BASSI, Welson.; TATIZAWA, Hedio. Conductivity and Dielectric Dissipation Factor ($\tan \delta$) Measurements of Insulating Oils of New and Aged Power Transformers—Comparison of Results Between Portable Square Wave and Conventional Bridge Methods **IEEE Electrical Insulation Magazine,** v. 37, n. 5, p. 14-25, Sep./Oct. 2021. doi: 10.1109/MEI.2021.9514646.

ABSTRACT

This article compares two different techniques to assess the oil quality of new and aged transformers. It is shown that laboratory tan δ tests and measurements with a portable IEG 61620 square wave method result in comparable diagnostic classifications.

Keywords: measurement, conductivity, oil, insulating, dielectric, dissipation factor, tangent delta