

IEEE Guide for the Reclamation of Mineral Insulating Oil and Criteria for Its Use

IEEE Power and Energy Society

Sponsored by the
Transformers Committee

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(Revision of
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Approved 26 October 2015

IEEE-SA Standards Board

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Abstract: Covered in this guide are: mineral insulating oil commonly defined as transformer oil; definitions and descriptions of reclaiming procedures; the test methods used to evaluate the progress and end point of the reclamation process; and recommended criteria for the suitable use of reclaimed oils. The use of oil in new apparatus under warranty is not covered in this guide.

Keywords: IEEE C57.637, mineral insulating oil, petroleum mineral oil dielectric fluid, reclamation, reconditioning, transformer mineral oil dielectric fluid

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1. Overview

1.1 Scope

The scope of this guide covers mineral insulating oil commonly defined as transformer oil; definition and description of reclaiming procedures; the test methods used to evaluate the progress and end point of the reclamation process, and what criteria recommended for the use of reclaimed mineral oils are considered suitable. This guide does not cover the use of mineral oil in new apparatus under warranty.

1.2 Purpose

The purpose of this guide is to provide detailed procedures for reclaiming used mineral insulating oils by chemical and mechanical means, making them suitable for reuse as insulating fluids, and to describe the essential properties suggested for reuse in each class of equipment and the recommended test methods.

2. Normative references

The following referenced documents are indispensable for the application of this document (i.e., they must be understood and used, so each referenced document is cited in text and its relationship to this document is