

Thesis Title	Potential of Office Building Peak Demand Reduction by Using an Existing Generator Standby Set
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Abstract

At present the demand side management is considered to be suitable measure is used generally now.

The objective of this thesis is to evaluate the potential of office building peak demand reduction by using an existing generator standby set and energy management in office building. To consider between two rates is Time of day and interruptible rate. The Head office of Thai Farmers Bank Ratburana was used as a study site. This office building is used category electricity large business time of day rate and consume approximately 1,596,916.67 kWh per month with maximum peak demand of 5,090 kW.

The result of economic value evaluation of office building peak demand reduction by using an existing generator standby set is found that the interruptible rate for three selection is the bestter economic value than the time of day rate. In 1999 Office building can reduce energy cost i.e. 5,611,710.28 bath per year, 4,506,712.48 bath per year, 6,008,285.08 bath per year and 2,715,381.95 bath per year respectively.

The energy conservation of building can not manage more energy saving because the building is used electricity main equipment through 24 hours for computer system and the installation of building automation system for controlling all electricity main equipment.

Keywords: Generator stand by set / Energy management in office building / Time of day rate / Interruptible rate