

Wara Prachumtong 2008: Protection Coordination Design for a Combined Heat and Power Plant Generator in Parallel with MEA Distribution. Master of Engineering (Electrical Engineering), Major Field: Electrical Engineering, Department of Electrical Engineering. Thesis Advisor: Associate Professor Santi Asawasripongton, M.Eng.Sc. 129 pages.

At present growing numbers on the development of high efficiency combined heat and cogeneration plant referring as Small Power Producer (SPP) plant are being connected in parallel with MEA's distribution networks. Previous experience described by many paper indicated that the integration of non-utility power plants network could create safety and technical problem. Some of problems reported are summarized. This paper describes the power system studies that applicable to the design of an optimum protection system to minimize potential operational problems and ensure safety and reliability of interconnected network.

The power system studies include short circuit current study required for protection system design. Results obtain from several case studies presented and discussed.

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Thesis Advisor's signature

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