

4.2.3 Power Generation Project

At present, PEA can not produce an immense electricity supply by itself. Only 0.2 % of the total distribution was generated by PEA's own diesel power plants in 1986. The main source is EGAT from which PEA purchased electricity approximately 99.6 % of the total distribution in the fiscal year 1986, while the remaining 0.2 % was bought from the NEA.

Although PEA takes most of the electricity from EGAT, the Authority still has to depend also on its own diesel power plants by using EGAT's facilities whenever the new connections or expanded facilities are made available. However, it is the PEA's policy to renounce these plants. During 1986 PEA could reduce its diesel power plants throughout Thailand to 28, a reduction of 9 plants or 24.3 % from 1985. These existing small plants are capable of supplying a total of 29.1 MW and their 1986 production amounted to 24.8 million kWh or 0.2 % of total energy generated and purchased.

In 1986, PEA purchased from EGAT 10,190.3 million kWh of electricity with a demand of 2,078.0 MW, an energy increase of 799.3 million kWh or 8.5 % and its demand on the EGAT system increased by 160.4 MW or 8.4 % over 1985.

At present time, PEA puts much effort on setting up some pilot projects on generating electric power by using renewable energy sources. The projects on constructing the Mini Hydro Electric Generating Plants at Mae Tien in Sun Pa Tong District and at Mae Chai in Phang District, Chiang Mai Province were entering into the construction period.

In 1986, three stations of the Solar Power Plant Project were set up in Tak, Nakhon Sawan and Nakhon Ratchasima Provinces. The Wind Power Plant Project and the Submarine Cable Project were under the feasibility study stage during 1986. the latter is under construction since mid 1987.

There are two power generation projects contained in the power development program of PEA during the 6th NESDP. One of them is a mini hydro project which consists of 10 individual mini hydro power plants to be located in the northern regions of the country. The other project is the wind power plant rated 100 MW to be installed at Pha-ngan Island, on the southern province of Surat Thani. Details of these two projects are as follows: