Wujing thermal power project

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China: Wujing Thermal Power Project (Loan: 2852-CHA)

The Implementation Completion report (ICR) on the China Wujing Thermal Power project (Loan 2852-CHA, approved in FY87) was prepared by the East Asia and Pacific Regional Office, with Annex 2 provided by the Borrower. The loan, in the amount of US$190 million, was fully disbursed and closed on August 2, 1995, with a delay of two years.

The project's objectives were to: (i) address the acute power shortage in East China; (ii) support development of a distribution network master plan for the city of Shanghai; (iii) promote efficiency in the Shanghai Municipal Electric Power Bureau (SMEPB) through a staff training program; and (iv) encourage financial reform through appropriate financial performance targets. The project included: (a) two additional generating units of 300 MW each for the coal-fired Wujing power station; (b) related 220 kV transmission lines and substations; (c) an on-line computer control and automatic load dispatching system for SMEPB; (d) a master plan study of the distribution network in Shanghai; and
(e) a training program for upgrading the technical, financial and management skills of SMEPB staff, including improvement of SMEPB's technical schools.

All the project objectives were met, particularly the overarching one which was to alleviate power shortages in East China. Physical components were carried out with only a modest cost overrun. SMEPB completed all components ahead of schedule, with one exception: loan closing was delayed two years to allow procurement of badly needed imported equipment to renovate the distribution network on the basis of the completed master plan. SMEPB introduced modern technology on coal-fired plant and power system operation, and took full advantage of management, operational and financial training for its staff, which contributed to improve the agency's efficiency. Reforms promoted by the Bank improved the tariff structure, and increased the average power price to more than twice the appraisal estimate with two consequences. First, compliance with financial covenants on tariff increases, level of self-financing, debt service coverage and rate of return on assets by SMEPB has been, and is expected to continue to be, satisfactory. Second, the reestimated economic rate of return of 16 percent is higher than the 12 percent appraisal estimate.

The ICR points out that the supply of the 300 MW boilerturbine-generator equipment was contracted with a local supplier who was the only one responding to the international competitive bidding (ICB). Foreign suppliers were discouraged to participate in the ICB by the comparative advantage of the significantly low production cost for that kind of equipment in China. In cases like this, the Bank and the Borrower, jointly, may well consider local competitive bidding as an alternative to cut down procurement time and expenses.

The project's outcome is rated as highly satisfactory because all the project's physical, institutional, and financial objectives were met and in some areas even exceeded. Institutional development is rated as substantial and sustainability as likely. Bank performance is rated as satisfactory at all stages of the project cycle. These ratings are consistent with those in the ICR. The ICR is satisfactory, although it would have gained from incorporating a set of performance indicators for future project monitoring and evaluation.

The project may be audited together with other power projects in China.