

**SWITCHGEAR ASSEMBLIES SUBCOMMITTEE  
MINUTES OF THE SPRING, 2001 MEETING**

**MILLS HOUSE  
CHARLESTON, SC**

The meeting was called to order by Chair D. Lemmerman at 1:30 PM on May 23, 2001 with the introduction of the following members and guests:

Members:	C. Ball T. A. Burse D. Gohil	J. M. Jerabek D. J. Lemmerman A. F. Morgan	P. J. Notarian T. W. Olsen E. A. Peters	R. J. Puckett M. Wactor
Guests:	D. J. Akers C. Connor P. Dwyer	D. Elliott J. Norfolk J. G. Ross	N. Simon R. Sunkara D. Thonsgard	G. Watson S. Witkowski
Excused:	E. R. Byron J. J. Dravis D. J. Edwards	R. K. Iyer W. E. Laubach W. C. McKay	P. J. Notarian G. R. Nourse G. O. Perkins	G. Sakats S. H. Telander
Absent:	(none)			

The minutes of the Fall, 2000 Switchgear Assemblies Subcommittee meeting in Tucson, AZ, were approved with correction of the word "process" to "progress" in the second item under new business.

**ADSCOM Report**

ADSCOM Committee Report: Mr. Lemmerman reported that:

- Mr. Tobin presented a proposal for future standards strategy. It was suggested that key standards for harmonization were IEC 60056 and IEC 60694, and we should endeavor to adopt these standards with appropriate changes for ANSI practices. Other documents, (e.g., IEEE C37.013, C37.60) where the ANSI/IEEE document is the leading world standard, should be put into IEC format and proposed to IEC for adoption as IEC documents.
- Mr. Ahmad of IEEE-SA presented a summary of FAQ's and vital information that the WG needs to comply with in order to meet the requirements for electronic balloting.
- Mr. Alexander raised concerns about the development of guides for acceptance testing, maintenance testing, and the like. In particular, NETA is developing such guides, and is a recognized ANSI standards development organization.

**WORKING GROUP REPORTS**

The following working group reports were presented:

- C37.20.1 (Metal-Enclosed Low-Voltage Power Circuit Breaker Switchgear) (attached). D10 was submitted for WG comments and Switchgear Assemblies comments, and appropriate changes incorporated in D11. D11 is officially out for ballot.
- C37.20.3 (Metal-Enclosed Interrupter Switchgear): Approved by IEEE in March, 2001. WG to remain pending resolution of ASC C37 status.
- C37.20.4 (Indoor AC Medium Voltage Switches for Use in Metal-Enclosed Switchgear) Approved by IEEE in March, 2001. WG to remain pending resolution of ASC C37 status.
- C37.20.7 (Guide for Testing Medium-Voltage Metal-Enclosed Switchgear for Internal Arcing Faults) (attached) The WG considered negative ballots. Two balloters requested that C37.20.7 be

held pending development of an application guide, and this position was not accepted. Mr. Telander's suggestion that type 3 accessibility be moved to an annex. This would be done to distinguish its purpose (reduced collateral equipment damage) from those of types 1 and 2 (personnel protection). A new draft for recirculation should be available in a few weeks.

- C37.21 (Control Switchboards) (attached). The present draft was reviewed. It is expected that a new draft will be submitted for ballot during the summer. A motion 1A was previously approved at the Fall, 2000 meeting in Tucson.
- C37.23 (Standard for Metal-Enclosed Bus and Guide for Calculating Losses in Isolated Phase Bus) (attached). No meeting was held. The document should be ready for re-circulation ballot in June.
- C37.24 (Guide for Evaluating the Effect of Solar Radiation on Outdoor Metal-Enclosed Switchgear) (attached). Draft D4 was reviewed and D5 will be available in mid-June. A motion 1A was previously approved at the Fall, 2000 meeting in Tucson.
- C37.100.1 (Common Clauses Working Group) (attached). Draft D1 is out to task force leaders for review. The IEC template is being used. For additional details, refer to Common Clauses WG minutes which will be posted on the Switchgear Committee website (<http://www.ewh.ieee.org/soc/pes/switchgear/index.htm>).

#### **OLD BUSINESS**

- Locking Devices (padlocks and devices for multiple padlocks): There is a need to define minimum requirements for a proper locking device for use with switchgear assemblies (for any of the standards that refer to locking this could be an issue). Mr. Edwards has done some research for padlock standards, and has not been able to identify a recognized standard for padlocks or locking devices (e.g., padlock multipliers). The consensus is that our standards should continue to require locking means, and that it should be the responsibility of the user to supply a padlock or comparable device which works correctly in the installation.
- Hybrid switchgear: A task force (E. Byron, D. Gohil, R. Puckett, A. Morgan, and M. Wactor) is studying the need for a document for a "hybrid" type of switchgear incorporating devices which do not conform fully to the C37.20.2 or C37.20.3 requirements. Examples of hybrid switchgear would include fixed-mounted circuit breakers in metal-enclosed switchgear, and fixed-mounted switches in metal-clad switchgear. Mr. Wactor created proposed words for a new class of equipment, somewhat resembling IEC "controlgear". Comments were solicited. Mr. Notarian indicated that UL has created a new category of equipment, designated as metal-enclosed circuit breaker switchgear, to accommodate existing products of this type. A motion was passed to the effect that the previous report, that such equipment is metal-enclosed rather than metal-clad, is the final resolution of the question.
- C37.20.7 Arc Resistant equipment: D. Swindler had volunteered to draft an application guide for dealing with arcing faults, including the use of equipment tested to the requirements of the arc resistant testing document, and with means to mitigate the effects of arcing faults, and related issues. This would likely be a separate document from C37.20.7. Further action is on hold pending receipt of the initial draft.

#### **NEW BUSINESS**

- Future standards directions: ADSCOM has asked each subcommittee to define their future standards with reference to harmonization with IEC. There is agreement that ANSI C37.20.1 and C37.20.2 assemblies differ significantly from their IEC counterparts, and therefore, complete acceptance of the IEC documents is probably not possible. Extensive "in-country clauses" would be necessary to adapt the IEC documents to our needs.

A motion passed to establish task forces to compare the existing standards (IEC or ANSI/IEEE) which deal with switchgear assemblies. A second motion passed to assign the establishment of the task force for a particular switchgear assemblies document to of the present working group chair for the document concerned.

- Switchgear Assemblies subcommittee document status summary was distributed and reviewed. This document lists all documents that this subcommittee sponsors or co-sponsors.
- Meeting Rooms- The working group chairs should advise Mr. Nelson of meeting room requirements for the Fall, 2001 (Quebec City) meetings by July 1.
- Next Meetings:

Sept. 30 – Oct. 4, 2001	Loews LeConcorde, Quebec City
Spring 2002	Newport, RI

The meeting adjourned at 5:09 PM.

T. W. Olsen, Secretary