

BANGLADESH
Ghorashal Unit 4 Repowering Project (IDA Credit no 5758-BD)

Implementation Review Mission
(August 01-08, 2016)

Aide Memoire (AM)

I. INTRODUCTION

1.1 During August 01 to 08, 2016, a Bank Team¹ carried out its first Implementation Review Mission of the Ghorashal Unit 4 Repowering Project (GRP-4). This Aide Memoire (AM) summarizes the findings on the status of the project implementation, the major implementation issues, and suggestions and agreements reached with the relevant agencies to take corrective measures and/or to expedite implementation. The contents of this AM was discussed at the wrap-up meeting on August 08, 2016 with the Secretary, Power Division as the chair during the first half and the Additional Secretary, Power Division during the second half of the meeting.

1.2 **Project Background:** The project objective is to increase generation capacity and efficiency of the Unit 4 at Ghorashal. The key activity of the project is to convert Unit 4, one of the four 210 MW gas-fired steam units at Ghorashal Power Station (GPS), into a combined cycle unit for an upgraded total capacity of about 409 MW. The steam unit is currently generating 170MW and the overall efficiency of the unit is around 31%. The project would increase the overall efficiency of the combined unit to 54%. The project would also support an Owner's Engineer to support project implementation and capacity building and institutional strengthening requirement of BPDB.

1.3 **Meetings:** The mission would like to take this opportunity to thank the government counterparts and the representatives of the implementing agency for their cooperation and hospitality. No field visits could be planned during this mission as all field visits by the Bank are suspended for now due to the security reason. As soon as the suspension is withdrawn, the team will schedule a field trip at Ghorashal. The list of persons met during the mission is given in Annex II. The findings and the recommendations of the mission summarized in this AM will be classified as a public document under the World Bank's Access to Information Policy.

II. OVERALL STATUS AND KEY PROJECT DATA

2.1 The overall implementation of the project is going moderately well with the key EPC (Engineering, Procurement and Construction) contract signed on June 06, 2016. However, there has been delay in effecting the contract and in some of the other project activities, i.e. selection of owner's engineer, in particular. Some of the dated legal covenants (in forming Project Steering Committee and hiring key PMU staff) have not been met either. Considering the overall progress, implementation performance has been rated as "Moderately Satisfactory (MS)". The mission is concerned with the progress on the Financial Management front which is also contributing to the delay in effecting the EPC contract and therefore, rated 'Moderately Unsatisfactory'. A desk review will be undertaken by the Bank team in late September 2016 to monitor the progress on the action plan agreed at the wrap up meeting and listed in Annex 1. The key project and performance data as of August 08, 2016 are shown in Table 1:

¹ Mohammad Anis (Senior Energy Specialist and Task Team Leader), Md. Iqbal (Senior Energy Specialist), Dr. Tanvir Ahmed (Environmental Consultant), Yusuf Salahuddin (Technical Consultant), Tanvir Hossain (Sr. Procurement Specialist), Sabah Moyeen (Senior Social Development Specialist), Mohammad Reaz Uddin Chowdhury (Financial Management Specialist), Mohammad Sayeed (Senior Disbursement Officer), Md. Bazlul Kadir (Procurement Consultant), and Md. Tafazzal Hossain (Program Assistant).

Table 1: Project Performance Ratings

| Project Performance Ratings | | | | |
|--|-----------------------------------|-------------------------------------|-------------|------------|
| Board Approval | December 21, 2015 | Summary Ratings | Last | Now |
| Effectiveness Date | May 15, 2016 | Project Development Objective (PDO) | - | S |
| Closing Date of IDA Credit | March 31, 2022 | Implementation Progress | - | MS |
| IDA Credit Amount | SDR 155.40 M (US\$ 217.00 M equi) | Procurement | - | MS |
| Amount Disbursed so far | 0.00 M | Financial Management | - | MU |
| | | Safeguard | | MS |
| Ratings: HS=Highly Satisfactory; S=Satisfactory; MS=Moderately Satisfactory; MU=Moderately Unsatisfactory; U=Unsatisfactory; HU=Highly Unsatisfactory; NA=Not Applicable; NR=Not Rated | | | | |

III. ACHIEVEMENT OF DEVELOPMENT OBJECTIVES

3.1 With major activities of the project not yet started, the outcome indicators in the project's Results Framework did not require to be measured during this mission. However, with the progress made so far in getting the project activities ready and the actions agreed during the mission (Annex I), it is clear that all of these indicators are achievable within the project closing date. Accordingly, the PDO rating has been agreed as 'Satisfactory'.

IV. KEY ISSUES DISCUSSED AND AGREED ACTIONS

- 4.1 **Use/Cancellation of surplus IDA credit:** The mission explained that the total IDA credit for the project agreed during the project Negotiation in Nov 2015 was US\$217 million, out of which US\$210 million was estimated for the repowering work and US\$7 million for the technical assistance component. However, the careful design of the project and the procurement process followed resulted in a competitive deal for BPDB and they signed the contract for the repowering work for US\$180 million, much lesser than what was estimated. The mission informed that if there are no use of this saving under the project, this additional fund needs to be cancelled now (instead of waiting till the next supervision mission in Feb/mar 2017 as was proposed by BPDB initially) so that such fund can be utilized for other projects in Bangladesh in FY17..
- 4.2 To utilize this saving, a proposal was made to finance part of the 12 year Long Term Service Agreement (LTSA) contract which BPDB will sign with the Gas Turbine supplier (GE) soon. This LTSA was earlier planned to be financed by BPDB. The mission explored the eligibility of such financing and agreed with BPDB later that the savings from the project can be utilized to finance the first 3 or 4 years of LTSA payment within the project closing date. The possible LTSA contract amount would be around US\$35-40 mill for 12 years and Bank could cover the payment of initial 3-4 years and keep some fund as contingency for the unforeseen works during implementation. Therefore, there would be no cancellation of fund from the project. The modality of the financing would be discussed in detail soon and a project restructuring would be required to amend the credit agreement to reflect the change. It was also agreed that the LTSA would be in place by the simple cycle commissioning date which would allow the Bank to finance the LTSA as agreed.
- 4.3 **Hiring of Owner's Engineer (OE):** The selection of Owners Engineer (OE) was a time sensitive activity for the project as BPDB needed them before the EPC contractor comes on board. While the EPC selection was done quickly and efficiently, there has already been delay in the OE hiring process. It's almost about 10 months since the hiring process had started and it is now unlikely that OE can start work in parallel with the EPC contractor. The mission suggested that the Bank's

observations on the technical evaluation report (that was sent on 28 June, 2016) are duly addressed and sent to Bank for clearance by August 20, 2016.

- 4.4 **PGCB's Network Strengthening Work:** The mission was concerned that the significant delay in awarding PGCB's network strengthening work that includes 230KV GIS at Ghorashal and the transmission line from Ghorashal to Tongi under the IDB financed project could now potentially delay the commissioning of the Gas Turbine of Unit 4 as planned. The mission suggested that PGCB should talk to the contractor immediately after being selected and prioritize the Ghorashal requirement to be completed within the timeline for GT commissioning of Unit 4.
- 4.5 The mission also discussed the alternative option with the Ghorashal team, in case PGCB's work gets further delayed, for the use of existing substation. This alternative option would call for variation order for the laying of cable for the GT and termination to the existing 230 KV switchgear; this could also result in loss of generation from the existing ST unit for a period of about 4 months. Therefore, it is extremely important that PGCB's work should start urgently so that the alternative option can be avoided. At the wrap up, PGCB official committed that they would do everything to ensure that the Ghorashal work is prioritized. BPDB management will follow up with PGCB regularly.
- 4.6 **Contract Effectiveness:** The contract is yet to be declared effective as the conditions for the effectiveness have not been met yet. The mission highlighted that there are delays in readiness from BPDB side.
- a) **Mobilization Advance:** Ten (10) percent mobilization advance (of the EPC contract) has not been paid as the guarantee for advance payment was returned due to incorrect information. A new one has been received which is under verification process. However, the mission explained that the advance cannot be paid until the preparatory work for Beneficiary Registration Form (BRF) in the World Bank Client Connection is completed. This is progressing slowly. The mission advised the Project to speed-up the BRF registration process so that the approval process can be completed by August 20, 2016.
 - b) **Issuance of Special Commitment (SC):** As per the contract provision, payments through Letter (s) of Credit (LC) to be opened by the Project will be covered by SC to be issued by the World Bank in favor of the Negotiating Bank of the contractor. The mission advised the Project to ensure timely opening of the LC and thereafter prepare withdrawal application requesting for issuance of the SC by the World Bank. Based on the current progress, it is estimated that the operative LC will not be possible before September 30, 2016.
 - c) **Site hand over:** The contractor has started soil investigation work but the site has not been formally handed over to them. The lay out plan (including the lay down area) has not been finalized yet. The mission advised BPDB to speed up the handing over process. BPDB updated the mission that a bar chart was received from the EPC on the construction schedule of the repowered power plant. The mission pointed out that the EPC should submit a complete level-4 construction schedule either in MS project or Primavera software, to enable PD's office track/supervise the implementation of the power plant.
- 4.7 **Implementation of Strategic Business Unit (SBU):** The mission reviewed the status of the Ghorashal SBU and found that the actual implementation on the ground is far behind what was agreed earlier. The mission understood that the primary reason for such lagging is the absence of revised organogram with few important departments such as, procurement, design etc., not created and functional. The mission was also informed that a single PPA for all the power plant units of Ghorashal has been signed with BPDB which was a good development. The delegation of financial power that was authorized to the Ghorashal SBU is now being revised as BPDB's own financial delegation has been revised. The mission requested BPDB that the SBU should be functional as soon as possible.

4.8 The following actions should be taken without delay to make the SBU functional: i) design and approve an organogram of Ghorashal SBU; ii) create new departments to allow functioning of Ghorashal SBU; iii) depute/recruit additional manpower as per the organogram; and iv) provide updated delegation of financial power to the SBU so that it can execute its power. The mission would review the progress of these action in the next supervision mission.

4.9 **Project Steering Committee:** The mission enquired about the status of forming the Project Steering Committee for the project as agreed in the Financing Agreement (FA). This was due to be formed by Feb 28, 2016. BPDB responded that this would be done by the Power Division. The mission suggested that this committee should be in place as soon as possible so that the issues like PGCB's delayed work to meet project's transmission needs can be addressed sooner. At the wrap up, the chair suggested that the PSC be formed by August 20, 2016. The mission was informed that the government has recently formed a committee to ensure proper implementation of few large power plant projects. This includes *among others* the Ghorashal Repowering Unit-4. The committee will review progress of construction of the project.

4.10 **Project Management Unit Staff:** As reflected in the FA, BPDB was expected to hire a Financial Management Specialist (FMS) and an Environmental Specialist (ES) by Feb 28, 2016. Both the hiring has been delayed. While the FMS has recently been hired and is expected to be on board in October 01, 2016, the process of hiring the ES has just started. The mission suggested that the ES is hired so that he can start work in parallel with the OE. It was also agreed during the mission that a workshop for BPDB management and SBU staff would be arranged by 25th August 2016 for sensitizing themselves with their roles and responsibilities related to the environmental management plan of the Project.

4.11 **Authorized Signatory:** Although the FA required one of the individuals (with the specimen signatures submitted to the Bank) in the signatory list to deliver application, the Government through a letter dated June 16, 2016 informed that any two of the persons with authenticated specimen signatures can sign applications for withdrawal and applications for a Special Commitment. The Bank has accepted this for now with the understanding that, in future, such discrepancy should be rectified when any opportunity arises.

V. PROCUREMENT AND FINANCIAL MANAGEMENT

5.1 **Procurement Performance:** The overall procurement performance rating of the project is “**Moderately Satisfactory**”. Although, BPDB has successfully signed the EPC contract for the repowering work in June 2016 and the contract is expected to be effective by the end of September, 2016, there have been considerable delays in hiring of OE and some key PMU staff (Financial Management Specialist and Environmental Specialist).

5.2 **Procurement Plan:** BPDB will submit the updated procurement plan through STEP (an online procurement planning, mentoring and reporting tool). This will help both BPDB and the Bank team to monitor the contracts including disbursements. A comprehensive procurement training on STEP will be given to the project staff by August 30, 2016.

5.3 **Key Procurement Issues:** (i) For the EPC contract, the project will follow a project management tool like (i.e. MS Project or Primavera or similar). This will help both the BPDB and the Bank to monitor the critical activities and take proactive action on time. (ii) Bimonthly procurement / contract implementation meeting between BPDB and Bank is proposed to follow-up the actual progress of the contract implementation.

5.4 **Financial Management Performance:** The overall FM performance rating of the project is “**Moderately Unsatisfactory**”. A time bound financial management action plan was agreed during negotiation of the project in order to meet the fiduciary and institutional requirements. The

overall progress on the action plan has not been satisfactory. With much delay, the project has nearly completed the recruitment process of Financial Management Specialist (FMS), who is expected to be onboard by October 01, 2016. The hiring process of Accounting System Consultant (ASC) and IT/ICT Consultant has not yet been initiated which was agreed as part of the automation process of overall BPDB accounting and Assets management system.

5.5 Financial Management Plan: Initially, it was agreed to have these consultants on board by November 2015 but the mission discussed this again with the aim to have clear understanding on the recruitment process of these two consultants and it was agreed that the TOR for the consultants will be shared with the Bank for its concurrence by August 14 and contract agreement with the consultants will be finalized by January 15, 2017. The mission also noted that procurement of an off the shelf accounting software will be completed by August 30, 2016 and it will be installed for the project purposes only until the BPDB accounting system becomes fully operational. The Interim Unaudited Financial Reports (IUFR) will be prepared and submitted to the Bank within 45 days from the close of each calendar quarter and the project will submit the 1st Interim Unaudited Financial Reports (IUFR) for the quarter ended October 31, 2016. The external audit of the project for FY17 will be due on December 31, 2017 and it was agreed that BPDB will hire the auditors on a timely manner to meet the deadline.

5.6 Disbursements: No disbursement took place under the project since credit effectiveness in May 2016. There was a retroactive provision of financing for the project related eligible expenditures incurred in the amount of SDR14.32 M for the period between December 01, 2015 and April 07, 2016. This retroactive provision will not be used by the project.

5.7 Quarterly Disbursement Estimates for FY 17: The mission worked with the Project team and estimated that a total of US\$58 million will be disbursed during FY17 in the following order:

| Quarters in FY17 | Q1 | Q2 | Q3 | Q4 | Total |
|---|----|----|----|----|-------|
| Projected Disbursements in US\$ million | 18 | 0 | 10 | 30 | 58 |

VI. ENVIRONMENTAL MANAGEMENT

6.1 It was agreed at appraisal of the project that as per ESIA, the PMU will set up a team, with specific responsibility to oversee the EMP (Environmental Management Plan) implementation activities. PMU will also recruit an Owner’s Engineer for supervision of implementation of boiler decommissioning, supervision of EPC contractor involved in civil works, erection of turbine and HRSG, including supervision and implementation of EMP. In view of the impending mobilization of the contractor, it has become essential that some arrangement on EMP implementation, should be put in place on an urgent basis. Therefore, the project is in the process of recruiting an Environmental Specialist whose primary responsibility is to Supervise Environmental Management Plan (EMP) during construction stages including compliance and effects monitoring and to inform BPDB management of any potential concern to be addressed. Also, since the internal capacity of BPDB regarding EMP implementation is inadequate, it appears that training of the team members on EMP/ EHS issues are necessary. BPDB will arrange a workshop for its PMU members by 25th August 2016 for sensitizing themselves with their roles and responsibilities related to the environmental management plan of the Ghorashal Unit 4 Repowering Project.

VII. NEXT MISSION: As some key activities are yet to be completed and the progress to be monitored, Bank would like to conduct the next supervision mission in the **3rd week of November 2016.**

Annex I: Summary of Agreed Actions

| SL | Actions | Responsibility | Agreed timeline | Revised timeline |
|------------------------------|--|----------------|-----------------|------------------|
| 1 | Formation of Project Steering Committee | Power Division | Feb 28, 2016 | Aug 17, 2016 |
| 2 | Submission of revised Technical Evaluation report of OE hiring | BPDB | Jan 15, 2016 | Aug 20, 2016 |
| 3 | Completion of OE hiring | BPDB | Apr 15, 2016 | Sep 30, 2016 |
| 4 | Completion of GIS and transmission line at Ghorashal end | PGCB | Jun 30, 2017 | Jun 30, 2018 |
| 5 | Complete all conditions/activities to declare EPC contract effective | BPDB | Jun 30, 2016 | Sep 30, 2016 |
| 6 | Hire Environment Specialist | BPDB | Feb 28, 2016 | Oct 30, 2016 |
| 7 | Create new departments to allow functioning of Ghorashal SBU | BPDB/SBU | | Sep 30, 2016 |
| 8 | Provide updated delegation of financial power to the SBU | BPDB/SBU | | Sep 30, 2016 |
| 9 | Organize a workshop for senior BPDB team on Ghorashal EIA | BPDB | Aug 25, 2016 | |
| Some FM specific action plan | | | | |
| 10 | a) Preparation of ToR for the “Accounting System Consultant (ASC) and IT ICT Consultant” firm and share the same with the Bank for its concurrence | BPDB/WB | Nov 30, 2015 | Aug 20, 2016 |
| | b) Sharing the Evaluation Committee Report for the Bank’s concurrence | BPDB | Jan 31, 2016 | Nov 15, 2016 |
| | c) Completion of hiring process and signing contract | BPDB | Feb 15, 2016 | Jan 15, 2017 |
| 11 | a) Completion of hiring process of FMS | BPDB | Feb 28, 2016 | Aug 15, 2016 |
| | b) FMS onboard | BPDB | Nov 30, 2015 | Oct 01, 2016 |
| 12 | Procurement of off the shelf accounting software | BPDB | Jan 31, 2016 | Aug 30, 2016 |
| 13 | Preparation and submission of 1 st IUFRRs | BPDB | - | Oct 31, 2016 |

Annex II: List of Officials Met During the Mission

Ministry of Power, Energy and Mineral resources (MPEMR)

1. Mr. Monowar Islam, ndc, Secretary, Power Division
2. Mr. Md. Mahbubul Alam, Additional Secretary (Dev.), Power Division
3. Dr. Shah Md. Helal Uddin, Deputy Chief (Planning), Power Division

Economic Relations Division (ERD), Ministry of Finance

1. Mr. Kazi Shofiqul Azam, Additional Secretary, ERD
2. Mr. Johirul Islam, Assistant Chief, ERD

Bangladesh Power Development Board (BPDB)

1. Mr. Md. Shamsul Hasan Miah, Chairman
2. Mr. Abul Baser Khan, Member (P&D)
3. Mr. Khaled Mahmud, Member (Generation)
4. Mr. Bikash Dewan, Chief Engineer (P&D)
5. Mr. Lutfar Rahman, Financial Controller
6. Mr. Md. Shah Nawaz, Project Director

Power Grid Corporation (PGCB)

1. Mr. Masum-Al-Beruni, Managing Director
2. Mr. Chowdhury Alamgir Hossain, Executive Director (P&D)
3. Mr. Arun Kumar Saha, Chief Engineer (P&D)