

Thesis Title	Potential of Peak Demand Controller Installation
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Abstract

At present, the electricity demand of the country is constantly increase . the unit cost of the produced electrical will be very high due to distribution system, sub-station and environmental protection system. Thus, the demand side management is considered to be suitable measure.

The objective of this thesis is to evaluate the suitability of using maximum demand controller and build automation system in office building. The Head office of Siam City Bank was used as a study site. This building consume approximately 485,000 kWh per month with maximum peak demand of 1,437 kW.

The result of installation of Peak demand controller show 37 kW and 135 kW of load can be controlled during partial and peak period respectively. The investment of the system is 203,621 bath while 32,712 bath per month can be saved with pay back period 0.5 years.

The installation of building automation system show that the saver will not complete with investment due high cost of the system

Keywords : Peak demand controller / Building Automation System / Energy management in building