## ABSTRACT

## OVER CURRENT AND GROUND-FAULT RELAY SETTING ANALYSIS AT TOPAN FEEDER TELUK BETUNG SUBSTATION

## By

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There are a lot of disruptions in the distribution network of Teluk Betung substation, causing interruption of power supply to consumers. Protective devices play an important role to overcome the fault and must meet the requirements of sensitivity, reliablelity, rapid and selectivity of which are dependent on the accuracy of the equipment settings. Protection equipment installed must be coordinated with the operation of the relay to determine any interference relay protection area. Protective equipments used are over-current and ground-fault relays to calculate the short circuit current, this work aims to determine the protective equipment settings and compare them to the settings installed in the field. By calculating a short circuit, we can determine the current setting and protection equipment with time at a predetermined equation. Calculation results and circumstances on the ground can still be considered good with only slight differences in value, but there is a protective device that requires resetting because it is no longer appropriate.

Keywords: short circuit, over-current protection, ralays setting, coordination relays Teluk Betung Substation.