

Pakistan

500kV Transmission Line Boosting Project



Substation at Multan

Outline of Loan Agreement

Loan Amount / Disbursed Amount	12,200 million yen / 9,354 million yen
Loan Agreement	March 1982
Terms & Conditions	Interest rate 2.75% p.a. Repayment period 30 years (Grace period 10 years)
Final Disbursement Date	March 1989

Project Outline

The project targeted the completion of the 500kV transmission system by boosting the transmission voltage on the existing 220kV part of the lines between hydroelectric plants in northern Pakistan and the Southern region, thereby contributing to a stable supply of electricity between north and south.

Results and Evaluation

In Pakistan attention has been focused on the construction of power transmission lines, with the transmission capacity of 500kV, between regions in the north in which hydroelectric plants are located and regions in the south to accommodate seasonal imbalances in power supply in both the wet season and the dry season. This project involved boosting a part of the transmission lines running north to south (Tarbela-Faisalabad- Guddu) operating at 220kV (Faisalabad-Guddu) to 500kV, and the construction of two substations (at Multan and Guddu).

Construction was completed around the end of 1986, and the lines went into operation in the following year. Electricity supply at Multan substation has continued to grow, and in 1996 had reached a level almost 9 times higher than at pre-project, indicating that the project has contributed to increasing supplies of electricity.

Moreover, Pakistan's Water and Power Development Authority (WAPDA), the project's executing agency, has seen gradual decreases in its transmission and distribution loss within the system since 1987, which is also considered to be partially attributable to the substations established under this project.

WAPDA is responsible for operating and maintaining the substations. Although there are no problems in terms of the technical skills of its employees, in terms of revenues, WAPDA has been attempting to improve its low tariff collection rate, and it will be necessary to monitor carefully the process of power sector reforms, which is currently being undertaken by the Government of Pakistan.