

ABSTRACT

ANALYSIS OF FAILURE INDICATIONS ON 150/20 KV TRANSFORMER ON SUBSTATION OF APP CAWANG USING DGA METHOD (DISSOLVED GAS ANALYSIS)

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In a power transformer using oil as insulation and coolant, in its operation the transformer may experience failure of temperature and electrical failure of its component, failure at that component will experience the process of decomposition that can produce gas and gas will dissolve in transformer oil, On the transformer containing gas, the gas produced can be analyzed by using DGA (Dissolved Gas Analysis) method, the gas to be analyzed is the total amount of dissolved gas and individual gas due to the failure, because this DGA method can know the existence of the failure very early so it can be taken action before further developing (the occurrence of failure), it is necessary to the early handling of the transformer to the gas dissolved in the oil in order to avoid failure of the transformer, the first transformer is in normal condition and on the second transformer warms over 700°C.

Keywords: Oil Transformer, Failure on transformer components, Dissolved Gas, DGA (Dissolved Gas Analysis) Method.