



1. Project Data :
OEDID: C2016
Project ID: P009506
Project Name: Power Distribution (16 Towns)
Country: Bangladesh
Sector: Distribution & Transmission
L/C Number: Credit 2016-BD
Partners involved : None
Prepared by : Alvaro J. Covarrubias, OEDST
Reviewed by : Alain A. Barbu
Group Manager : Gregory K. Ingram
Date Posted : 08/24/1999

2. Project Objectives, Financing, Costs and Components :
 The Power Distribution (16 Towns) project, supported Credit 2016-BD in the amount of SDR64.7 million (US\$87.0 million equivalent) was approved in FY89 and closed at the end of FY98 after three one-year extensions. A total of SDR2.9 million (US\$4.0 million equivalent) was canceled. The appraised cost of the project was US\$ 121.3 million and the actual cost is estimated about US\$ 145.8 million at completion in June 1999 with a delay of 4 and a half years. The objectives of the project were to : (a) expand and strengthen the distribution system of 16 towns; (b) stabilize the system voltage; (c) reduce power system losses; (d) improve the operational efficiency of the Bangladesh Power Development Board (BPDB); and (e) assist in the reorganization /institutional strengthening of the power sub-sector by implementing the recommendations made by a BPDB reform study . These objectives were to be met by (a) erecting/renovating about 627 km of 33-kV and 11-kV distribution lines, 640 km of 400-volt lines, 90 MVA in distribution transformers, and 175 MVA in 20 distribution transformer substations; (b) adding about 280 MVAR in 33-kV and 11-kV distribution capacitors and compensation equipment; (c) adding consumer kWh meters, system metering equipment, and meter calibration benches; (d) providing utility vehicles, motor cycles, radio equipment, desk-top computers, and spare parts and tools; (e) establishing the Dhaka Electric Supply Authority (DESA) as the responsible institution for the electric distribution in the Dhaka area; and (f) providing consultants services for technical assistance and supervision during project implementation, including staff training in computerized billing, accounting, and distribution planning . Following a 17 months suspension of disbursement the project components were restructured in 1993 by adding the rehabilitation of the Kaptai hydroelectric plant and the expansion of the Ishurdi transformer substation from 450 MVA to 675 MVA. Close to 80 percent of project financing was allocated to the purchase of equipment and materials for distribution lines, transformer substations and capacitors, and the rest to the hiring of consultant services and DPDB administrative costs . The Bank contributed 62 percent to project financing and BPDB/GOB the balance.

3. Achievement of Relevant Objectives :
 About 80 percent of physical objectives were achieved with significant delays by December 1998 and the pending works were to be completed by June 1999. In some instances the physical components completed exceeded the original targets because favorable market conditions allowed buying more power distribution equipment and material than planned. Time delays were caused by a 17-month suspension of disbursement caused by unsatisfactory performance of the Borrower and delay in establishing DESA . Very weak project management and either failure of suppliers to deliver goods and services on time or works exceeding estimates later also originated additional delays . Although overall power system losses were reduced by the project they are still very high (about 32 percent) and well above acceptable utility standards (less than 10 percent). The institutional development objectives were not achieved. DESA was established but inherited from BPDB its deficient organizational and operational practices, and lack of autonomy. DESA remained a government parastatal, and since it serves 42 percent of the power market its performance, being worst than BPDB' performance, did nothing to improve the sector . A newly created company, Dhaka Electric Supply Company (DESK) is expected to gradually take over operations of DESA and improve the power sector by introducing commercial practices in its operations . Moreover, BPDB performance has been paltry over the period 1988-1998 as illustrated by a few key financial indicators : BPDB never had a net profit, accounts receivable have almost doubled from 6.6 to 11.6 months of billing, rate of return on assets has been at best 2.4 percent in 1990 and most of the time around 0.8 percent i.e. well below the covenanted 8 percent target, and self

financing has been significantly negative in 8 out of 12 years. The recalculated EIRR of the investment in the power distribution (a low 7 percent) is a reflection of a low average electricity tariff taken as a proxy for project benefits. The recalculated EIRR of the rehabilitation of the Kaptai hydro plant is estimated at 27 percent.

4. Significant Achievements :

The expansion of the Ishurdy 230 kV transformer substation improved the reliability and stability of the western power system and has made possible the transfer of bulk, low cost gas -based power generation from the western to the eastern part of the country.

5. Significant Shortcomings :

The project failed to improve sector performance through the establishing of DESA (see above).

6. Ratings :	ICR	OED Review	Reason for Disagreement /Comments
Outcome :	Unsatisfactory	Unsatisfactory	
Institutional Dev .:	Negligible	Negligible	
Sustainability :	Uncertain	Uncertain	
Bank Performance :	Satisfactory	Satisfactory	
Borrower Perf .:	Deficient	Unsatisfactory	
Quality of ICR :		Satisfactory	

7. Lessons of Broad Applicability :

Relevant lessons are: (i) need for proper coordination between project staff and commercial operations personnel; and (ii) adequate attention should be paid to improving the condition of consumer service drops and meters in order to achieve sustainable reduction in non -technical losses

8. Audit Recommended? Yes No

9. Comments on Quality of ICR :

The ICR contains a concise description of project implementation and results. It also makes a candid evaluation of Bank and Borrower performance. The recalculation of the EIRR is satisfactory. The Borrower provided a very good contribution to the ICR.