

ABSTRACT

GHECO-one Project: First Super-Critical Power Plant in Thailand

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In Thailand, the peak electricity demand in April 2007 was 22,586 MW; representing a 7.2 percent increase from 2006 peak of 21,108 MW, or an increase of 1,478 MW per year.

To ensure that there will be adequate electricity supply for demand in the future, one of Thailand's major energy issues, the Thai government initiated the IPP program as part of Thailand Power Development Plan (PDP 2007).

GHECO-one Company Limited, the first IPP in the EGAT 2007 IPP Solicitation to come to the market, was selected as a winning bidder on December 7, 2007, to construct a 660 megawatts (MW) coal-fired power plant, one of the cleanest in the world using state-of-the-art technology.

GHECO-one project represents a model project from the environmental and social responsibility point of view; this paper, however, aims to propose further improvements to the project in order to create a benchmark for designing coal-fired projects in developing countries.

Keywords: GHECO-One Project, Thailand, coal-fired power plant, electricity supply

