUTES OF THE FALL, 2003 MEETING**

**MARRIOTT PORTLAND DOWNTOWN
PORTLAND, OR**

The meeting was called to order by Secretary, T. Olsen at 1:35 PM on Sept 24, 2003 with the introduction of the following members and guests:

Members:	C. Ball T. A. Burse E. R. Byron P. Dwyer	D. J. Edwards S. S. Gohil D. Mazumdar	A. F. Morgan T. W. Olsen R. J. Puckett	S. P. Slattery J. E. Smith M. Wactor
Guests:	P. Barnhart J. Maurice	F. Mayle N. P. McQuin	D. Parker R. Sunkara	T. Williams
Excused:	J. J. Dravis R. K. Iyer J. M. Jerabek	W. E. Laubach D. J. Lemmerman P. J. Notarian	G. R. Nourse E. A. Peters G. Sakats	S. H. Telander
Absent:	A. Livshitz			

The minutes of the Spring 2003 Switchgear Assemblies Subcommittee meeting in St. Pete Beach, FL, were amended as follows, and accepted as amended:

- Paul Barnhart should be added to the list of guest attending.

ADSCOM Report

ADSCOM Committee Report: Mr. Olsen reported that:

- The objective is to post Switchgear Committee minutes to the website within 2 weeks. Some reports have not yet been posted from the Spring 2003 meeting. Reports must be submitted in a format compatible with Word 6.0, Acrobat 4.0, or Excel 5.0.
- Reviewers for papers are needed, and reviews must be done expeditiously.
- "Power & Energy" (PES magazine) has requested an article on the committee. Input should be provided by subcommittees to Jeff Nelson by Oct. 10, so that he can meet an Oct. 15 deadline. Photos are desired, and should be at least 600dpi.
- Common Clauses (C37.100.1) needs a new chair, as Mr. Storms does not have clerical support. Mr. Stone will be providing editorial support to C37.100.1.
- The Operations Manual for the Switchgear Committee is available on the website.
- At the September Standards Board meeting, the metric policy was modified to allow dual dimensioning (metric first with English in parenthesis).
- The PES Technical Council has adopted a Standards Strategy (attached). The Switchgear Committee voted negative on the policy, feeling that it mandates adoption of IEC standards. No other committee voted negative, feeling that the language allows latitude in interpretation. ADSCOM agreed to continue pursuing the strategy that we have discussed in recent years. The IEEE-SA representative suggested that Switchgear Committee is further along on harmonization than many other committees.
- IEEE and IEC have formalized the agreement for dual-logo documents (attached). Denis Dufornet presented a draft flow-chart of the process. Under the agreement, IEEE maintains copyright, control, and maintenance of dual-logo documents. Also, IEC would have the option to accept or not accept an offered document, but would not have the ability to make changes. ADSCOM agreed to "accept in principle", and asked that subcommittees advise any documents that should be submitted for dual-logo status. Likely candidates include C37.60 (reclosers), C37.24 (solar radiation), and C37.013 (generator circuit breakers).

- Mr. McQuin requested that a procedure for dielectric testing of vacuum interrupters be developed for inclusion in the common clauses document, based on the information in the position paper created by Kirk Smith. Mr. McQuin will head a task force to investigate further. This affects at least four subcommittees, including HVCB, SA, RODE, and HVS.
- Mr. Gray heads a task force on simplification of the standards process. A draft document is out for comment within the task force.
- C37.016 (circuit switchers) was balloted with normative references to IEC 60694. ADSCOM recommends that the Switchgear Committee adopt a policy that an IEEE Standard not make a normative reference to an IEC Standard on a topic that is covered by an IEEE document. An example of such a reference in C37.016 is that it adopts the IEC 60694 control voltages and ranges, whereas control voltages are covered in great detail (and with different requirements) in many IEEE documents.

WORKING GROUP REPORTS

The following working group reports were presented:

- C37.20.7a (Guide for Application of Equipment Qualified as Medium-Voltage Metal-Enclosed Arc Resistant Switchgear): WG met on Monday and reconfirmed the decision of the last meeting, namely, to revise the test guide, and incorporate an application guide into the document. He will submit a PAR for revision of C37.20.7 in the near future. A draft revision will be created. It will reflect lessons learned with the present document, particularly with respect to laboratory limitations. It will also harmonize with the evolving language in the newest draft of IEC 62271-200 (old 60298) and new efforts in CSA/Canada. Thus, this will change from C37.20.7a to C37.20.7.
- C37.21 (Control Switchboards): D. Edwards has received input from the IEEE-SA editorial staff, and submitted the document on Sept. 20 to IEEE-SA for ballot. It is expected that the ballot will open in early November.
- C37.23 (Standard for Metal-Enclosed Bus): C37.23 was approved by the Standards Board on Sept. 11, 2003. Material from the 1945 McGraw-Hill is in the public domain, so no copyright issue exists. The document has been submitted to the IEEE-SA editors, with no issues identified in the initial review. Publication is expected very late in 2003, or early in 2004.
- C37.24 (Guide for Evaluating the Effect of Solar Radiation on Outdoor Metal-Enclosed Switchgear): This was approved in June, and is in final editing. It should be published in 2003.
- C37.100.1 (Common Clauses Working Group): It was reported the document will be out for ballot by the end of the year. There was discussion of ratings remaining within the various standards. The requirement for a maintenance team was identified. The goal is not to require balloters to review or accept the IEC standards. The IEC reference is only informative.

OLD BUSINESS

- Report of Ad-Hoc committee for review of old C37 Switchgear Assemblies documents that were converted to electronic form by IEEE-SA. These documents and the "champion" for review of the IEEE-SA pdf file are:
 - C37.20.6 (T. Burse): No technical differences noted between historic paper copy of document and the electronic pdf file.
 - C37.81 (T. Olsen): Technical errors noted on five pages between historic paper copy of document and the electronic pdf file. T. Olsen will discuss with IEEE-SA in Piscataway.
 - C37.82 (A. Morgan): No technical differences noted between historic paper copy of document and the electronic pdf file.
 - C37.121 (D. Lemmerman): No technical differences noted between historic paper copy of document and the electronic pdf file.

- C37.82 Reaffirmation: The reaffirmation ballot closes Sept. 27, 2003.
- IEC Activities (SC 17C MT14). T. Burse is the IEEE liaison D representative of the IEEE PES Switchgear Committee to SC 17C MT14:
 - IEC 60298 (62271-200) [AC Metal-Enclosed Switchgear and Controlgear for Rated Voltages above 1 kV and up to and Including 52 kV]: The TAG has recommended an affirmative vote with comments on 17A-311-FDIS, due on Sept. 25. Now, we need to consider whether we want to revise C37.20.2 to increase harmonization with the new concepts introduced in the FDIS. The FDIS introduces a concept of Loss of Service Continuity, replacing historic distinctions between metal-enclosed and metal-clad equipment.
 - IEC 61330 (62271-202) [Prefabricated Substations]: This product is not manufactured in the US, but has addressed combined testing of substations.
 - IEC 60466 [AC Insulation-Enclosed Switchgear and Controlgear for Rated Voltages above 1kV and up to and including 38kV]: They are looking for experts to work on this working group.
- ASC C37: All documents remaining under ASC C37 responsibility are current. C37.51 balloted in August, and a recirculation ballot was initiated Sept. 12. Approval in 2003 is expected. C37.50 will need reaffirmation prior to start of a revision effort to coordinate with changes to C37.13.
- Switchgear Assemblies document status review: The document status summary was distributed and revisions solicited. This lists all documents that this subcommittee sponsors or co-sponsors. It will be available with the minutes. On Sept. 23, IEEE-SA advised that the following documents are on the list for administrative withdrawal at the December meeting of the Standards Board, as reaffirmation or revision has not occurred in 5 years:
 - C37.21 Control Switchboards – submitted for ballot on Sept. 20.
 - C37.82 Class 1E Qualification – reaffirmation ballot closes Sept. 27.
 T. Olsen will converse with D. Ringle at IEEE-SA to get these removed from the list slated for administrative withdrawal.
- Future standards directions: At the Spring 2003 meeting, Mr. Telander suggested that responsibility for C37.20.1 be transferred from Switchgear Assemblies subcommittee to Low Voltage Switchgear Devices subcommittee. Mr. Telander's letter will be circulated to the SA members. This issue was discussed earlier today at the LVSD meeting, and LVSD decided not to request transfer of C37.20.1 at this time. Further, they decided to solicit additional participation in Switchgear Committee activities (including LVSD and SA subcommittees) from members of the Industrial Applications Society. Mr. Slattery will draft a letter intended for selected IAS members, with the intent that it will be jointly issued by LVSD and SA. Separately, it was decided that input of all SA members should be sought on this issue.

NEW BUSINESS

- Metal thickness: Mr. Byron raised an issue regarding the thickness for steel specified in C37.20.1, C37.20.2, and C37.20.3.
 - C37.20.1 says MSG No. 11 (nominal thickness 3 mm) and MSG No. 14 (nominal thickness 1.9 mm).
 - C37.20.2 says MSG No. 11 [nominal thickness of 3 mm (0.1196 in)] and MSG No. 14 [nominal thickness of 1.9 mm (0.0747 in)].
 - C37.20.3 says MSG No. 11 [nominal thickness, 3 mm (0.119 in)] and MSG No. 14 [nominal thickness, 1.9 mm (0.075 in)].
 Mr. Byron requests a formal interpretation, and he was requested to submit a formal written request for interpretation to the IEEE-SA in accordance with IEEE-SA policies.

- IEEE 4: T. Burse discussed a request by M. Smith. Mel participates in the IEEE PSIM Committee working group that is revising IEEE 4. He had requested review of the IEEE correction factors from the 1978 and 1995 documents. A listing of corrected test voltages per the 1978 rod gap factors and the 1995 factors (without rod gaps) clearly indicates the need for the 1978 rod gap data. This reinforces the effort to add the rod gap factors to IEEE 4, which was done in Supplement IEEE 4a-2001. Mr. McQuin will forward data prepared by Mr. Nourse in 1995, which was part of the effort that resulted in IEEE 4a-2001.
- Meeting Rooms- Working group chairs, please submit your WG room requests for the Spring 2004 meeting to Mr. Burse by Feb. 1, 2004. Working groups are asked to carefully consider any audio visual equipment requirements, as A/V equipment is a major expense.
- Working group chairs were requested to give changes to working group memberships to T. Olsen by the end of the meeting.
- Working Group chairs are asked to provide electronic copies of reports to T. Olsen by Sept. 25.
- ADSCOM- items from ADSCOM meeting requiring attention by the subcommittee.
 - Do we have any document that we would like to submit for consideration as dual-logo standards? Mr. Sigmon will be instructed to offer C37.24 for dual-logo status.
- C37.20.6 ownership: The ADSCOM minutes from the Spring 2003 meeting state "... Move ownership of the document to SA? HVCB and SA will discuss the issue in the respective meetings.". The minutes from the Spring 2003 Switchgear Assemblies subcommittee meeting state: "ADSCOM would like to move this to a subcommittee, but it was agreed that no single subcommittee controls all aspects of the requirements. C37.20.6 is on the agenda for the Standards Board meeting in June, 2003 for reaffirmation. Comments received with the reaffirmation ballots will be forwarded to Switchgear Assemblies subcommittee, to be held for consideration during the next revision project. It was agreed that Switchgear Assemblies subcommittee will provide the WG chair for the next revision". The subcommittee decided to request resolution of the ownership of C37.20.6 at the Main Committee meeting on Sept. 25.
- Switchgear Main Committee—items to be reported verbally during the main committee meeting were reviewed.
 - C37.23 has been approved.
 - C37.24 is proposed for dual-logo status.
 - C37.20.6 is under the responsibility of ADSCOM, under a task force including HVCB and SA members. HVCB has expressed disinterest in the document, and SA has previously agreed to review comments received with the recent reaffirmation ballot, and to provide the WG chair for the next revision effort. It is requested that this be resolved.
- Recognition of individuals was discussed, and appropriate nominations for recognition will be submitted to ER&P.
- Future Meetings:

May 03-06, 2004	San Luis Resort
	5222 Seawell Boulevard
	Galveston Island, TX 77551
Fall, 2004	Philadelphia ??

The meeting adjourned at 4:15 PM.

Minutes submitted by: T. W. Olsen
Secretary