

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

PC57.166

Tuesday, October 29, 2019

1:45 – 3:00 PM

Union CDE Room

Columbus, OH

Chairman Tom Prevost
Vice Chair Scott Reed
Secretary Alan Sbravati

The meeting was called to order at 1:52 pm by Chair Tom Prevost.

There were 29 of 37 members present. There were 54 guests. A membership quorum was achieved.

Introductions

Approval of Agenda

Approval of Spring 2019 Minutes

Call for Patents

New Document:

Title

Scope

Purpose

Review of Document Structure and Task Forces

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

New Insulating Fluids – Continued Discussion from Fall 2018 Meeting

Voltage Levels within Acceptance Tables- Discussion

New Business

Adjourn

The Spring 2019 minutes were unanimously approved. Motion for approving the minutes of meeting from Dominique Bolliger, second Mike Bonn.

The Spring 2019 agenda was unanimously approved. Motion for approval the agenda from Diego Robalino, seconded by Claude Beauchemin. No comments were presented, agenda approved unanimously.

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

Chairman Prevost presented the copyright policy slides.

Chair's Remarks:

Chairman Prevost presented the scope and purpose of the guide, previously discussed. Next, the chair asked each task force to speak about their respective sections.

Peter Balma questioned whether the discussion about the additives is part of the standard. Topic belongs to TF 4.

TF1-Types of Insulating Liquids, Jinesh Malde

Jinesh presented the current version of the draft, which will be made available in the website. The proposed text already includes all previously planned sections.

Rainer Frostcher proposed combining all limits of properties in a single table, but Jinesh replied the table would be too large, as the limits are different according to the voltage class.

Peter Balma made an observation of making a clear differentiation between normative and informative references due to the difficulties and associated costs for getting all normative references.

Claude Beauchemin second Peter's comment.

Jinesh presented the definitions for unused / used and for liquids in new equipment, for discussion.

Kevin Rapp made a comment that the definitions in ASTM are going to be discussed during their next meeting.

Jim Graham suggested moving the definitions to the C57.12.80 and Kurt Kaineder made a comment recognizing the value of the proposed definitions.

Sue McNelly questioned the number of categories, which was clarified by Tom Prevost.

TF2- In Service, Scott Reed

Scott presented the revised tables for the limits of the properties in use. He informed the test according to ASTM D877 was removed from the tables.

Scott explained the tables for synthetic ester liquids was developed based on the existing values for natural ester liquids, from C57.147.

For silicone liquid the information is only available for transformers up to 69kV, in a single column.

For LFH the tables include a category for applications up to 34.5kV and up to 69kV.

Michel from ABB made a question regarding the variation of the moisture content with temperature.

TF3-Mixture of Insulating Liquids, Alan Sbravati

Alan presented the first draft of the document developed by the TF, which includes an informative Annex for retrofilling transformers.

TF4- Maintenance of Insulating Liquids, Jon Karas presented on behalf of Andy Holden

The draft is still under development, including discussion around the processing of the liquids, reconditioning and reclaiming.

T5- Insulating Liquids for LTC's, Rainer Frotscher

Rainer presented proposed draft, based on C57.106. Some discussions were raised regarding the voltage classes, as Rainer proposed changing from 69kV to 72.5kV

Old Business:

Chairman Prevost mentioned there are no old business.

New Business:

A discussion was raised.

The meeting was adjourned at 3:02 pm.

Alan Sbravati, Secretary

Scott Reed, Vice Chair