Analisis Harmonisa Transformator Pada Sistem Distribusi Menggunakan Aplikasi Simulasi Etap Dan Pemasangan *Harmonic Filter* Terhadap Transformator Distribusi

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ABSTRACT

Harmonics are problems in electric power distribution systems due to the distortion of current and voltage waves. Fundamentally, harmonics are the product of waves of different frequencies: the multiplication of an integer with their base frequency. It is the so-called harmonic frequency in the original waveform while the integer multiplier of the fundamental frequency is called the harmonic sequence number. THDv in this study does not yet meet the IEEE 519-2014 standard still exceeds the 5% maximum standard, therefore tuning is required to install a single tuned filter on seventh and eleventh orders of harmonic current sources. Due to only tuning in the 5th order. Based on the analysis, it can be seen that the THDi and THDv in each phase of the transformer exceed the standard. The greater the load on the transformer, the transformer losses will be more significant, and THDi will increase & exceed the standard

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