Thesis Title Phenomena Analysis of Pressure and Temperature of Oil-Immersed

Distribution Transformer under Fault Conditions

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ABSTRACT

The purpose of this thesis is to perform the analyse of the phenomena analysis of pressure and temperature of oil-immersed distribution transformer under fault conditions. When the transformer occurred fault or short circuit, pressure inside transformer tank and temperature of coil and oil are increased. If it short circuit, it may be explode and coil may be decay. In order to prevent of the accident, this thesis analyse the result by developing software to help this analysis. The developing software consists the programs uses for pressure in single-phase distribution transformer which has a cylindrical tank and the programs for temperature in single and three phase distribution transformers. This developing software will help to analyse rapidly, decrease some mistakes and the result accuracy.

The result from this analysis can use for design transformer tank, core, coil, insulator and other parts in order to make it endure short circuit including aging life, safety and security