ICR Review

Operations Evaluation Department

Report Number : ICRR11004

1. Project Data:		Date Posted : 08/16/2001		
PROJ ID : P005215			Appraisal	Actual
Project Name : Power Sector Efficiency		Project Costs (US$M)	413.9	258.8
Country : Iran		Loan/Credit (US$M)	165	157.6
Sector(s): Board: EMT - Power (100%)		Cofinancing (US$M)		None
L/C Number : L3583				
		Board Approval (FY)		93
Partners involved :		Closing Date	06/30/1998	12/31/2000

Prepared by :	Reviewed by :	Group Manager :	Group :	
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2. Project Objectives and Components

a. Objectives

The primary short-term objective of the project was to decrease load shedding by adding about 200 MW of electricity supply capacity. Additional objectives were to upgrade planning capabilities to ensure the sustainability of the project benefits by laying the groundwork for commercialization and setting the stage for attracting private sector participation.

b. Components

The project comprised: (i) the addition of 200 MW of generating capacity by converting the open cycle gas turbine at Qom to combined cycle operation; (ii) the construction of 400-kV substations and transmission lines to connect the Qom plant to the power system and to strengthen the north-south interconnection; (iii) the supply of distribution equipment to improve the planning capability, customer billing and collection, and information systems of Tehran Regional Electric Company (TREC), and (iv) technical assistance and consulting services for three studies (Energy Development, Commercialization/Privatization of the Power Sector, Thermal Power Plant Rehabilitation) and training for power plant operators. The studies were to be executed by the Iran Power Organization (IPO), a semi-autonomous agency of the Ministry of Energy (MOE), responsible for the dispatch of electricity.

c. Comments on Project Cost, Financing and Dates

The project was completed at a cost of US$258 million i.e. 38 percent below the US$414 million estimated at project appraisal. The cost savings were the result of favorable competitive bidding for the supply of equipment and lower US$ equivalent of the local cost component that resulted from the devaluation of the local currency. The Bank loan financed the procurement of equipment for the conversion of the Qom plant (US$143.2 million), distribution equipment (US$6.0 million), engineering and project management (US$6.4 million) and studies and training (US$1.95 million). The Government financed the balance of equipment for the Qom plant and transmission lines and substations, and part of the studies and training (US$61.4 million equivalent). The loan was closed on 12/31/2000 following an 18 month extension of the closing date, at which time US$8.0 million were canceled.

3. Achievement of Relevant Objectives:

The physical objectives were achieved. The Qom power plant was converted from 400 MW open cycle gas turbine operation to 600 MW combined cycle operation. The additional 200 MW are helping to alleviate load shedding by providing TREC with about 1,500 GWh. The 230 kV substation and 400 kV lines were built. The nonphysical objectives were partially met. The Power Sector Restructuring Study is helping to prepare the power sector for privatization by formulating a long-term strategy for commercialization. The implementation of a new structure for the industry and a framework for private and public involvement awaits Government approval. The Energy Development Study assessed a broad range of resource needs (fossil fuels, hydro power, investment capital and management). However, obtaining the full benefit of this study requires the formulation of a policy and strategy for financing future energy needs. The Government opted not to pursue the study on Rehabilitation of Thermal power

plants within the project. The training for TREC staff on maintenance of gas turbine and combined cycle power plants and on specific subjects for engineers, chemists and technicians was completed.

4. Significant Outcomes/Impacts:

The improvement of the accounting, billing and collection systems allowed TREC to reduce the accounts receivable to less than 3 months of annual billing, as covenanted in the loan agreement.

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

Although the electricity price increased from 20 percent of the LRMC in 1993 to 55 percent of LRMC in year 2000, it is still quite far from recovering the cost of service. The Energy Sector Development Study is expected to develop (and recommend the implementation of) an electricity pricing policy based on economic principles.

6. Ratings:	ICR	OED Review	Reason for Disagreement /Comments
Outcome:	Highly Satisfactory	Satisfactory	The achievement of the physical objectives does not overweigh the partial achievement of the nonphysical objectives.
Institutional Dev .:	Substantial	Substantial	
Sustainability:	Highly Likely	Likely	The implementation of the power sector reform is not yet approved by the Government. There is not a pricing policy in place to ensure that the future electricity price will be based on cost recovery.
Bank Performance:	Highly Satisfactory	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:

Continuity of both competent staff in the Project Implementation Unit and Bank staff during project supervision contributed to maintain a good dialogue. Working together, Bank and borrower staff were able to address power sector institutional issues and adequately oversee project implementation. Also, the use of competent local consultants contributed to the successful implementation of accounting, billing and collection systems.

8. Assessment Recommended? ○ Yes ● No

9. Comments on Quality of ICR:

Generally, the report complies with Bank guidelines for ICRs. It could have been enriched by: (a) including more information about the extent to which the additional 200MW at Qom reduced load shedding compared to the additional generation supplied by other power plants installed in the period 1993-2000; (b) indicating the amount of generation capacity installed in the period 1993-2000. This information is necessary if readers are to have a clear picture about how TREC dealt with the need to install additional 1000 MW of capacity by year before 2000, as indicated in the SAR. Also, this would give to the reader an idea of the relative importance of the Qom plant in the TREC power system. It should be noted that the description of the project objectives and components presented in the ICR is not congruent with the one given in the SAR. The OED evaluation summary adheres to the description given in the SAR.