



Progress Report on Tranche Release

Loan Number: 2353
August 2009

Viet Nam: Mong Duong 1 Thermal Power Project

CURRENCY EQUIVALENTS

(as of 23 July 2009)

Currency Unit	–	dong (D)
D1.00	=	\$.00006
\$1.00	=	D17,806

ABBREVIATIONS

ADB	–	Asian Development Bank
EPC	–	engineering, procurement, and construction
EVN	–	Viet Nam Electricity
ha	–	hectare
MD1	–	Mong Duong 1 Thermal Power Plant
MD2	–	Mong Duong 2 Thermal Power Plant
MW	–	megawatt
RFP	–	request for proposal
TPPMU1	–	Thermal Power Plant Management Unit 1

NOTE

In this report, "\$" refers to US dollars.

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I. INTRODUCTION

1. The Government of Viet Nam requested that the Asian Development Bank (ADB) help finance the 1,000 megawatt (MW) Mong Duong 1 Thermal Power Plant (MD1) through a multitranche financing facility. A multitranche financing facility for the project for \$930.71 million and the first tranche loan for \$27.86 million was approved by ADB on 2 October 2007. The Government entered into the framework financing agreement with ADB on 9 October 2007. On the same day, the Government and Viet Nam Electricity (EVN) signed the Loan Agreement and Project Agreement for the first tranche. This update reports on the progress of the implementation of the first tranche of the Mong Duong 1 Thermal Power Project Investment Program, from October 2007 to date.

II. THE INVESTMENT PROGRAM

2. The investment program involves the design, construction, and commissioning of MD1, and construction of the associated common facilities required to support the operation of MD 1 and another thermal power plant, Mong Duong 2 (MD2), at the same site. MD2 is sized at 1,200 MW and is being financed by the private sector under the build operate and transfer (BOT) arrangement. The program focuses on the construction of MD1 and the associated facilities to support operations of both MD1 and MD2. The project site is in Mong Duong ward, Cam Pha District, Quang Ninh Province. ADB has evaluated the 107-hectare (ha) plant site and determined that it can support a 2,200 MW capacity power plant. The location was chosen because it is close to a fuel source and close to the sea, which will facilitate transportation of materials and equipment to the plant and provide easy access to cooling water for the power plant's operation.

3. The framework financing agreement consists of two loan tranches. The first tranche in the amount of \$27.86 million is to finance:

- (i) civil works for site preparation and leveling, and construction of the Mong Duong river diversion channel;
- (ii) consulting services for the following tasks: reviewing the technical design and drawings; preparing bid documents for selecting the engineering, procurement, and construction (EPC) contractor; facilitating negotiations with the EPC contractors; advising on other civil works contracts; and supervising the civil works; and
- (iii) consulting services for updating the environmental management and resettlement plans, and supervising their implementation by EVN.

4. The second tranche of approximately \$902.85 million will finance the works of the EPC contractor, comprising:

- (i) detailed engineering design, procurement, construction, testing, and commissioning of MD1, in particular:
 - (a) civil works;
 - (b) boiler and auxiliaries;
 - (c) turbine generators and auxiliaries;
 - (d) coal handling and storage facilities;
 - (e) instrumentation and control;
 - (f) electrical equipment;

- (g) a 500-kilovolt switchyard;
 - (h) a communication system;
 - (i) a workshop and laboratory;
 - (j) balance of plant (oil supply, ash handling, electrostatic precipitator, limestone supply, fire fighting equipment, etc.);
 - (k) spare parts; and
 - (l) installation, testing, and commissioning until commercial operation commences, including warranty period.
- (ii) common facilities and services for MD1 and MD2, in particular:
- (a) fuel-oil jetties and limestone jetties,
 - (b) a cooling water inlet and outlet channels,
 - (c) a cooling water discharge channel beyond the outfall,
 - (d) a pumping station and water pipeline from the Thac Thay River to supply freshwater during plant operation,
 - (e) boundary fencing,
 - (f) ash pond No.1,
 - (g) main access roads to the site and access roads to the jetties, and
 - (h) site construction power supply.

The financing plan is shown in the table below.

Financing Plan for the Investment Program
(\$ million)

Item	ADB	Borrower	Total
First tranche	27.86	16.15	44.01
Second tranche	902.85	152.74	1,055.59
Total	930.71	168.89	1,099.60
Share (%)	84.60	15.40	100.00

Source: Asian Development Bank estimates.

III. PROGRESS OF THE FIRST TRANCHE

5. The first tranche for \$27.86 million was approved by the Board on 2 October 2007, signed on 9 October 2007, and declared effective on 27 March 2008. The loan proceeds were on-lent by the Government to EVN for project implementation. The Implementing Agency is the Thermal Power Plant Management Unit 1 (TPPMU1), an EVN subsidiary.

6. Advance recruitment of project implementation consultant for the first tranche commenced much earlier. In April 2007, the invitation for expressions of interest for consulting services was advertised on the ADB website, and ADB engaged a staff consultant to assist TPPMU1 in preparing the terms of reference and the request for proposal (RFP). ADB received the draft RFP in July 2007. The Office of the General Counsel and the Central Operations Services Division 2 received the draft in August 2007 and requested incorporation of interdepartmental comments and resubmission of the RFP. EVN incorporated the comments and resubmitted the RFP to ADB for approval. The RFP was finally issued to a short list of six ADB-approved consulting firms on 29 November 2007. Because of the high demand for engineering consultancy services in the international market at that time, only one consulting firm submitted a proposal. That proposal was disqualified because there was a conflict of interest. On 13 February 2008, the RFP was revised to ensure that conflicts of interest would not recur, and the scope was adjusted to encourage wider interest.

7. The second RFP was issued on 7 March 2008 with a deadline of 11 April 2008. This time none of the six invited consulting firms submitted proposals. The following factors influenced the firms' decisions to abstain from submitting bids: (i) qualified senior staff were already committed to manage other power projects; (ii) the allocated budget did not match the number of person-months required considering that salaries of consultants had increased in line with the international market demand for highly technical personnel; and (iii) the contract was to be denominated in the rapidly depreciating US dollar, whereas most firms had to pay their staff in euros or pounds sterling. The general consensus among the consulting firms was that the proposed contract amount of \$3.0 million was insufficient for the amount of work required under the terms of reference. After two unsuccessful attempts to bid the contract, the shortlist was revised and the RFP was amended once more, with the overall budget amount increasing from \$3.0 million to \$3.5 million in early May 2009.

8. On 22 May 2008, the RFP was reissued for a third time and three out of six invited consulting firms submitted proposals. ADB approved the technical evaluation report on 5 September 2008. The financial evaluation report was approved on 13 October 2008, and TPPMU1 signed the contract with Worley Parsons Ltd. (Singapore) on 9 December 2008. The consulting firm was mobilized in January 2009 and is currently finalizing the bidding documents for the EPC contract that will be financed under the second tranche of the multitranche financing facility. The high demand for engineering consultancy services in the international market at the time coupled with the low budget allocation was the main reason for the delay in recruiting the project implementation consultant.

9. On the civil works front, ADB engaged a staff consultant as early as August 2007 to undertake an independent review of the technical specifications and drawings submitted by the Implementing Agency, TPPMU1, for the site leveling and river diversion works package, estimated at \$13 million. A one-stage, two-envelope international competitive bidding procedure was used to select the civil works contractor. The draft bidding document was received by ADB in late November 2007, reviewed, and circulated interdepartmentally. The final bidding documents were approved by ADB in March 2008 after EVN and TPPMU1 had satisfactorily incorporated all ADB's comments on the draft bidding document. TPPMU1 issued the bidding documents in April 2008 and set 30 May 2008 as the submission deadline for proposals. ADB received the technical bid evaluation report on 20 June 2008 and the report was approved by ADB's procurement committee in August 2008. ADB received the financial bid evaluation report in September 2008 and approved it on 17 October 2008. TPPMU1 signed the contract with the most responsive and lowest cost bidder on 4 November 2008 for \$13.73 million. The contractor is the Infrastructure Development and Construction Corporation (LICOGI)—a Vietnamese firm. As of July 2009, the contractor had completed about 43% of the site leveling work at the main plant area, and about 98% of the excavation work for the Mong Duong River diversion channel.

10. A package for supplying power during construction was procured using national competitive bidding procedures. The contract with an estimated value of about \$1.8 million commenced on 29 September 2008. Before the contract was awarded, ADB had reviewed and provided comments on the draft bidding documents. TPPMU1 issued the bidding documents on 4 December 2008. TPPMU1 received three bids during the public opening of bids held on 17 December 2008. ADB received TPPMU1's evaluation report on 12 January 2009. ADB approved the awarding of the contract to the lowest priced and most responsive bidder, for \$1.03 million, on 19 January 2009. The contract was signed in February 2009.

11. EVN prepared a resettlement plan, which was approved by ADB in September 2006. Based on the preliminary design, the resettlement plan identified 37 affected households that would experience loss of land and house, of which 32 households would require relocation. In addition, the plan projected that eight coal transport companies and one forest company would require relocation. The resettlement plan identified four large farmland owners who would potentially be affected, along with their employees, by adverse impacts on farmland. The plan also pointed out that the river diversion would potentially impact 13 fishermen. The resettlement plan also made reference to the environmental impact assessment report, which identified potential decline in fish catch during the operational phase of the Project. The causes of this risk included a possible increase in water temperature in the vicinity of the discharge channel. The actual impacts can only be assessed during operation of the plant through a monitoring program and a rapid response mechanism to be established by TPPMU1.

12. From January to October 2008, TPPMU1 and the Mong Duong District resettlement committee worked on updating the resettlement plan. They submitted the updated plan to ADB in December 2008. ADB approved the updated plan on 15 January 2009 and uploaded it to the ADB website. The updated plan covered the power plant area, the cooling water intake channels, the ash pond, the water discharge channel, and the river diversion area. Following the available technical design, a detailed measurement survey was carried out in 2008. This survey confirmed that 37 households will be affected by the Project. However, while the September 2006 resettlement plan projected that 32 households would require relocation, the 2008 survey projected that only 16 households would have to be relocated. Of those 16 households, three would require additional support and assistance through provision of income-generating activities (working at TPPMU1, for example) or provision of access to credit to start new farming activities to replace the loss of their main income source. No workers would lose employment, as the owners of affected companies in the project area would all retain their employees.

13. TPPMU1 engaged Worley Parsons as the project implementation consultant (para. 8). The firm commenced work in January 2009. The consulting team includes a competent national resettlement specialist and an experienced international specialist. They are responsible for monitoring the implementation of the resettlement plan, devising income restoration strategies, and monitoring impacts on fishermen. In parallel, Development Research and Consulting Center was recruited to serve as an external monitoring agency in late October 2008 and was mobilized in November 2008.

14. ADB mission in March 2009 determined that a small increase in land acquisition was required, and that this would affect one additional household and three additional businesses. An updated resettlement plan that explains the need for additional land acquisition and compensation for additional households and businesses has been submitted to ADB. The updated plan stipulates the same compensation entitlement as stipulated in the January 2009 resettlement plan. The updated plan reflects the increased costs associated with additional resettlement.

15. Implementation of the approved and updated resettlement plan is almost completed. Disbursement of compensation funds to affected households is almost completed as well. TPPMU1 and supervision consultants are monitoring compensation, relocation, and land-clearing activities. Final design and implementation of income restoration strategies to severely affected households will be reflected in the progress reports that will be submitted to ADB in August 2009. The external monitoring agency is also carrying out its own monitoring and evaluation and will report to ADB on a quarterly basis.

16. The external monitoring report of June 2009 noted that the external monitoring agency had interviewed 22 out of 50 affected households. All interviewed households reported that they had received full compensation before handing over their project-affected land. Of the 15 reallocated households being interviewed, 14 households reported that their living conditions were equal to pre-project conditions.

17. In preparation for the second tranche, TPPMU1 is preparing a resettlement plan that covers the construction of a reservoir that will supply freshwater to the power plant. An ADB mission in May 2009 visited the site of this future reservoir. The reservoir design has been prepared pending formal approval by EVN management. It was noted that the reservoir will occupy 170 ha of land. TPPMU1 has collected preliminary information about the impacts of this reservoir, noting that about 36 households will be affected. Constructing residential quarters for the operational staff of the MD1 and MD2 thermal power plants will also require additional land acquisition. Both the Ministry of Construction and the province must approve land acquisition before work can commence on building these residential quarters. TPPMU1 has finalized the first draft of a resettlement plan, which covers construction of the freshwater reservoir (including the pipeline route), and the first draft of a resettlement framework, which covers construction of the staff quarters. These drafts are being reviewed by ADB.

18. Implementation of the environmental management plan is ongoing. TPPMU1 is in the process of engaging an organization to carry out regular environmental monitoring of air, groundwater, and surface water quality. TPPMU1 originally contacted the Center for Environmental Observation and Analysis of the Quang Ninh Province (the Center) to be the contractor for environmental quality monitoring, but contract negotiations failed because the cost estimate proposed by the Center (about D6 billion) was much higher than EVN's approved budget for direct engagement (D1 billion). According to the Government regulation, contract values more than D1billion should be bid out following an open competitive bidding process. EVN is now preparing necessary documents for an open national competitive bidding to select an organization to undertake environmental monitoring. EVN confirmed that the selection of the organization to carry out monitoring of environmental effects will be done by early August and the monitoring works will commence immediately. Regarding the replanting of the 52 ha mangrove, as specified in the Environmental Management Plan, after investigating six locations proposed in the Environmental Impact Assessment Report for mangrove replanting, TPPMU1 has short-listed Binh Dan commune of the Van Don district, Quang Ninh province to be the location for mangrove re-plantation. TPPMU1 has recruited a consultant to prepare plan for mangrove re-plantation and will mobilize the contractor to commence planting in August 2009.

19. Prequalification of the EPC contractors commenced while the implementation of the first tranche was ongoing. The EPC package concerns the procurement, supply, and construction of the main power plant. The package is technologically complex and has a high value. Prequalification will ensure that only the strongest contractors are eligible to bid. The draft prequalification documents were circulated to the ADB Office of the General Counsel and Central Operations Services Division 2 in May 2008 for review. The prequalification documents were approved by ADB on 17 July 2008, and put on the ADB website on 7 August 2008. The prequalification invitation was also advertised in Vietnam News, People Newspaper, and in the newsletter issued by the Ministry of Planning and Investment. Following issuance of the invitations, EVN received proposals from six international firms. EVN submitted the prequalification evaluation report of the EPC contractors to ADB on 28 January 2009. ADB reviewed the prequalification evaluation report and sought clarification from TPPMU1 on various

aspects. Finally, the ADB procurement committee held a meeting on 15 April 2009, and on 20 April 2009 approved the prequalification evaluation report submitted by TPPMU1.

IV. CONCLUSION

20. The implementation of the first tranche is progressing satisfactorily. Procurement of the civil work packages has progressed in accordance with the implementation plan and in strict accordance with ADB's *Procurement Guidelines* (2007, as amended from time to time). Implementation of the resettlement and environmental management plans is on-going. The progress of the Project's implementation is shown in the Appendix.

21. ADB is working with EVN and TPPMU1 to prepare the Periodic Financial Request Report for the second tranche of the multitranche financing facility.

PROGRESS OF THE PROJECT'S IMPLEMENTATION

Items	2007			2008				2009				2010	
	II	III	IV	I	II	III	IV	I	II	III	IV	I	II
1. Site leveling and construction of the MD river diversion channel													
a. Detailed design and cost estimate	—	—											
b. EVN approval of detailed design and cost estimate			▼										
c. ADB evaluation of bidding document			—	—									
c. ADB approval of bidding document				▼									
d. Bidding				—	—								
e. EVN approval of bid evaluation							▼						
f. ADB evaluation of TPPMU1's bid evaluation reports							—	—					
g. ADB approval													
h. Contract award													
i. Implementation									—	—	—	—	—
2. Consulting service Tranche 1													
a. First issuance of RFP			▼										
b. Second issuance of RFP				▼									
c. Third issuance of RFP					▼								
d. Bidding					—	—							
e. ADB evaluation and approval of bid evaluation reports													
e. Contract award													
f. Implementation									—	—	—	—	—
3. Power supply for construction													
a. Detailed design and cost estimate							—	—					
b. EVN approval of detailed design and cost estimate													
c. Bidding									—				
d. EVN approval of bid evaluation									▼				
e. ADB approval of bid evaluation									▼				
f. Contract award									▼				
g. Implementation									—	—	—	—	
4. Resettlement													
a. Update RP				—	—	—	—		—				
b. ADB approval of the updated RP									▼				
c. Implementation									—	—	—	—	
5. Environment													
a. Identification of area and planning for mangrove replantation									—	—			
b. Mangrove replanting											—	—	
c. Engagement of organization for environmental effects monitoring									—	—	—	—	
d. Monitoring											—	—	—

ADB = Asian Development Bank, EVN = Viet Nam Electricity, RFP = Request for Proposal, RP = Resettlement Plan
 MD = Mong Duong, TPPMU1 = Thermal Power Plant Management Unit 1.
 Source: TPPMU1's progress reports.