Unapproved Minutes
IEEE/PES Transformers Committee
Standards Subcommittee Meeting
October 25, 2006
Montreal, Quebec, Canada

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1. Meeting Attendance
    a. The Standards Subcommittee met on Wednesday, October 25, 2006, at 4:30 PM. There were 22 members and 13 guests present, with 4 requesting membership.
2. Approval of previous meeting minutes
    a. The meeting minutes from the spring 2006 meeting in Costa Mesa was approved as written.
3. Standards subcommittee secretary.
    a. After this meeting, current secretary Javier Arteaga will leave this position and a volunteer will be seek to continue the work in the subcommittee.
4. Working Group Reports.
    a. C57.144 - Guide for Metric Conversion of Transformer Standards
        i. Bill Chiu indicated that the process to revise/reaffirmed this standard needs to start in 2007, and a Chair is required to lead these efforts.
        ii. We will solicit for a volunteer at the General Meeting to take on this effort. Preferably an active member in the Distribution Transformer Subcommittee.
    b. Continuous Revision of C57.12.00, Dong Kim WG Chair, and C57.12.90 Stephen Antosz WG Chair.
        i. Both standards were approved by RevCom on September of 2006 and will be published after their editorial review. It is expected that the standards will be published in 2006.
        ii. Both documents can now be used by the different working groups for the development of their work.
        iii. All unresolved comments received during the balloting process will be directed, by the Chairs, to the appropriate subcommittees for their review and discussion within their working groups.
        iv. After the documents are published, a new PAR will be submitted to continue their revision.
    c. C57.12.80 – IEEE Standard Terminology for Power and Distribution Transformers – Tim Raymond, WG Chair
        i. The amendment to the PAR was submitted to add the definition of thermal upgraded paper. When this is approved, the document will be balloted.
        ii. After the new revision is published, a new PAR will be issued in order to incorporate other definitions already identified.
        iii. Chair requested to the working groups of all subcommittees to send him new definitions identified during the development of their work.

d. C57.12.70 – IEEE Standard Terminal Markings and Connections for Distribution and Power Transformers – Steve Shull, WG Chair.

   i. Bill Chiu indicated this document was reaffirmed and the comments received make necessary to start the revision process of this standard.

e. TF on IEC/IEEE Cross Reference - IEC TC10, TC14, TC36 and TC98 – Steve Beckman, TF Chair.

   i. The scheduled meeting was cancelled and no report was issued.

   ii. Chair indicated that a new Task Force Chair is required. Jim Sim agreed to lead the review process. He will provide the cross reference for IEC TC14 and requested volunteers to take the additional work.

   iii. Peter Zhao will prepare the cross reference for TC36 and other volunteers will be required during the general meeting.

   iv. A. Molden has prepared a cross reference between IEEE C57.98 and IEC 60060-3 and the resulting document is extensive. Based on this, it was decided not to publish a technical paper with the entire cross references, but a comparative table.

f. TF on Coordination of IEEE 62 – IEEE Guide for Diagnostic Field Testing of Power Apparatus – Part 1: Oil Filled Power Transformers, Regulators and Reactors – Loren Wagenaar, TF Chair.

(Minutes from the Task Force is attached)

Task Force on Coordination of IEEE 62, Guide for Diagnostic Field Testing of Electric Power Apparatus – Part I: Oil Filled Power Transformers, Regulators and Reactors

Minutes of October 24, 2006 Meeting held in Montreal, Quebec

Chair Wagenaar opened the meeting at 9:30 am with introduction of 13 members and 28 guests. In accordance with IEEE policy, the Chair asked if there were any patents related to the work of the task force. There were none.

Minutes of the previous meeting, held in Costa Mesa, CA on March 21, 2006 were approved as written.

It was agreed at the Costa Mesa meeting that volunteering members would review seven associated guides and standards for the purpose of comparing the content these documents with IEEE 62. They would then point out the overlapping scopes and conflicts to Jin Sim, who volunteered to coordinate these findings. Results were received from most of the individuals assigned and indicate that:

1. There is duplicate information between IEEE 62 and the other documents.

2. There are conflicts in the information given in IEEE 62 and the other documents. This demonstrates the need to state this information in one and only one place.

3. There is at least one case where the present information in IEEE 62 is incorrect. This was brought about because of the advancement of knowledge since IEEE 62 was last revised.

These results emphasize the point that there is a need to have this information in one place. No one argued to drop the document altogether, and it was thought that if it were dropped, service people could possibly continue to use the current revision instead of referring to the proper up to date document. No one thought the information should be contained in an untold number of separate documents.

The ideal document would contain all information pertaining to what the service people in the field need to maintain a transformer in the field. He typically does not want to pull this info out of his laptop, if he has one, from a number of standards. Ideally, this information would not appear in any other document maintained by the Transformers Committee. However, from a more practical aspect, this may not be workable solution in some cases because the expertise resides in the various technical committees.

Historically, IEEE 62 has been used by service people to install and maintain transformers. It was stated that hundreds of municipalities use IEEE 62.

The question of whether to include information pertaining to installation of new transformers was also discussed at length. The primary argument for inclusion included the fact that the initial tests on a transformer were the baseline tests for future comparisons. The primary argument against inclusion was that guidelines for installation of a new transformer are typically specified

by the manufacturer, and acceptance criteria do not belong in any standard unless there is agreement of concerned members regarding the specific standard covering the product being tested.

A straw vote was taken among the members present on their preference on the following three options:

Option 1 - Should IEEE 62 be dropped as a guide?
Option 2 – Should IEEE 62 be included in another guide such as C57.140?
Option 3 – Should IEEE 62 be maintained and where possible, be the only source of the information pertaining to field testing?

Options 1 and 2 received absolutely no votes. Support for Option 3 was overwhelmingly unanimous.

On the question of whether installation of new transformers should be included in IEEE 62, the vote was 23 for and 1 against. Although the results of the straw vote were clearly in favor of inclusion of new transformers, this issue promises to be a sticky one in future discussions.

It was also the opinion of the task force that this document should be under the Standards SC and be considered as a guide for continuous review, in a manner similar to C57.12.00 and C57.12.90.

Another question asked was should the document continue to be called IEEE 62, or should it be a C57 number? This question was not addressed since it was not within the scope of the task force to decide. However, it will have to be considered in the future.
Chair's note: This issue was later discussed at the Standards SC meeting on Oct. 25 that the revision would have a C57 number, as do all documents revised within the Transformers Committee.

A recommendation in accordance with the discussion will be made to the Standards SC. The direction of this task force will be determined by the Standards SC and the AdCom.
Chair's note: The recommendations to: 1) Revise IEEE 62 to be, wherever possible, the sole source of information pertaining to field testing, and 2) Consider the document as a guide for continuous revision, were approved by the Standards SC.

With the recommendations offered by the task force being accepted by the Standards SC, the work of the task force is considered complete, and it will not meet at the next meeting.

Submitted by Loren Wagenaar

i. The Standards Subcommittee voted to approve the recommendations of the Task Force and this document will be reviewed to bring it up to date under the Standards Subcommittee.

ii. A volunteer will be requested to lead these efforts during the General Meeting. Since the Standards Subcommittee does not have all the proper expertise, it will delegate some tasks to other subcommittees.

5. Old Business

a. IEEE/IEC Dual Logo

i. IEEE C57.123 – IEEE Guide for Transformer Loss Measurement – Is in the process for dual logo. IEEE Standards submitted standard to IEC Technical Council and is waiting for resolution.

ii. Ken Hanus recommended considering C57.12.15 - IEEE Standard Requirements, Terminology, and Test Code for Step-Voltage Regulators – as the next standard for dual logo. He indicated the IEC does not have a standard for this type of transformers.

b. References to NEC 2005, IEEE 1584, NFPA 70E on arch Flash analysis clothing thermal approach boundary, safety approach distance.

i. Mr. Rossetti indicated that safety experts in their company consider that this code applies to personnel without training that qualifies them to perform electrical work.

ii. Steve Beckman indicated that its main application is in the transformer's control cabinet.

iii. It was mentioned that under development standard C57.148- Standard for Control Cabinets for Power Transformers – is already incorporating references to NEC 2005

iv. There was a strong opinion of the subcommittee that this code does not belong to the transformer committee and no action will be take at this time.

c. IEEE-SA Standards Board Implementation Plan for Policy 9.19 (Metrification Policy)

i. IEEE Metric Policy 9.19 is available in the IEEE's Website and needs to be consulted by subcommittee during the development of their work.

ii. When safety considerations are involved, units in the English system can be utilized, with the conversion to the International System of Units (SI) in brackets, otherwise, the units are expressed in the SI system, with its

conversion to the English system in brackets as outlined in IEEE/ASTM SI 10.

6. New Business

a. C57 Collection of Standards

i. IEEE-SA will support the Transformers Committee in issuing a new C57 Collection of Standards in CD version

ii. It will be offered during our next meeting in Dallas, in the spring of 2007, at a discount price.

iii. The collection will include the latest revisions available, specially the expected revisions in 2006 for standards C57.12.00 and C57.12.90.

7. Adjournment

a. The meeting adjourned around 5:30PM.