

8.7 Underground Transformers and Network Protectors

Carl G. Niemann (Chair)

Dan Mulkey (Vice-Chair)

Meeting Minutes – October 28, 2009

8.7.1 Introduction/Attendance

The Underground Transformers and Network Protectors Subcommittee met on Wednesday, April 28, 2009, in the Jr. Ballroom C of the Westin Lombard Yorktown Center Hotel in Lombard, Illinois at 11:00 AM with 8 members and 5 guests present.

8.7.2 Approval of Minutes

The minutes of the April 22, 2009 meeting in Miami, Florida were approved as submitted.

8.7.3 Membership

Membership stands at 15 members, so a quorum for this meeting was met.

8.7.4 Chairman's Remarks

The following Administrative Subcommittee notes were reported to the subcommittee:

- An overview of meeting statistics was provided
- WG leaders should:
 - Should establish a quorum of > 50% of membership

8.7.5 Working Group Reports

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

1. The WG did not meet in Lombard. The document was published in April 2009 and is valid until 12/31/2014. The WG has no new issues to address so it will be inactive until revision or reaffirmation is required.

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 26, 2009 in the Cypress A/B Room of the Westin Lombard Yorktown Hotel. Brian Klaponski acted as the recording secretary.
2. An agenda was presented and introductions were made. The meeting was attended by 14 members and 22 guests. One guest requested membership.
3. The Chairman asked 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 Miami on April 20, 2009 were reviewed and approved since a quorum was established with 14 members present at this meeting.
5. The Chairman had tried to email a complimentary copy of the newly published C57.12.24 – 2009 through the AM System to all members and guests but the file was

too large to be delivered. The Chairman stated that he would email a copy directly to each member and guest. Once each WG member receives the new published document, members should read it to identify any changes and improvements at the next meeting.

6. The Chairman discussed quorum requirements for future meetings based on a meeting he attended early the morning of October 26 set up by the Distribution Subcommittee. His intent is to review the WG membership list and bring it up to date to reflect the active members.
7. The meeting was adjourned at 8:45 a.m.

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

1. The WG met on Monday, October 26, 2009 at 09:30 am with 9 members and 9 guests. One quest requested member status.
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 April 20, 2009 meeting in Miami, Florida were reviewed and approved.
4. The Chairman stated that the standard was last reviewed in 1998/1999. The goal of this meeting is to bring the standard to an acceptable level so that it can proceed to balloting.
5. The rest of the meeting consisted of a review of Draft 6 of the standard dated October 21, 2009.
 - A. Section 6.2. 2 - B. Title change from “Short Circuit Withstand of the Switch” to “Momentary Short Circuit Withstand of the Switch.”
6. The Chairman recommended he finalize the draft in the next couple of months, then circulate the draft to WG members for final comments, and then proceed to balloting prior to our March 2010 meeting. Larry Dix made a motion to this effect and Dan Mulkey seconded the motion. The motion was voted on and approved.
7. The meeting was adjourned at 10:44 am with the next meeting in Houston TX in March.

8.7.5.4 Secondary Network Protectors (C57.12.44) – Bill Wimmer, Chairman

1. The WG met on Monday, October 26, 2009 at 11:00 am with 6 members.
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. This group has not met for several meetings. The document will expire at the end of next year and we do want to keep it active. This meeting was to determine the course of action for the document (revision or reaffirmation).
4. The chairman opened the floor for any possible changes that need to be considered for a new revision.
5. Mark Faulkner had the following comments:
 - A. 6.2.1.3b “The network relay(s) shall be tested at 1500 V at 60 Hz for 1 min.” Is this left over from the electromechanical days? The general consensus is that it is.

- B. 5.2.3.3 “At the end of the test, the network protector shall be capable of meeting its interrupting rating and capable of carrying rated continuous current without exceeding the temperature rise limit. ” Does this require a second heat run test?
- 6. Ed Bertolini had the following comments:
 - A. 10.5.20 “The operating mechanism and relay cases shall be grounded to the enclosure through the removable breaker.” There is a general lack of detail in the requirements and in some cases customers may not be properly installing protectors and maintaining the ground connection. Suggested that a non-painted stainless pad, etc should be added.
 - B. We should consider adding a section on environmental requirements. This would include requirements for such items as CTs and Pts.
- 7. It was decided that there were enough issues to go forward with a revision to the document. The chair will send out a copy of the current (2005) version to all past members of the working group and solicit any additional comments.
- 8. The chair will also go forward with submitting for a PAR sometime after the Spring meeting.

8.7.5.5 Ventilated Dry-Type Network Transformers (C57.12.57)

- 1. The WG was not scheduled to meet.

8.7.6 Old Business

- 1. None.

8.7.7 New Business

- 1. Brian Klaponski had comments on the Patent Issue:
 - A. We ask the patent question at the beginning of each meeting. In all the meetings I have ever attended I have never seen anyone identify a patent. I attended the meeting of a new TF on Natural Ester Fluids. This group is just forming. When the patent question was asked there were no patents identified – yet there are clearly patents involved. So my question is: why do we ask the question?? When someone stood up and addressed the issue at that meeting their questions and concerns were addressed only in a defensive way and quite frankly they should have been duly noted and as a minimum taken under advisement. What do the minutes of that TF show in regards to that discussion?
 - B. I will attempt to now answer the question of why we ask the question. The IEEE wants to protect themselves from patent infringements and I suppose at the same time protect us the members. Also, there is another important and very fundamental reason we need to understand as people trying to write standards. We need to understand if there are issues that will affect the availability of products that are parts of our specs. We need transparency to ensure proper decision making. Should not there be full disclosure.
 - C. Should we (as the Transformers Committee) undertake to better understand why we are asking for patent disclosure?

8.7.8 Future Meetings

- The next meeting will be March 7-11, 2009 in Houston, Texas.