

## **8.7 Underground Transformers and Network Protectors – Carl G. Niemann**

### **Meeting Minutes – October 17, 2007**

#### **8.7.1 Introduction/Attendance**

The Underground Transformers and Network Protectors Subcommittee met on Wednesday, October 17, 2007, in the Ballroom E of the Hilton Minnesota Hotel at 9:30 AM with 11 members and 3 guests present.

#### **8.7.2 Approval of Minutes**

The minutes of the March 14, 2007 meeting in Dallas, Texas were approved as submitted.

#### **8.7.3 Membership**

Membership stands at 21 members. Michael Hardin and Said Hachichi were accepted as new members.

#### **8.7.4 Chairman's Remarks**

**The following Administrative Subcommittee notes were reported to the subcommittee:**

- The attendance statistics and future meeting locations
- Admin. Subcommittee. is working to add a treasurer spot

#### **8.7.5 Working Group Reports**

##### **8.7.5.1 Underground Single Phase Transformers (C57.12.23) – A. Traut, Chairman**

1. There were 12 members and 11 guests for a total of 23 in attendance. The total membership of the WG stands at 28.
2. The chair requested disclosure of any patents that might impact this standard. There were no patents disclosed at this meeting.
3. The minutes of the March 2007 meeting in Dallas were approved as submitted.
4. The chair reported that the PAR has an expiration date of 12/31/2009 and that the exiting document published in 2002 is valid to that date.
5. The WG agreed no further changes are needed to Draft 6 of the document.
6. The document will proceed to pre-ballot editorial review and sponsor ballot.

##### **8.7.5.2 Three-Phase Underground-Type Transformers (C57.12.24) – Giuseppe Termini, Chairman**

1. The meeting was called to order by the Chairman at 8:00 a.m. on Monday, October 15, 2007 in the Ramsey Room of the Hilton Minneapolis Hotel in Minneapolis, Minnesota.
2. Introductions were made. The meeting was attended by 14 members and 13 guests. Three guests requested membership.
3. The Chairman opened the meeting by asking if anyone in the Working Group knew or had knowledge of any existing or pending patents that may affect the work on this standard. All responses were negative.

4. The Meeting Minutes from the previous meeting in Dallas, Texas in March 12, 2007, were reviewed and approved.
5. The status of the Draft (D1) standard was discussed.
  - A. This draft has been issued for mandatory editorial coordination (MEC) by the IEEE editorial staff prior to balloting.
  - B. Matt Ceglia of IEEE briefly described the MEC process to the working group. He expects the MEC review to be completed by November 8, 2007.
  - C. The Chairman stated that unless there were significant editorial changes, the draft would not be sent out for review by the working group prior to being submitted for balloting.
6. The meeting was adjourned at 8:20 a.m.

#### **8.7.5.3 Liquid Filled Secondary Network Transformers (C57.12.40) – Brian Klaponski, Chairman**

1. The WG met on Monday, October 15, 2007 at 09:30 am with 9 members and 6 guests. One guest requested membership.
2. The chairman reviewed the patent legal issue and asked whether there were any patents or patents pending that would affect the WG or standard. None were identified.
3. The minutes of the March 12, 2007 meeting in Dallas, TX were reviewed and approved.
4. B. Klaponski stated that the PAR was approved by IEEE in April 2007.
5. The rest of the meeting consisted of a review of Draft 1 of the standard dated October 4, 2007.
  - A. Section 2 - B. Klaponski stated that the referenced standards would include the latest revision and that we will need to review that in detail towards the end of the review of this standard.
  - B. Section 3.1- Deleted reference to C57.12.24.
  - C. Section 3.3 - Deleted reference to I.E.C.
  - D. Section 3.4 - B. Klaponski will come up with proposed wording to clarify the chopped wave testing requirements listed in C57.12.90.
  - E. Section 5.2 - B. Klaponski indicated that Larry Dix will rework this section and present a new draft of this whole section prior to our next meeting.
  - F. Section 5.2.5 - Joe Cultrera questioned the 5 min limit for dc testing. He suggested that test duration should be longer, perhaps 15 min.
  - G. Section 5.2.6.4 - The comment below Table 6 was reworded and incorporated as a note.
  - H. Section 5.2.6.5 - Comment below this section was deleted.
  - I. Section 5.3.1 - Section was reworked.
  - J. Section 5.3.1.1 - Proposed wording was reworked. Second sentence was removed.
  - K. Section 5.3.1.2 - Section was reworked. B. Klaponski will review this section and compare it with the previous revision and make changes as necessary.
  - L. Section 5.3.2 - Section was reworked.
  - M. Section 5.3.3 – A requirement for minimum operating torque was added and the importance of a maximum operating torque of about 50 ft-lbs was discussed.
6. The meeting was adjourned at 10:50am with the next meeting in Charlotte, NC.

#### **8.7.5.4 Secondary Network Protectors (C57.12.44) – D.H. Mulkey, Chairman**

1. The WG was not scheduled to meet.
2. The standard was published in 2005

#### **8.7.5.5 Ventilated Dry-Type Network Transformers (C57.12.57) – A.L. Robinson, Chairman**

1. The WG was not scheduled to meet.

#### **8.7.6 Old Business**

1. Brian Klaponski lead a discussion on getting the standards development process reviewed and fixed to better utilize the volunteer capabilities of the working group personnel and the professional editorial staff of the IEEE

#### **8.7.7 New Business**

1. The Administrative Subcommittee of IEEE Transformers Committee should consider paying the standards association fee for regular attending members instead of a reduction in the next meeting registration fees. Regular attending members would be those attending 4 out of the last 5 meetings. This would encourage more voting members. Brian Klaponski motioned, it was seconded and passed unanimously:
2. Dan Mulkey has received notification of an interpretation request concerning the use of generation on the low-voltage side of network protectors. Dan will forward the information to the C57.12.44 working group and develop a response via email.

#### **8.7.8 Future Meetings**

The location and dates for the next meetings are as follows:

- Spring 2008 March 16-20, Charlotte, NC, Westin Hotel
- Fall 2008 Porto, Portugal October 5-9, 2008 (OPO airport code) Porto Palacio Hotel, 120Euro w full breakfast and high-speed internet
- April 19-23, 2009, location TBD
- Oct 18-22, 2009, location TBD

#### **8.7.9 The Subcommittee adjourned at 10:15 AM.**