



1. Project Data:		Date Posted : 06/28/2001	
PROJ ID: P004032		Appraisal	Actual
Project Name: Phnom Penh Power Reh	Project Costs (US\$M)	45.7	41.7
Country: Cambodia	Loan/Credit (US\$M)	40.0	35.2
Sector(s): Board: EMT - Power (90%), Law and justice (5%), Central government administration (5%)	Cofinancing (US\$M)	01/23/95	
L/C Number: C2782			
	Board Approval (FY)		96
Partners involved : None	Closing Date	12/31/1999	06/30/2000
Prepared by:	Reviewed by:	Group Manager :	Group:
Alvaro J. Covarrubias	Fernando Manibog	Alain A. Barbu	OEDST
2. Project Objectives and Components			
a. Objectives			
The objectives of the project were to rehabilitate the Phnom Penh's distribution system and to assist the Kingdom of Cambodia (KOC) in its initial efforts to strengthen institutions and create an environment in which the power sector can be developed and operated efficiently with private sector participation. These objectives were congruent with IDA's Country Assistance Strategy and the Borrower's objectives for the power sector.			
b. Components			
The project components comprised: (a) the rehabilitation of the Phnom Penh's distribution system (construction of 115kV lines and 115kV/22kV substations; construction of 22kV lines and low voltage lines to connect additional consumers; improving facilities supporting the operation, safety and environmental conditions of the power distribution system); and (b) Technical assistance to: (i) Electricité du Cambodge, EDC, on procurement and engineering, management, commercial operations, land acquisition, and setting-up of an environmental unit; and (ii) the Ministry of Industry, Mining and Energy, MIME, on the definition and implementation of a new sector structure and regulatory framework, and in training its staff in energy planning.			
c. Comments on Project Cost, Financing and Dates			
The actual project cost including interest during construction (US\$41.7 million) is 8.7 percent lower than the appraisal estimate (US\$45.7 million). The IDA Credit of SDR 25.8 million was fully disbursed and yielded only US\$35.2 million as a result of the devaluation of the SDR in the period 1995-2000. The Credit financed equipment and material for power transmission and distribution lines, transformer substations and connection of consumers (US\$31.8 million, most procured through ICBs), and technical assistance to MIME for a power sector reform, and to EDC for project management, procurement and engineering, management, commercial operations, land acquisition, setting an environmental unit, and training (US\$3.4 million, most as consultant services and computer hardware and software). The balance was financed by the KOC (US\$6.5 million, of which US\$4.0 million were interest during construction). Project implementation took 5.5 years and the extension of the Credit closing date by 6 months to 06/30/2000 was necessary to allow EDC complete part of a physical component delayed by a contractor.			
3. Achievement of Relevant Objectives:			
The physical objectives were fully met. The institutional development objectives were substantially met. The 115kV transmission and 22kV distribution lines, and transformer substations were built and more than 47,000 new consumers were connected to electricity service. A new Electricity Act restructured the power sector and established a regulatory framework. Private investors added 50MW to the power generating system. However, the financial position of EDC continues to be weak as reflected by poor financial indicators (negative net income and rate of return on assets in operation since 1995, and accounts receivable nearing 5.8 months).			

4. Significant Outcomes/Impacts:

The project built the 23 km of 115 kV lines and the 3 transformers substations totaling 250 MVA as appraised and more 22kV lines, distribution substations and consumer connections than appraised [144km of 22kV lines (100 at appraisal), 137 distribution substations (125 at appraisal), and 47,000 consumer connections (40,000 at appraisal)]. Power system energy losses were reduced from 33 percent in 1995 to 16.5 percent in October 2000 as a result of distribution rehabilitation and phasing-out wholesalers. EDC now has the engineering and management capability for implementing power transmission and distribution projects. The KOC now has a new Electricity Act enabling private participation in power projects.

5. Significant Shortcomings (including non-compliance with safeguard policies):

The financial position of EDC remains poor. However, it is expected to improve with the increase in electricity tariff in effect since year 2000 and with the Government settling its debt to EDC and continuing to pay the electricity bills in full and timely as established in the Plan with Special Measures to reduce the accounts receivable pertaining to Government agencies. The implementation of this Plan is expected to contribute to the sustainability of the project. The project was flagged at risk during the aftermath of the 1997 national political turmoil and Asia financial crisis.

6. Ratings:	ICR	OED Review	Reason for Disagreement /Comments
Outcome:	Satisfactory	Satisfactory	The 21.8 percent ex-post project economic rate of return is similar to the appraised 21.5 percent. Physical objectives were fully achieved, and non-physical objectives were mostly accomplished.
Institutional Dev.:	Substantial	Substantial	
Sustainability:	Likely	Likely	
Bank Performance:	Highly Satisfactory	Highly Satisfactory	Quality at entry and project supervision were highly satisfactory
Borrower Perf.:	Satisfactory	Satisfactory	
Quality of ICR:		Satisfactory	

NOTE: ICR rating values flagged with '*' don't comply with OP/BP 13.55, but are listed for completeness.

7. Lessons of Broad Applicability:

Consulting services for project management should last until all civil and other works are completed, tested and commissioned in order to ensure the availability of consulting services in case of failure of any of those events. In this project, at the time the 115kV substation works were about to be completed, EDC did not have management consulting services and faced a difficult situation in dealing with the contractor when the equipment broke down and the works had been left incomplete.

8. Assessment Recommended? ☒ Yes ☐ No

Why? To inform the proposed rural electrification and transmission power project, and derive lessons relevant to small power sectors in many Bank client countries.

9. Comments on Quality of ICR:

The ICR complies with OP 13.55 and presents a satisfactory description of project preparation, appraisal and implementation results, and a good evaluation of project objectives and achievements, and of IDA and Borrower performance. However, the ICR would have been enriched by including a brief description of the present size and composition of the KOC's power system (type and magnitude of the installed capacity and peak demand and load factor) and the structure and regulatory framework of the reformed power sector established by the new Electricity Act – interesting to know because it is a reform for a small power sector.