#### ICR Review Operations Evaluation Department

1. Project Data :	Date Posted: 06/23/2000				
PROJ ID: P045251 OEDID: L4205			Appraisal	Actual	
Project Name :	Quick start gas turbine project	Project Costs (US\$M)	96.1	79.5	
Country:	Hungary	Loan/Credit (US\$M)	60	52.9	
Sector, Major Sect .:	Distribution & Transmission, Electric Power & Other Energy	Cofinancing (US\$M)			
L/C Number: L4205					
	•	Board Approval (FY)		97	
Partners involved :		Closing Date	06/30/1999	06/30/1999	
Prepared by :	Reviewed by:	Group Manager :	Group:		
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# 2. Project Objectives and Components

#### a. Objectives

The project objective was to provide about 200 MW of reserve generation capacity to enable Hungary maintain a level of reliability of supply in line with the standards set by the Western European Power Pool (UCPTE), to which the power system of the Hungarian Power Companies Ltd. (MVM) is interconnected.

### b. Components

The project consisted of two complete single cycle gas turbine power plants rated about 110 MW each, burning light distillate fuel oil, comprising the main generation equipment, the auxiliary systems (fuel supply, water supply, and telecommunication and remote control and supervisory systems), telecommunication link to the energy management system, and civil works.

### c. Comments on Project Cost, Financing and Dates

The actual cost of the project (US\$79.5 million, including interest during construction) was 4.1 percent lower than the appraisal estimate (US\$ 96.1 million) as a result of a low price obtained by MVM for the supply of the main turbine-generators sets through international competitive bidding. The cost was financed by the Bank loan (US\$ 52.9 million) and MVM (US\$ 26.6 million). Disbursement of funds from the Bank loan was done quickly and the loan closed on June 30, 1999 as originally planned. The undisbursed amount US\$ 7.1 million was canceled from the loan. The execution of civil works, installation of equipment and auxiliary systems, and commissioning of the two gas-turbine plants was done as planned over a period of 16 months after loan effectiveness. The plants entered into service and tested successfully for reliability in September 1998.

## 3. Achievement of Relevant Objectives :

The project objective was fully achieved. The two gas turbine plants meet the power reserve requirements of UCPTE's standards and MVM became and associate member of it.

## 4. Significant Outcomes /Impacts:

The two quick start gas turbines can be connected by remote control to the grid in 8.5 minutes and reach full load in 9.5 minutes, which is better than the maximum 10 minutes required under the project. The plants can be converted to peaking plants or combined cycle plants by expanding their fuel storage capacity. The financial performance of MVM improved significantly during project implementation as a result of an increase in the average retail tariff in 1998 to HUF 12.34/kWh (UScents 5.0/kWh) and an additional 5.9 percent increase in 1999. This permitted MVM to earn a return on equity of 4.8 percent in 1998 and 8 percent in 1999 as required by the Government, and meet the self financing ratio, current ratio, and debt service coverage covenants of the loan agreement .

5. Significant Shortcomings (including non -compliance with safeguard policies): None.

6. Ratings:	ICR	OED Review	Reason for Disagreement /Comments
Outcome:	Highly Satisfactory	Highly Satisfactory	The project objectives were fully met, and its 16.5 percent recalculated economic rate of return is fully in line with the appraisal estimate (16.6 percent).
Institutional Dev .:	Substantial	Substantial	Although not a specific project objective, the Government will shortly consolidate the restructuring and substantial privatization of the electric power industry completed in 1996, by creating an independent system operator, opening part of the electricity market to full competition, and strengthening the electricity sector regulator.
Sustainability :	Likely	Likely	The financial prospects MVM are satisfactory, and the physical sustainability of the project is ensured by a 10 year maintenance contract between MVM and the manufacturer of the gas turbine plants.
Bank Performance :	Satisfactory	Satisfactory	Appraisal was highly satisfactory and supervision was satisfactory.
Borrower Perf .:	Highly Satisfactory	Highly Satisfactory	MVM initiated project preparation well ahead of Board approval, completed project procurement before loan effectiveness, and performed outstandingly in implementing the project.
Quality of ICR :		Satisfactory	

7. Lessons of Broad Applicability : Completing procurement prior to project effectiveness can accelerate loan disbursement and shorten significantly the project implementation period.

8. Audit Recommended? O Yes 
No

9. Comments on Quality of ICR : The ICR's quality is satisfactory overall (although it does not include, nor is there any mention of, the ICR mission's aide-memoire). The Borrower's contribution is exemplary.