

Research Title: Analysis of Protective Relay Coordination when DG
interconnection with Distribution System

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ABSTRACT

This research proposed the effect of protection device when 8 MW distributed generation (DG) interconnected to distribution system of Thailand. Case studies are simulated for 3 phase fault (3-P) and single line to ground fault (SLG) using digital simulation and electrical network calculation program (DigSILENT). The results of this research are shown that fault current from substation will be decreased, when DG installed into the distribution system, due to impedance of system is changed. Such a fault can lead to the malfunction of the protective relays. In addition, the results of this research can be used and created the suitable and fairness of the fee for both DG and utility.

Keywords : Protective Relay, Distribution System, Distributed Generation