



Analysis of Partial Discharge Value Measurement Using Ultra TEV Plus on A 20 KV Cubicle

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ABSTRAK

Partial Discharge occurs is an indication of a failure that occurs due to the condition of the 20 kV cubicle. Indications of failure from the characteristics of PD that occur are caused by design errors, poor installation, equipment conditions, post-exposure to water and human factors. Identification of failures that occur at this time is done by the PD measurement investigation method. This study shows an analysis using the Ultra TEV Plus test tool, based on cases of collecting data on the characteristics of partial discharge patterns from the test results obtained indications of failure. Furthermore, this study uses the TEV and Ultrasonic (Transient Earth Voltage) method which shows the appearance of dB, pulse per cycle and noise - noise with high frequencies in partial discharge by producing waves that tend to be directional. For the measurement points carried out at the position of the power cable, Circuit Breaker (PMT), Current Transformer (CT), Potential Transformer (PT) and Busbar.

Keywords: Cubicle, Partial Discharge, Transient Earth Voltage (TEV), Ultrasonic.