

**JUDUL: STUDI ANALISIS KEDIP TEGANGAN PADA FEEDER BLK I SISTEM 20KV DI GI PAUH LIMO AKIBAT GANGGUAN HUBUNG SINGKAT**

***ABSTRACT***

*At GI Pauh Limo, there are several feeder distribution of 20 kV using AAAC wire. In this distribution system, interference is often found, one of which is caused by short-circuit fault current. One of the feeders studied was the BLK I feeder. Based on data obtained from PT. PLN (Persero) in the Padang Rayon Indarung area. Short circuit fault current in this distribution channel occurs at a short time and causes the nominal voltage to drop temporarily, which is called the voltage flicker. Common short-circuit faults in distribution are interruption of one-phase to short-circuit current to ground, phase to phase and three-phase. To find out the value of voltage flickering due to short circuit faults, it is necessary to calculate the short circuit fault current and the calculation of voltage flicker, namely the estimated interference at the point of 25%, 50%, 75% and 100%. The value of voltage flickering and the percentage of voltage flickering from normal voltage when a single phase fault circuit occurs to the ground is the highest percentage with an estimated fault at 100% voltage blink value of  $2568,915 \angle 20.36^\circ$  V, with the percentage of voltage blinks at 7.42%. In the short-circuit current to phase interruption, the highest percentage is obtained with the estimated interference at the 100% point of the voltage blinking value of  $4217.733 \angle 89.91^\circ$  V, with a percentage of 12.18%. In the three-phase short circuit current disturbance the highest percentage is obtained with the estimated interference at the 100% point of the voltage blinking value of  $17443,349 \angle -61.48^\circ$  V, with a percentage of 87.22%. From the results obtained from the three disturbances, the value of voltage flickering with the highest percentage of voltage flicker is obtained in the three-phase short-circuit fault current.*

*Keywords: Voltage Flicker, 20 kV distribution network, ,short circuit breakdown*