

Vietnam

Evaluation of the Impact Concerning Equitization and Private Sector Activities in the Electricity Sector in Vietnam

Study period: November 2007, February-March 2008



Summary of the Evaluation

This thematic evaluation analyzed and examined the following questions: how the reform of the electricity sector developed; what is the impact of the reforms on the two large-scale thermal power plants constructed using ODA loans; what is the impact of the ODA loan projects on private investment in this sector. The evaluation study then discussed the future direction of ODA loans and made recommendations.

It is considered that the following reforms to the electricity sector contributed to improvements in the profitability and improvements in the public service function of the sector: the introduction of private finance; improvements to the organizational and business man-

agement system of Electricity of Vietnam (EVN) group companies; and the policy to freeze electricity prices. Regarding the effects of ODA loan projects on private investment, the ODA loan projects constructed basic infrastructure for power generation (such as water channels) and power supply (such as power lines), which reduced concerns about insufficient infrastructure. With regard to the area for future ODA loans, it will be worth considering supporting the alternative energy area. Regarding the types of future ODA loans, it will be worth considering ODA loans to promote strategic public-private partnership as well as ODA loans, which will be implemented in collaboration with JICA technical cooperation projects.

Projects subject to the evaluation	Loan agreement	Loan amount	Final disbursement date
Pha Lai Thermal Power Plant Project (1) - (4)	April 1995 (Phase I)	72,096 million yen	September 2004 (Phase IV)
Phu My Thermal Power Plant Project (1) - (4)	January 1994 (Phase I)	61,932 million yen	July 2005 (Phase IV)

Evaluation Results

Background

A roadmap for electricity sector reforms has been produced based on the Vietnamese government's state enterprise reform policy which promotes the transition to a market economy. According to the roadmap, liberalization of the electric generation market will be completed in 2014, liberalization of the electricity wholesale market will be completed in 2022. The electricity retail market will be liberalized after 2022. Therefore, equitization and the introduction of private sector activities have only just begun. However, the Ministry of Industry and Trade has vigorously implemented various political measures, including the creation and the enforcement of the Electricity Law, the introduction of private capital, business diversification of the EVN and the restructuring of affiliated companies into joint stock

companies. There are 49 EVN affiliated companies, of which 17 are joint stock companies, eight are single member limited liability companies and 24 are 100% owned by the parent company, as of 2007. It is expected that 30 affiliated companies will become joint stock companies in a few years' time.

The Pha Lai thermal power plant company, where ODA loans were used, became a listed company in 2006. The Phu My thermal power plant company is currently a single member limited liability company, but it is also scheduled to become a joint stock company. However, the EVN will continue to hold at least 51% of the shares in many joint stock companies including the two companies mentioned above.

Evaluation Framework

1 The Impact of the Electricity Sector Reforms on the EVN Group and the Projects Supported by ODA Loans

The evaluation study examined (1) the EVN group enterprises, (2) the Pha Lai Thermal Power Plant Project and (3) the Phu My Thermal Power Plant Project. The study created the following criteria in order to examine these enterprises in terms of their profitability and their

public service function.

- (1) Evaluation of profitability: (a) the corporate performance and financial situation, (b) the organizational and business management system and method, (c) the percentage of power loss
- (2) Evaluation of the public service function: (a) the percentage of households with an electric power supply, (b) electricity prices, (c) stable power supply, (d) environmental measures

2 The Impact of the ODA Loan Projects on Private Investment

The study analyzed and evaluated two BOT (Build, Operation, and Transfer) projects in the Phu My complex, from the following standpoints.

- (1) Reliability of the consortium which implements the project and the consortium's risk management

- (2) Reducing uncertainties when private companies enter the electricity sector
- (3) Reducing concerns about insufficient infrastructure
- (4) Reducing the possibility of project operation failure (concerning insufficient technologies, market, raw material supply and financing)
- (5) Reducing other possibilities of failure (such as insufficient risk management by the host country's government)

Evaluation Results, Lesson Learned and Recommendations

1 The Impact of the Electricity Sector Reforms on the EVN Group and the Projects Supported by ODA Loans

With respect to the profitability of the enterprises, the EVN group is making reasonable levels of profit due to increased power generation and increased sales, despite the freeze on electricity prices. Therefore, positive effects were seen in the group's profitability after

private finance was introduced to the sector and some EVN group companies became joint stock companies, which led to improvements in the organizational and business management systems. Regarding the impact of the reforms to the public service function, the electricity sector reforms which allowed the freezing of electricity prices had some positive effects. No impact has so far been observed on the other items in the criteria mentioned above.

Enterprise evaluated	Evaluation of profitability			Evaluation of the public service function			
	Business performance, financial situation	Percentage of power loss	Organization, management	Percentage of households with power supply	Electricity prices	Stable power supply	Environmental measures
The whole EVN group	A	B	A	B	A	N/A	N/A
Pha Lai power plants	A	B	A	B	N/A	B	B
Phu My power plants	B	B	A	B	N/A	B	B

Note: A= positive impact, B= no change (or unknown), C= negative impact, N/A= not applicable

2 The Impact of the ODA Loan Projects on Private Investment

There are several factors which enabled the establishment and the continuation of a successful business by the two BOT projects (which Japanese-owned companies participated in) in the Phu My complex. These factors include: (1) the appropriate consortium business organization and management systems were established; (2) uncertainties for private companies when they enter the electricity sector were reduced; (3) concerns about insufficient infrastructure were reduced; (4) modern technologies were provided; (5) the Power Purchase

Agreement (PPA) was concluded; (6) the fuel supply and demand system was established; (7) financing sources were secured; and (8) The host government's guarantee was obtained. The ODA loan projects were considered to have had a positive impact on "(2)" mentioned above, because the ODA loan projects invested in the construction of the power plants up-front. It is also considered that the ODA loan projects had a positive impact on "(3)" mentioned above, because they assisted with the construction of basic infrastructure for power generation and power supply such as water channels and power lines.

3 Recommendations on the Future Direction of ODA Loan Projects for the Electricity Sector in Vietnam

Future ODA loan projects should consider the challenge of minimizing increases in electricity prices by further creating competitive markets in the power generation and distribution sectors, and by establishing efficient business management systems at each enterprise unit which can compete in the market. Based on this idea, ODA loan projects should be provided for the development of basic infrastructure in the electricity sector such as the establishment of fuel supply systems, and the development of alternative energy (such as solar, wind and nuclear power) in order to cope with rises in fuel prices. In terms of the type of ODA loan projects, it will be worth considering the promotion of strategic public-private partnership, after discussing the needs and trends of private investment at the project formulation stage. It will also be worth considering collaboration with JICA technical cooperation projects which work on capacity development in order to enable the reform of the electricity sector.



The control room of the Phu My thermal power plant