

RECLOSER AND SECTIONALIZER COORDINATION ANALYSIS IN PENYULANG KTN 14 GARDU INDUK KENTUNGAN YOGYAKARTA

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ABSTRACT

This study aims to determine the coordination of the protection system, namely between recloser and sectionalizer when securing short circuit faults at the KTN 14 Kentungan Yogyakarta Substation by analyzing using the formula. From the research conducted, it shows that the largest short-circuit fault current is located at kilometer 0, which is 13021 90 Ampere. Meanwhile, the smallest fault current is located at kilometer 12, which is 2339 -71.1 Ampere. The recloser will work first if there is a disturbance with a working time (t) of 0.3 seconds then SSO 1 with a working time (t) of 0.7 seconds, SSO 2 with a working time (t) of 1.1 seconds and SSO 3 with a working time (t) 1.5 seconds. Coordination between recloser and sectionalizer (SSO) is based on the location of the disturbance. If there is interference between the recloser and the SSO, the recloser is the one working in this network. The disturbance that is after the SSO, the SSO and the recloser detect the fault current, then the recloser trips or opens first. SSO then senses a loss of voltage due to the opening of the recloser. Furthermore, the recloser will close again or reclose and currently the disturbance has been removed by the SSO, then the recloser has not detected a fault current. and what will go out is the network after SSO.

Key words : *Protection System Coordination, KTN 14*