

**JUDUL: ANALISA PENENTUAN TITIK LOKASI GANGGUAN
BERDASARKAN ARUS HUBUNG SINGKAT PADA FEEDER 20 kV
(FEEDER TELUK SIRIH)**

ABSTRACT

In Padang City, there are several feeder distribution of 20 kV using AAAC wire. One Feeder was examined in this study is the Teluk Sirih feeder. Based on data obtained from PT. PLN (Persero) in the Padang Rayon Indarung area, there has been several time short circuit fault from the substation Bungus to the Teluk Sirih feeder throughout 6,5 kms, data collection was performed in January until April. The facilitate officers who inspect a fault location, than in this study used the method of calculation of short circuit current. Short-circuit current of 1560 A, in disturbance three-phase the distance of the obtained point distance fault location from the voltage source 1.2729 kms, in the two-phase obtained distance of the fault location is 1.1024 kms and in disturbance one phase to ground is obtained the distance of the fault location 0.1834 kms.

Keywords: 20 kV distribution network, fault current, short circuit breakdown