SWITCHGEAR ASSEMBLIES SUBCOMMITTEE MINUTES OF THE FALL 2006 MEETING

HYATT REGENCY MILWAUKEE, WISCONSIN

The meeting was called to order by Chair, T. Olsen, at 3:45 PM on October 4, 2006 with the introduction of the following members and guests:

| Members: | C. J. Ball P. Barnhart T. A. Burse P. Dwyer | D. J. Edwards D. J. Lemmerman F. Mayle D. Mazumdar | A. Morgan G. R. Nourse | T. W. Olsen J. E. Smith M. Wactor |
|----------|--|---|--|---|
| Guests: | M. Abrahamsen D. Colaberardino L. Farr M. Flack | K. Flowers T. Hood H. Josten N. McQuin | C. Morris A. Morse R. Rajvanshi C. Ross | C. Schneider A. Storms P. Sullivan J. Webb |
| Excused: | J. J. Dravis S. S. Gohil | J. E. Jerabek W. E. Laubach W. C. McKay | P. Notarian E. Peters | R. J. Puckett S. H. Telander |
| Absent: | E. R. Byron | R. K. Iyer | A. Livshitz | G. Sakats |

IEEE-SA rules on Patents were reviewed prior to further discussions.

The minutes of the Spring 2006 Switchgear Assemblies Subcommittee meeting at the San Luis Resort, Galveston, Texas were accepted with one amendment (remove the descriptor word acting preceding the word Chair).

WORKING GROUP REPORTS

The following working group reports were presented:

- C37.20.1b: (Standard for Metal-Enclosed Low-Voltage Power Circuit Breaker Switchgear Amendment 2: Additional Requirements for Control and Auxiliary Power Wiring in dc Traction Power Switchgear – T. Burse. D3 recirculation ballot closed September 25, 2006 with no negatives. Final ballot successful. Submitted to RevCom on 9/27/2006.
- C37.20.2: (Standard for Metal-Clad Switchgear) M. Wactor. Comments received on D2 of the document were reviewed. Comments, both from those persons previously assigned and from others interested, are requested by October 31, 2006.
- C37.20.6: (Standard for 4.76 kV to 38 kV Rated Grounding and Testing Devices Used in Enclosures) – T. Burse. A PAR was approved Dec. 7, 2005. Reviewed actions since last meeting and the 37 comments received. Those volunteering to provide addition text are requested to do so by October 31, 2006.
- C37.20.7: (Guide for Testing Metal-Enclosed Switchgear rated 1kV through 38kV for Internal Arcing Faults): The D11 recirculation ballot was successful. The document has been submitted to RevCom for approval. Negative comments were discussed with the negative balloter at the PCIC meeting in September. A 10-day recirculation ballot will be conducted starting almost immediately.

• C37.100.1 (Common Clauses) – T. Burse (for D. Stone): Last ballot received 50 comments. Most negatives have been resolved. There will be a 10-day recirculation ballot.

ADSCOM Report

ADSCOM Committee Report: Mr. Olsen reported that:

 The IEEE-SA Standards Board reviewed the metrication policy, in response to a plea presented by the Transformers Committee and supported by the Switchgear Committee. The Board adopted revised language, a key portion of which is:

Proposed new standards and revised standards submitted for approval should use metric units exclusively in the normative portions of the standard. Inch-pound data may be included in parentheses after the metric units if the Sponsor believes that the audience for the document would benefit from the inclusion of inch-pound data, based on concerns for safety or clarity. Metric units shall always be the primary unit of measurement.

In effect, this establishes that the Sponsor (i.e., Switchgear Committee) has the main technical responsibility and authority in questions on use of dual dimensioning. Metric units remain the primary unit of measurement.

- Partial registration fees (e.g., for one day or perhaps one meeting) were discussed but will not be offered.
- Subcommittee web pages will be reviewed within the next two weeks. Our SA webpage is current, but will be reviewed to confirm. (Editorial remark – revised information submitted Oct. 6).

OLD BUSINESS

- Mike Wactor will be the new Standards Coordinator, effective in January.
- C37.20.3 (Metal-Enclosed Interrupter Switchgear) Recirculation ballot closed 8/29/2006.
 100% affirmative. Submitted to RevCom 8/31/2006. Working group chair will be Chuck Ball.
 The first meeting will be held at St. Pete Beach, spring 2007.
- C37.20.4 (Indoor AC Switches, 1 kV-38kV, for Use in Metal-Enclosed Switchgear) –
 Recirculation ballot closed 8/29/2006. 100% affirmative. Submitted to RevCom 8/31/2006.
 Working group chair will be Chuck Ball. The first meeting will be held at St. Pete Beach, spring 2007. The revision will include merging C37.22 (Preferred Ratings and Related Required Capabilities for Indoor AC Medium-Voltage Switches Used in Metal-Enclosed Switchgear) into C37.20.4. C37.22 was previously a NEMA document.
- C37.121 (Unit Substations) Reaffirmation ballot closed 8/29/2006. 97% affirmative, 3% negative (2 negatives). Submitted to RevCom. A revision of this document will be needed soon.
- MV GIS Application Guide P1663 (Guide for the Application of Medium Voltage Gas-Insulated Substations 1kV to 52kV) -- (T. Olsen) – The Substation Committee has initiated a

- project (PAR approved 12-August-2004) to create a MV GIS Application Guide. T. Olsen will be on the working group.
- The Task Force headed by Ted Burse recommends separating the LV dc traction switchgear requirements in C37.20.1 from the ac requirements and creating C37.20.8 for dc traction switchgear. The task force is studying IEC/EN standards (31 standards) dealing with dc traction switchgear to determine if harmonization is appropriate. Charles Ross will involve the TPSSC community in this effort. Splitting the ac and dc traction requirements and creating C37.20.8 will be presented as a dual submittal. A volunteer to chair the Working Group is needed.
- IEC Activities (SC 17C MT14) L. Farr provided an update.

| IEC 60298 | AC Metal-Enclosed Switchgear and Controlgear for Rated Voltages |
|-----------|---|
| (62271- | above 1 kV and up to and Including 52 kV. T. Burse is comparing this |
| 200) | document with C37.20.2. Comments on the document are due |
| | 10/27/06. Metal Clad switchgear is addressed in an informative annex. |
| IEC 60466 | AC Insulation-Enclosed Switchgear and Controlgear for Rated Voltages |
| (62271- | above 1kV and up to and including 38kV. USA approved document. |
| 201) | - |
| IEC 60932 | Additional Requirements for Enclosed Switchgear and Controlgear from |
| (62271- | 1 kV to 72.5 kV to be used in Severe Climatic Conditions. Ken Geltman |
| 304) | is working on this document. |
| IEC 61330 | High-Voltage / Low-Voltage Prefabricated Substations. This document |
| (62271- | has been approved. |
| 202) | |
| IEC 61958 | High-Voltage Prefabricated Switchgear and Controlgear Assemblies – |
| (62271- | Voltage Presence Indicating Systems – This document may include |
| 206) | electronic voltage dividers. |

- ASC C37: Documents under ASC C37 responsibility are current. Ballots will be issued shortly for:
 - Revised operating procedures to reflect new ANSI Essential Requirements.

NEW BUSINESS

- IEEE-SA: Use of MyBallot requires internet access and electronic communications ability, and also requires an IEEE Web Account. A tip sheet for using MyBallot was presented and will be posted on the PES Switchgear Web page. The left hand column includes tips for the voter and the right hand column includes tips for the Working Group chair or document sponsor.
- 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-lideset.pdf.
- Procedure for Meeting Rooms! Meeting arrangements must be made through the
 Subcommittee Chair. Working Group chairs, advise the Subcommittee Chair of 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 Ted Olsen by March 1, 2007 so Ted can advise Ken Edwards by March 9, 2007.

- Working Group chairs, give changes to your working group memberships to A. Morgan by the
 end of the meeting, and provide electronic copies of WG reports to A. Morgan at the end of the
 meeting today.
- Switchgear Main Committee—items to be reported verbally during the main committee meeting were reviewed.

• Future Meetings:

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|-------------------|--|--|--|
| May 6-10, 2007 | St. Pete Beach, FL | | |
| Sept. 23-27, 2007 | Philadelphia | | |
| Spring 2008 | 8 Las Vegas NV, Portland OR, Orlando FL, Asheville | | |
| | NC, Nashville TN, Anaheim CA | | |
| Fall 2009 | If you would like the IEEE Swgr Committee to come to | | |
| | your city, please contact Ken Edwards or Bill Long | | |

The meeting adjourned at 5:15 PM.

Minutes submitted by: A. F. Morgan

Secretary