

3. EGAT's Power Generation and Transmission

3.1 Background

The Electricity Generating Authority of Thailand (EGAT) was established in May 1969 as a result of the merger of three state enterprises which had independently generated electricity in Thailand by then. The three enterprises were the Yanhee Electricity Authority, the Lignite Authority and the Northeast Electricity Authority respectively. The EGAT's administrative structure is as shown by the organization chart in Figure 3-1. (Also see Appendix 1 for name of person holding each title)

The responsibilities with which EGAT has been entrusted by the Government are:

-To generate and transmit or distribute electricity to the Metropolitan Electricity Authority (MEA) which distributes electricity to customers in the Bangkok and nearby areas, the Provincial Electricity Authority (PEA) which is responsible for supplying electricity to users in the remaining areas which are not served by MEA, the EGAT's direct customers and the neighbouring countries.

-To undertake the activities related to the production of electricity including the energy resource development and other activities which benefit EGAT.

-To carry out the production and sale of lignite and its by-product.

EGAT's electric system is divided geographically into four regions which are:

-Region 1 covering the central area of the country in which the electricity consumption is the highest.

-Region 2 covering the northeastern area of the country.

-Region 3 covering the southern area of the country.

-Region 4 covering the northern area of Thailand in which the biggest lignite-fired power plant is situated at Mae Moh.

Presently, each adjacent region is electrically connected through transmission lines at a voltage level of either 230 kV or 115 kV. Additionally, EGAT also has system interconnection with Lao PDR and Malaysia through the 115 kV circuits.

The details of EGAT's electric system can be seen in Figure 3-2.