



1. Project Data:		Date Posted : 12/23/2004	
PROJ ID: P057578		Appraisal	Actual
Project Name: Egat-inv Prog Sup Pj	Project Costs (US\$M)	3,060	2,040
Country: Thailand	Loan/Credit (US\$M)	300	300
Sector(s): N/A	Cofinancing (US\$M)		
L/C Number:			
	Board Approval (FY)		99
Partners involved :	Closing Date	10/13/2008	10/13/2008

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2. Project Objectives and Components

a. Objectives

(1) Help EGAT meet its essential investment commitments on generation and transmission projects whose implementation had already been under way; (2) Help EGAT not lose ground in accomplishing its organizational restructuring, corporatization and privatization strategy; (3) Strengthen EGAT's environmental management function; (4) Improve the regulatory framework for the energy sector; and (5) Help EGAT achieve significant additionality both in terms of narrower margins and longer maturities for bond issues by means of a Bank partial credit guarantee.

b. Components

Investment Components: (i) 300 MW Krabi Thermal Unit 1; (ii) 2x700 MW Ratchaburi Thermal Units 1 and 2; (iii) 600 MW Wang Noi CC Block 3; (iv) 500 kV Transmission System for IPPs and Hong Sa Project in Laos; (v) Bulk Power Supply for Greater Bangkok; (vi) EGAT-TNB Stage II Interconnection; and (vii) Transmission System Expansion 9.

Policy Components: (i) Restructuring and Corporatization of EGAT; (ii) Privatization of EGAT's Generation; (iii) Reform of the Sector's Regulatory System; (iv) Formulation of Corporate Policy for Environmental and Social Management; and (v) Strengthening EGAT's Environmental Management Function.

c. Comments on Project Cost, Financing and Dates

The project was implemented at an actual cost of US\$2,040 million or 33 percent below the appraisal estimate of US\$3,060 million. The significant cost decrease was caused by the deferral/cancellation of project components not essential to meet the depressed demand induced by the economic and financial crises of Thailand in the late 1990s as follows: (i) dropping of 500 kV line for the Hong Sa project and two out of four 500 kV double circuit lines for independent power producers; (ii) dropping of two major substations for bulk power supply for greater Bangkok; (iii) dropping of non-priority components for transmission system expansion Project 9. US\$495 million were disbursed from the US\$300 million bond issue and a total of JPY48.5 billion and US\$115.6 million were borrowed by EGAT from JBIC of Japan.

3. Achievement of Relevant Objectives:

The project objectives were achieved as follows:

Objective 1. *Help EGAT meet its essential investment commitments on generation and transmission projects whose implementation had already been under way.*

This objective was fully achieved. During 1997 to 2000, EGAT deferred/cancelled non-essential investment components and improvements in operational efficiency in order to cope with the country's financial crisis: capital expenditures were dropped from about US\$5.6 billion budgeted at appraisal to about US\$4.5 billion and the operating expenses were reduced from about US\$1.6 billion to about US\$1.4 billion during that same period. EGAT has not constructed any new thermal plants during the project tenure.

Objective 2. *Help EGAT not lose ground in accomplishing its organizational restructuring, corporatization and privatization strategy .*

This objective was partially achieved, though substantial progress was made in sector reforms. Restructuring of EGAT was done on a Cost Center and not a Profit Center basis as envisaged at appraisal. Its business units now are: New Generation and Transmission Development; Operation/Maintenance and Fuel Procurement; System Control and Demand Side Management; and Support Services. EGAT would be converted into a Public Limited Company and not into a Private Limited Company as a result of the Corporatization Act for SOE's passed by the Parliament. EGAT would be privatized as a single entity (with assets of about US\$7.14 billion) and listed on the Security Exchange of Thailand as a State-owned Company. The privatization of EGAT's thermal plants (Rayong, Khanom and Ratchaburi) and divestment of its equity in EGCO have been fully accomplished.

Objective 3. *Help EGAT strengthen its environmental management function .*

This objective was fully met. A major achievement was the acquisition of an Integrated Environmental Information Management System capable of analyzing different data required for environmental studies and analysis, and the training on environmental management. Policies and strategies for environmental and social management were embodied and institutionalized in EGAT. Moreover, EGAT prepared the "Power Sector Environmental Assessment" which defines the framework and guidelines for environmental assessment. Also, substantial progress has been achieved in adding gazettes to the National Park as a way to eject encroachers of this national reserve.

Objective 4. *Improving the regulatory framework for the Energy sector .*

This objective was partially realized. The Pool-based Electricity Supply Industry (ESI) structure approved by the previous Cabinet, which envisaged setting up an Independent Regulator, was kept in abeyance following the new Government's decision to withhold the Parliament's passage of the Energy Act. Instead, a new Ministry of Energy (MOE) was created and the Power Pool model approved by the previous Cabinet was dropped. The regulatory issues would be re-visited after the new ESI structure has been firmed up and it is expected that an Independent Regulator would be set up. However, a significant achievement was the change in the wholesale tariff structure from October 2000.

Objective 5. *Help EGAT achieve significant additionality both in terms of narrower margins and longer maturities for bond issues by means of a Bank's partial credit guarantee .*

The objective was fully met. The Bank's Guarantee secured better terms of narrower margins and longer maturities – the \$300 million bond carries a semi-annual interest payment of 7% (interest of sovereign bond at that time was 13%) and a balloon payment of principal at the end of the maturity period of 10 years. Further, it is expected that the process of EGAT corporatization and listing on the Security Exchange of Thailand would be greatly facilitated by its bonds being now rated by international credit rating agencies (Moody's and S&P) and once EGAT adopts International Accounting Standards.

4. Significant Outcomes/Impacts:

- The second US\$ 300 million bond issue was not required because EGAT's financial position recovered considerably and local bonds were available at interest rates of 2-3% with maturities of 3 to 7 years.
- In June 1999 EGAT established its "Corporate Environmental Policy," and in November 1999 EGAT issued its "Strategic Implementation Framework", which set out objectives, targets and guidelines for implementation of the environmental policy.
- Revised bulk tariff rates are effective since October 2000: (i) the bulk supply tariff contains an energy price adjustment mechanism enabling EGAT to recover any excess costs of its fuel and energy purchases, while taking into account efficiency gains and certain foreign exchange losses on loan repayments and interest payments; (ii) the wholesale tariff is separated into generation and transmission charges by voltage level and by time-of-use periods; and (iii) the tariffs for Metropolitan Electricity Authority (MEA) and Provincial Electricity Authority (PEA), are the same and cross subsidy payments are made directly via cash transfers by MEA to PEA, making the subsidies between urban and rural consumers more transparent.

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

- Although construction of Ratchaburi and Krabi thermal power plants was on schedule, major delays in initiating their commercial operations resulted from the slow finalization of their fuel supply systems due to the unusually lengthy process of environmental assessment and clearance.
- The Hang Sa project in Lao Peoples Democratic Republic did not materialize because the power purchase agreement between Lao Government and EGAT could not be negotiated satisfactorily and, consequently, the 500 kV transmission line to Hang Sa was not built.

6. Ratings:	ICR	OED Review	Reason for Disagreement /Comments
Outcome:	Satisfactory	Satisfactory	
Institutional Dev .:	High	High	
Sustainability:	Highly Likely	Highly Likely	
Bank Performance:	Highly Satisfactory	Highly Satisfactory	
Borrower Perf .:	Highly Satisfactory	Highly 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:

- A World Bank Partial Credit Guarantee could be a useful instrument in securing favorable terms for the Borrower, provided it is applied when market conditions are appropriate and the Borrower's own credit rating is sound.
- Sudden economic and financial crises in a country could negatively impact power demand and void development plans. Under such circumstances, the Bank would do well to take a flexible approach to Government actions and compliance with covenants. At the same time, utilities need to exercise great financial discipline by cutting down operating expenses, dropping unnecessary investments and carrying on only indispensable investments needed to meet required service.
- The Bank could best play the role of advisor and facilitator for countries that have already embarked on significant power sector reforms and should recognize that restructuring proposals cannot be cast in stone and could change as Government and utility thinking evolves.

8. Assessment Recommended? Yes No

Why? because: (i) it is the first Bank's Partial Credit Guarantee for a power utility in Thailand; (ii) to evaluate the course of actions taken by the Government in order to complete the power sector reform and privatization of EGAT.

9. Comments on Quality of ICR:

The ICR complies fully with the Bank guidelines for ICRs. It presents a concise and complete account and evaluation of project results that are well supported by additional information and annexes in the ICR.