# 2.4 Underground Transformers and Network Protectors - C.G. Niemann

Meeting Minutes – Raleigh, North Carolina

#### 2.4.1 Introduction/Attendance

The Underground Transformers and Network Protectors Subcommittee met on Wednesday, March 19, 2002, in Capital Room 20 of the Sheraton Capital Center Hotel at 9:30 AM with twelve members and three guests present.

# 2.4.2 Approval of Minutes

The minutes of the October 23,2002 meeting in Oklahoma City, Oklahoma were approved as submitted.

### 2.4.3 Membership

Membership stands at 20 members.

#### 2.4.4 Chairman's Remarks

# Administrative Subcommittee Notes Reported to SC

- Attendance at meeting is 306 registered and 40 companions.
- The subcommittee was informed that NEMA and IEEE had reached an agreement and that all NEMA copywrited C57 standards had been turned over to IEEE.
- Discussion on reballot of C57.12.34.
- No word received yet from IEEE on the metrification issue. The Underground Subcommittee Chair voiced his displeasure with the delay as it was affecting how we will proceed in standards revisions

### 2.4.5 Working Group Reports

### 2.4.5.1 Three-Phase Underground-Type Transformers (C57.12.24) J. Sullivan – Chairman

- 1. Met on Monday, March 17, 2003, at 9:30 AM in the Capital Room with nine members and six guests present.
- 2. Approval of minutes of last meeting were dispensed with as there was no meeting in Oklahoma City.
- 3. The Working Group decided to pursue a new PAR to cover revision of the document.
- 4. Several items for revision were brought up:
  - a. Fins 12 Ga is specified. However no one any longer supplies that gauge.
  - b. Tank material, thickness, and coating requirements.
  - c. Address construction requirements for wet and dry applications in the standard.
- 5. A task force was named to review the standard and discuss needed revisions prior to the next meeting.. Members are: Giuseppe Termine, Brian Klaponski, Dan Mulkey, and John Sullivan.

- 6. Giuseppe Termine was named Vice Chairman of the Working Group.
- 7. Meeting was adjourned at 10:05 AM.

# 2.4.5.2 Liquid Filled Secondary Network Transformers (C57.12.40) B. Klaponski - Chairman

- 1. Met on Monday, March 17, 2003 at 3:15 PM with 13 members and five guests present.
- 2. Minutes of the October 21, 2002 meeting in Oklahoma City, Oklahoma were approved as submitted.
- 3. The WG discussed the metrification issue and the fact that the Administrative SC on Sunday had given direction to proceed with dual dimensioning. The Chairman insisted he would not proceed in that direction until the Standards Board approved this direction. This standard is being held up on the metrification issue.
- 4. The current ANSI/NEMA standard has numerous editorial errors and our current PAR was intended to be short lived to correct these errors and then publish this document as an IEEE document. Caution should be exercised with the current C57.12.40 2000 NEMA document. A new PAR will not be submitted until this is resolved.
- 5. To make use of this meeting discussion continued as if we were working under a new PAR. A detailed proposal on the rating of the three position primary switch was discussed based on a letter from Larry Dix of Quality Switch. Based on the discussion Larry will revise his proposal wording to include:
  - a. A 1500 amp ground circuit requirement
  - b. A resistance change criteria for the switch
  - c. A specific torque change criteria

From this revised proposal existing switch manufacturers will verify the acceptance of these criteria .

- 6. The Part II of this standard that used to be included for Con-Ed was again discussed. It is noted that prior to application for a new PAR, Con-Ed will be requested to attend our meetings, state their case in regards to Part II, and participate in the standard development. No ConEd representation was at this meeting.
- 7. The meeting was adjourned at 4:30 PM.

#### 2.4.5.3 Secondary Network Protectors (C57.12.44) D.H. Mulkey – Chairman

- 1. Met on Monday, March 17, 2003 at 1:45 PM with five members and six guests present.
- 2. Minutes of the October 21, 2002 meeting in Oklahoma City, Oklahoma were approved as written.
- 3. The WG reviewed changes added since the last meeting.
- 4. Additional discussion centered on:
  - **A.** Need for Table 4. No resolution, will be worked on between meetings
  - **B.** 5.2.5, 5.2.5.1 Need to conform 10kV BIL in this vs. 30kV BIL for network transformer secondary.
  - **C.** 11.4.1 "cm" should be "mm".
  - **D.** Section 11.4.1 Transformer Mounted. The "C" dimension as referenced in C57.12.44D1.3 in the 2500-4500A unit size does not agree with C57.12.40-2000 Figure 4. Mistake in .40 document.

- 4. Next meeting will be held in Pittsburg, PA on October 5-9, 2003.
  - A. One working group session required for the next meeting.
- 5. The meeting was adjourned at 3:00 PM.

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

. No report. Working Group did not meet

#### 2.4.6 Old Business

1. Continued discussion on removal of metric units from standards. Subcommittee is in favor of dual unit system. The Underground Transformers and Network Protectors Subcommittee Working Groups are not in favor of moving forward on revisions until this issue has been resolved with the Standards Board.

### 2.4.7 New Business

None

# 2.4.8 Future Meetings

The location and dates for future meetings are as follows:

October 5-9, 2003 Pittsburg, Pennsylvania March 7-12, 2004 San Diego, California October 17-21, 2004 Edinburgh, Scotland

The Subcommittee adjourned at 10:45 AM.