

**SWITCHGEAR ASSEMBLIES SUBCOMMITTEE
MINUTES OF THE SPRING 2005 MEETING**

**TRADEWINDS ISLAND GRAND RESORT
ST. PETE BEACH, FL**

The meeting was called to order by Chair, D. Lemmerman, at 1:30 PM on May 11, 2005 with the introduction of the following members and guests:

Members:	C. Ball P. Barnhart T. A. Burse E. R. Byron P. Dwyer	D. J. Edwards S. S. Gohil D. J. Lemmerman A. Livshitz F. Mayle	D. Mazumdar A. Morgan G. R. Nourse T. W. Olsen	R. J. Puckett S. P. Slattery J. E. Smith M. Wactor
Guests:	N. Gunderson C. Lam S. Meiners	A. Morse N. P. McQuin	M. Orosz A. Storms	P. Sullivan W. Von Miller
Excused:	J. J. Dravis J. E. Jerabek	W. E. Laubach P. Notarian	E. A. Peters S. H. Telander	
Absent:	R. K. Iyer	G. Sakats		

The minutes of the Fall 2004 Switchgear Assemblies Subcommittee meeting at the Westin La Paloma in Tucson, AZ were accepted as distributed.

ADSCOM Report

ADSCOM Committee Report: Mr. Lemmerman reported that:

- Naeem Ahmad, former liaison to the Switchgear Committee, is no longer with IEEE-SA. Sue Vogel is filling in until a permanent replacement is named.
- IEEE-SA MyBallot is operational. Access requires an IEEE web account and internet access. Members are encouraged to convey issues to Christina Sahr, Manager, Balloting, +1 732 562 5540, c.sahr@ieee.org.
- The number of members needed for a quorum at the main committee meeting was discussed. Since the number of experienced members no longer able to attend in person is growing, we have experienced problems in obtaining a quorum. Approaches to deal with this issue will be discussed in the Main Committee meeting on May 12.
- It is likely that the committee will add a Treasurer to list of officers and that the technical committee program coordinator position will be de-coupled from the vice chair position.
- It is planned to start accepting credit card payments for the Fall, 2005 meeting.
- Enhancements to the meeting format are under consideration, such as a Sunday evening social get-together. Suggestions and ideas are solicited.

WORKING GROUP REPORTS

The following working group reports were presented:

- C37.20.1a: (Amendment to C37.20.1 - 2002 Standard for Metal-Enclosed Low-Voltage Power Circuit Breaker Switchgear) – T. Burse. The D6 ballot closed May 5, with 94% return (72 of 76) and 98% affirmative (70 of 72), 1% negative (1 of 72), with 1 abstention. Ballot comments were discussed and decisions reached. Negative balloters will be contacted, and a re-circulation ballot will be initiated in a few weeks.

- C37.20.2 (Metal-Clad Switchgear) was reaffirmed in March, 2005. A working group for revision will meet at the Fall, 2005 meeting.
- C37.20.7: (Guide for Testing Metal-Enclosed Switchgear rated 1kV through 38kV for Internal Arcing Faults): The D7 ballot closed May 5, with 80% return (78 of 97) and 76% affirmative (59 of 78), 21% negative (16 of 78), and 3 abstention. Ballot comments were discussed and decisions reached. Negative balloters will be contacted, and a re-circulation ballot will be initiated in a few weeks.

It was moved that, at the next revision cycle, C37.20.7 be elevated from the status of a "Guide" to a "Standard". The motion passed 13-7.

- C37.21 (Control Switchboards): The PAR is valid through 31-Dec-2005. The D18 ballot closed Feb. 18, with 100% affirmative, 0% negative. D18 is on the agenda for approval by the Standards Board at the June meetings.
- C37.81-1989 (Guide for Seismic Qualification of Class 1E Metal-Enclosed Power Switchgear Assemblies) – D. Lemmerman: Reaffirmation ballot closed Feb. 10, 100% affirmative, no negatives. RevCom recommended approval on April 21. [Following the meeting, it was learned that the Standards Board approved reaffirmation on May 10].
- C37.100.1 (Common Clauses) - T. Burse (for D. Stone): D5 ballot: closed April 3, 83% affirmative, 17% negative, 501 comments (down from 1094 on D3 ballot).

OLD BUSINESS

- C37.20.3, C37.20.4, and C37.22 MEI Switchgear and related standards. Discuss status of these standards and decide when a coordinated revision effort should begin. IEEE 1247 is in the final stages of re-balloting, and approval can probably be anticipated in 2005.
 - C37.20.3-2001 (Metal-Enclosed Interrupter Switchgear) – Revisions needed when IEEE 1247 is revised. Re-affirmation ballot needed in early 2006.
 - C37.20.4-2001 (Indoor AC Switches (1 kV–38 kV) for Use in Metal-Enclosed Switchgear) - Revisions needed when IEEE 1247 is revised. Re-affirmation ballot needed in early 2006.
 - C37.22-1997 (R2003) (Preferred Ratings and Related Required Capabilities for Indoor AC Medium-Voltage Switches Used in Metal-Enclosed Switchgear): This was transferred from NEMA in 2003. It uses a peak factor of 260% in line with the new generation of standards, but contains a momentary (rms) rating (160%) that is still based on the historic 270% peak factor.

General consensus: In the near future (one year?) form working groups to revise these standards. Consider consolidating C37.22 into C37.20.4 in the revision.

- C37.121-1989 (R2000) (Unit Substations) Re-affirmation ballot needed in 2005. The chair will launch the reaffirmation ballot in the summer.
- C37.24 Dual Logo (IEEE-IEC) status. IEC did not accept for dual log status at its meeting Sept. 21, 2004.

- MV GIS Application Guide – P1663 (Guide for the Application of Medium Voltage Gas-Insulated Substations 1kV to 52kV) (T. Burse) – The Substation Committee has begun a project (PAR approved 12-August-2004) to create a MV GIS Application Guide.
- DC Switchgear – P1653.3 (Standard Wiring Practices and Requirements for Traction Power Metal-Enclosed DC Switchgear) -- T. Burse – This is a project of the IEEE Traction Power Substation Standards Sub-Committee, intended to supplement the requirements in C37.20.1. A PAR has not been submitted. The members of the Switchgear Assemblies subcommittee expressed concern that the document may infringe on the technical areas that are within the SA charter. If the document is restricted to application issues, it would not infringe on the SA charter.
- IEC Activities (SC 17C MT14). T. Burse PES Switchgear Committee liaison representative 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]: No current activity.
 - IEC 60466 (62271-201) [AC Insulation-Enclosed Switchgear and Controlgear for Rated Voltages above 1kV and up to and including 38kV]. In CDV stage.
 - IEC 61330 (62271-202) [Prefabricated Substations]: In CDV stage.
 - IEC 60932 (62271-304) [Additional Requirements for Enclosed Switchgear and Controlgear from 1 kV to 72.5 kV to be used in Severe Climatic Conditions]. In CD stage.
 - IEC 61958 (62271-206) [High-Voltage Prefabricated Switchgear and Controlgear Assemblies – Voltage Presence Indicating Systems]: No current activity.
 A copy of the latest status report from the IEC is attached.
- ASC C37: All documents remaining under ASC C37 responsibility are current. A reaffirmation ballot for C37.50 will be issued very shortly. A revision effort will begin on C37.50 when the content of C37.13 is firmed up.
- 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.
 - C37.20.6: Revision needs to start. Working group will consist of T. Burse (chair), T. Olsen (vice-chair), P. Dwyer, N. McQuin, D. Mazumdar, A. Morgan, J. Smith, A. Livshitz, P. Barnhart, D. Gohil, M. Orosz, W. Laubach, P. Sullivan. The first meeting should take place at the Fall, 2005 meeting. [Subsequent to the meeting, P. Dilillo was added to this list.]
 - C37.121: A reaffirmation ballot will be initiated shortly.

NEW BUSINESS

- C37.23 interpretation issued by IEEE-SA. At the Spring 2004 meeting in Galveston, a request for interpretation of existing standard C37.23 was discussed. It was concluded that a formal interpretation was not involved, but rather, a request for explanation as discussed in the IEEE-SA Standards Companion. Mr. Lemmerman provided an explanation and Mr. Gomez advised that the response was satisfactory. Recently, IEEE-SA issued this explanation as an interpretation, contrary to the decision of the Subcommittee. Mr. Lemmerman will discuss with IEEE-SA and attempt to determine why this was issued as a formal interpretation.
- E. Byron requests that future Switchgear Assemblies subcommittee standards eliminate the present requirement for dielectric tests on control wiring, on the basis that the dielectric test of low voltage wiring is no longer needed. Basically, with today's wire and paint techniques plus with the new generation of relays it serves little value. A copy of the presentation on this issue

is attached, and the issue should be considered by working groups on Switchgear Assemblies documents.

- IEEE-SA MyBallot went “live” in March 2005. Use of MyBallot requires internet access and electronic communications ability, and also requires an IEEE Web Account. MyBallot is an electronic, web-based standards related balloting system and service, providing continuous access (24/7) to a collection of balloting tools and related information. The service allows for online voting and comment submission. With the introduction of these new systems, paper ballots are no longer permitted.
- IEEE-SA patent policy The IEEE-SA patents policy must be reviewed during every working group meeting. The patent materials are available at <http://standards.ieee.org/board/pat/pat-slideset.pdf>.
- **New Procedure!!** Meeting arrangements must now be made through the Subcommittee Chair, rather than directly with the Switchgear Committee secretary. Working Group chairs, advise the Subcommittee Chair (Dave Lemmerman) concerning your working group room requirements (preferred dates, number of sessions (one session = 1 hr 45 min), number of persons expected, and A/V needs). The Subcommittee Chair must send the WG needs to the Committee Secretary at least 10 weeks before the next meeting. So, WG chairs advise Dave Lemmerman by July 27, so Dave can advise Bill Long by August 1.
- Switchgear Main Committee—items to be reported verbally during the main committee meeting were reviewed.
 - A reaffirmation ballot for C37.121 will be initiated shortly.
- Future Meetings:

Oct. 2-6, 2005	Omni Mont-Royal, Montreal, Quebec, Canada
May 7-11, 2006	San Luis Resort Hotel, Galveston Island, TX

The meeting adjourned at 3:40 PM.

Minutes submitted by: T. W. Olsen
Secretary