

Working Group for Acceptance and Maintenance of Insulating Liquids in Transformers and Related Equipment

PC57.166

Tuesday, April 27, 2021

12:55 – 2:10 PM

Virtual Meeting

Chairman Tom Prevost
Vice Chair Scott Reed
Secretary Alan Sbravati

The meeting was called to order at 1:00 pm by Chair Tom Prevost.

There were 29 of 36 members present. There were XX guests. A membership quorum was achieved.

Introductions

Approval of Agenda

Approval of Fall 2020 Minutes

Call for Patents

Task Force Reports

TF1 Types of Insulating Liquids—Jinesh Malde

TF2 In Service—Scott Reed

TF3 Mixture of Insulating Liquids—Alan Sbravati

TF4 Maintenance of Insulating Liquids—Andy Holden

TF5 Insulating Liquids for LTCs—Rainer Frotscher

TF6 Editorial—Toby Johnson

Voltage Levels within Acceptance Tables- Discussion

New Business

Adjourn

The agenda of the meeting was presented by the coordinator. A motion for approval was presented by ???, and seconded by Kumar Mani. Without objection, the agenda was unanimously approved.

A motion for approving the minutes of meeting from F20 was presented Tim Raymond, second Kumar Mani. No comments were presented, minutes from Fall 2020 were approved unanimously.

Chairman Prevost posted the Patent Claim. No claims were made.

Chairman Prevost presented the copyright policy slides.

TF 1 – Jinesh Malde

- The task force has been working for two years. Since a few months having biweekly meetings, with very good attendance.
- The proposed text and tables were reviewed line by line with the TF participants.
- Expectation is completed it during the next month. The secretary will share with the other task forces for using as their template. It will also be sent to Toby for starting the integration of the other texts into a full draft.
- Sessions for storage and handling were also incorporated in TF1.

TF 2 – Scott Reed

- Document is very almost complete. Pending definitions of in service limits for synthetic esters liquids as IEC revision of IEC61203 is not completed yet.
- It requires updating the tables and format according to the template from TF 1.
- Draft circulation can be ready by F21. If necessary, provisional values will be included but clearly marked.
- In the IEC working group they are having discussions around the characterization of the acids. Some of the tests and parameters in IEC will not match the IEEE methods. A database with information of some synthetic ester cases in North America will be provided to the TF.

TF 3 – Alan Sbravati

- Text is finalized. It requires adjusting the format to the template from TF1
- A new item for sampling will be included (reference to ASTM D923)
- As per the suggestion from C57.154, we will include some items C4 and C5 from the Annex C of their previous version, as this annex is being excluded. These items will be included in the informative annex about transformers retrofill.

TF 4 – Andy Holden

- The chapter will be a reference to IEEE Std. 637, for the sake of avoiding repetition.
- TF was discontinued

TF 5 – Toby Johnson

- All drafts will be sent to Toby for combining in a single document

TF 6 – Rainer Frotscher

- Text is completed, pending the formatting according the template.
- As per the decisions there will be a need to adjust the tables for matching the voltage classes to the IEEE standards.

Voltage classes discussion:

A decision around the harmonization of voltage classes was pending from last meeting. TF1 did an analysis of the reasons for the voltage classes used in IEEE and concluded it would not be possible to change.

It was clarified that the voltage classes allow for a range of voltage regulation, for instance, having the 230kV as the reference value for the definition of basic impulse levels and other tests. This is different from IEC where the definition considers the maximum voltage and some small variations of regulation may imply the utilization of the next class.

Jinesh presents a motion to use only IEEE voltage class levels in the whole document: $\leq 69\text{kV}$, $> 69\text{kV}$ & $< 230\text{kV}$, $\geq 230\text{kV}$.

Motion as seconded by Kumar Mani.

Rainer Frotscher abstained. No one opposed. Motion stands.

As previously mentioned, the text from TF 6 will be adjusted accordingly.

Old Business: Chairman Prevost mentioned there are no old business.

New Business: No new business.

The meeting was adjourned at 2:13 pm.

Next meeting is scheduled for Oct 17-21, 2021 in Milwaukee, Wisconsin.

Alan Sbravati, Secretary

Scott Reed, Vice Chair