

10.6 Insulating Fluids Subcommittee – F. J. Gryszkiewicz, Chair; R.K. Ladroga, Vice-Chair

10.6.1 Introduction/Attendance

The Insulating Fluids Subcommittee met in San Diego, California on Wednesday, March 10, 2004 with 20 members and 20 guests present. One guest requested membership on the Subcommittee.

10.6.2 Approval of Meeting Minutes

The Transformers Committee has received a letter of concern related to the attachment letter included with the last Insulating Fluids Subcommittee Meeting in Pittsburgh, Pennsylvania. The Committee Officers will review this concern with IEEE as a follow-up to its initial review with IEEE when this letter was presented for inclusion in the Minutes. Upon completion of that review, a decision will be made as to any changes and notifications needed related to the Minutes.

In view of the foregoing, the Minutes of the Pittsburgh meeting were approved with Exception noted to inclusion of the subject letter included with the Insulating Fluids Subcommittee Minutes, subject to review with IEEE, and final determination of the status of this item in the Minutes.

10.6.3 Subcommittee Membership

There were no changes to report in the Subcommittee Roster; however, one guest requested membership on the Subcommittee. The new member is Mr. Kjell Sundhuist of Nynas Naphthenics, AB.

10.6.4 Current Subcommittee Business

10.6.4.1C57.106 – IEEE Guide for Acceptance and Maintenance of Insulating Oil in Equipment

Jim Thompson and T.V. Oommen are the Co-Chairs of this Working Group. The Working Group met on Tuesday, March 9, with a combination of 43 members and guests in attendance. The Working group reviewed Draft 2 of the suggested revision of Section 4.5. Several suggestions for changes were proposed. These comments will be incorporated into Draft 3, which will be sent out for a Subcommittee Survey Ballot before the next meeting.

10.6.4.2C57.104 – IEEE Guide for the Interpretation of Gases Generated in Oil – Immersed Transformers

This Working Group is Co-chaired by Frank Heinrichs and Frank Gryszkiewicz. This document completed a Standards Association Ballot some time ago and several negative ballots were received. The negative ballots were resolved and/or rebutted and incorporated into Draft 11C.

A Standards Association Ballot will be conducted on Draft 11C. This will be the first electronic ballot of this document. The Working Group also agreed to participate with IEEE Headquarters in an experimental procedure. Any negative ballots will be resolved or rebutted via a website based and teleconferencing procedure.

10.6.4.3 C57.130 – Trial Use Guide for the Use of Dissolved Gas Analysis During Factory Temperature Rise Tests for the Evaluation of Oil- Immersed Transformers and Reactors

This Working Group is co-chaired by Frank Heinrichs and Frank Gryszkiewicz. Draft 14 of this document has been sent to IEEE for a Standards Association Ballot.

10.6.4.4C57.111 – IEEE Guide for Acceptance of Silicone Insulating Fluid and Its Maintenance in Transformers

Kent Haggerty and Jim Goudie are the Working Group Co-Chairs. A successful Standards Association Reaffirmation Ballot was completed in September of 2003 and the IEEE Standards Board at their December 2003 meeting approved the document.

10.6.4.5C57.139 – IEEE Guide for Dissolved Gas Analysis in Load Tap Changers

Rick Ladroga resigned as the Working Group Chair for this project due to his work responsibilities. The Subcommittee Chair thanked Rick for his work during his tenure as Working Group Chair. Fredi Jakob agreed to take over as Working Group Chair of this project.

The Working Group met on Tuesday, March 9, with a combination of 42 members and guests in attendance. The follow new members were added to the Working Group.

Don Chu	Tommy Spitzer
George Forrest	Robert Tillman, Jr.
Jack Hammers	Dave Wallach

In the past, the Working Group had a difficult time agreeing on dissolved gas analysis (DGA) limits for the different design load tap changers. In view of the foregoing, it was decided to use “generic limits” of the combustible gases of interest for the various design types of load tap changers. It was proposed that a table be formulated as follows.

- A. Normal Values
- B. Caution Values
- C. Warning Values

If the Normal Values were exceeded, ratios of the various combustible gasses would be used to determining whether the DGA data is indicative of a tap changer problem. The ratios discussed were Ethylene/Acetylene, Ethane/Methane, and Ethylene/Ethane.

The Working Group will prepare a new draft, which will be discussed at the next meeting.

10.6.4.6C57.146 – IEEE Guide for the Interpretation of Gases Generated in Silicone Immersed Transformers

This document previously carried the IEEE designation P1258. This has been changed to the IEEE designation C57.146 to be consistent with the other standards in the C57 collection.

Jim Goudie and Bill Bartley are the Working Group Co-Chairs of this project. A Standards Association Ballot is in the process of being conducted.

10.6.4.7 C57.147 – IEEE Guide for the Acceptance and Maintenance of Natural Ester Based Fluids

Patrick McShane is the Working Group Chair. The Working Group met on Tuesday, March 9, with 6 members and 44 guests in attendance. The following 10 requested membership on the Working Group.

Bill Chiu	Jerry Murphy
Larry Dix	Scott Reed
George Forrest	Randy Rensi
Rowland James	Chris Rega Rochling
Brian Klopinski	Barry Ward

Prior to the Working Group meeting, Donald Fallon, Vice Chair of the Transformers Committee, advised that IEEE received a letter regarding a document and disclosure of intellectual property at the last Working Group and Insulating Fluids Subcommittee meetings. This subject was discussed in Section 10.6.2 above and is under review by IEEE.

The Working Group meeting was then called to order by the WG Chair, Patrick McShane. As required in the IEEE Standards Board By-law, Section 6.3.2, the Chair reminded the WG members that they are required to disclose any intellectual property patents or pending patents that “may be essential” to the standard development.

The Working Group reviewed Draft 2A, through Clause 4, of the Guide.. The comments received will be incorporated into Draft 3 for the next meeting.

10.6.4.8C57.121 – IEEE Guide for Acceptance and Maintenance of Less Flammable Hydrocarbon Fluid in Transformers

The Working Group Chair is Patrick McShane. A successful Standards Association Reaffirmation Ballot was recently conducted and the document will be sent to the IEEE Standards Board for approval.

10.6.5 Adjournment

The Subcommittee adjourned at 12:00 noon.

10.6.6 Next Meeting

The Insulating Fluids Subcommittee and its Working Groups will next meet in Las Vegas, Nevada during the period of October 17-21, 2004.

