

# **SBF Project Implementation Monitoring Report**

# Bangladesh: Power System Upgrade and Expansion Project

### 1. Project Information

Project ID:	000088	Investment Number:	L0088A-BGD		
Member:	Bangladesh	Region:	Southern asia		
Sector:	Energy	Sub-sector:	Electricity transmission and distribution		
AIIB Financing Type:	Loan: 120 USD million	Co-financier(s):	Stand-alone		
E&S category:	В	Borrower:	People's Republic of Bangladesh		
Red Flags Assigned:	1	Monitoring Regime:	Regular Monitoring		
Implementing Agency:	Power Grid Company of Bangladesh Ltd. (PG0	CB)			
Project Team Leader:	Raqib Ahmed Chowdhury				
Project Team Members:	Haiyan Wang, Senior Finance Officer, CTL Zhaojing Mu, Environmental Specialist, OSD Yunlong Liu, Senior Procurement Specialist, OSD Sheikh Naveed Ahmed, Social Development Specialist, OSD Shonell Robinson, Financial Management Specialist, OSD Liu Yang, Counsel - Investment Operations, OGC				
Completed Site Visits by AIIB:	Nov, 2018 The team visited the project sites in Chattagram during project preparation stage				
Planned Site Visits by AIIB:	Jan, 2022 Construction work has not started yet. The team is planning to conduct site visit in early 2022				

### 2. Project Summary and Objectives

The objective of the project is to upgrade and strengthen power transmission systems in the Chittagong area to ensure an adequate and reliable power supply. Project activities include:

- Constructing double circuit transmission lines: (a) for 400 kilovolts covering a distance of approx. 27 kilometers from Anowara to Anandabazar; and (b) for 230 kilovolts covering in total a distance of approx. 26 kilometers, consisting of the following two underground segments: (i) approx. 10-kilometer long transmission line from Khulshi to Anandabazar, and Anandabazar to Rampur; and (ii) approx. 16-kilometer long transmission line from Madunaghat to Khulshi.
- Constructing two 230 kilovolts gas-insulated switchgear (GIS) substations: (a) a GIS substation at Anandabazar with transformers of 2x350/450 megavolt ampere; and (b) a GIS substation at Khulshi with transformers of 2x350/450 megavolt ampere and 3x80/120 megavolt ampere.
- Constructing two GIS bay extensions of 230 kilovolts at Madunaghat substation and two GIS bay extensions of 230 kilovolts at Khulshi substation.

After completion of the project, the grid network capacity of Chattogram area will be enhanced. The growing demand of this area will be fulfilled with the reliable power supply to industrial, commercial, and residential load points. This will improve voltage stability of 132kV level in the transmission side along with 33kV in distribution side.

#### 3. Key Dates

Approval:	Mar. 26, 2019	Signing:	Nov. 8, 2019
Effective:	Aug. 3, 2020	Restructured (if any):	
Orig. Closing:	Jun. 30, 2023	Rev. Closing (if any):	

#### 4. Disbursement Summary (million)

Currency:	USD		
a) Committed:	120	b) Cancellation (if any):	
c) Disbursed:	0.3	d) Most recent disbursement: (amount / date)	0.3, Aug. 3, 2020
e) Undisbursed:	119.7	f) Disbursement Ratio(%) <sup>1</sup> :	0.25

 $<sup>^{1}</sup>$  Disbursement Ratio is defined as the volume (i.e. the dollar amount) of total disbursed amount as a percentage of the net committed volume, i.e., f = c / (a - b)



### 5. Project Implementation Update

The project's loan has become effective on August 3, 2020. As per the agreed procurement plan, there are in total three procurement packages, out of which one package (Package-3) is now at the bidding stage and the deadline for submission is April 28, 2021; Invitation for tender for package-1 has ended on April 1, 2021, and currently, technical evaluation is going on at client end. The remaining package's (package-2) bid document is under the review stage and to be floated for invitation soon.

Components	Physica I Progres s	Environment al & Social Compliance	Procurement
Component 1: Procurement of material & equipment and necessary installation work including design, erection, testing, and commissioning for Anowara to Anandabazar (New Mooring) 400 kV double circuit overhead line portion: approx. 19.932 km (USD 12.18 million)	0%	Being complied with	Bid invitation was floated on January 12, 2021, and deadline was ended on April 1, 2021. Technical bid evaluation is under process.
Component 2: Procurement of material & equipment and necessary installation work including design, erection, testing, and commissioning for Anowara to Anandabazar (New Mooring) 400 kV double circuit underground cable portion: approx. 5.253 km; Khulshi to Anandabazar, and Anandabazar to Rampur 230 kV double circuit underground cable line: approx. 26 km; and Madunaghat to Khulshi 230 kV double circuit underground cable line: approx. 16km. (USD 64.85 million)	0%	Being complied with	Bid-tender documents under preparation stage and expected to be floated in May 2021.
Component 3: Procurement of material & equipment and necessary installation works including design, erection, testing, and commissioning for 230/132 kV GIS Substation: Anandabazar (New Mooring) with 2x350/450 MVA 230/132 kV transformer; 230/132/33 kV GIS Substation: Khulshi with 2x350/450 MVA 230/132 kV and 3x80/120 MVA 132/33 kV transformer; Two nos. 230 kV GIS bay extension at Madunaghat Substation, two nos. 230kV GIS bay extension at Khulshi Substation. (USD 38.24 million)	0%	Being complied with	Bid invitation was floated on January 28, 2021, and deadline will end on April 28, 2021.

### Financial Management:

To date, no fund has been disbursed except adjust of the front-end fee from loan proceeds. As such no financial reports have been prepared by PIU. The project team will review the financial management compliance status once the project implmentation starts.

# 6. Status of the Grievance Redress Mechanism (GRM)

At PGCB entity level, GRM is in place. Project level Grievance Redress committee will be formed once the contracts have been awarded.

### 7. Results Monitoring

Project Outcome Indicators:

- 1. Capacity of power transmission added
- 2. Additional electricity transmitted annually
- 3. Daily load shedding in Chittagong

Project Output Indicators:

- 1. 400 kV transmission lines constructed
- 2. 230 kV transmission lines constructed
- 3. 230 kV GIS substations constructed
- 4. 230 kV line bays constructed

Baseline Year: Dec. 31, 2018 End Target Year: Dec. 31, 2022

Project Objective Indicators #1

Capacity of power transmission added (Unit: MVA)

Year	Target	Actual	Others, if any
Dec. 31, 2018	-	0 (Baseline)	



Dec. 31, 2019	0	-	
Dec. 31, 2020	0	-	
Dec. 31, 2021	0	-	
Dec. 31, 2022	1400	-	

### Project Objective Indicators #2

Additional electricity transmitted annually (Unit: GWh)

Year	Target	Actual	Others, if any
Dec. 31, 2018	-	0 (Baseline)	
Dec. 31, 2019	0	-	
Dec. 31, 2020	0	-	
Dec. 31, 2021	0	-	
Dec. 31, 2022	2500	-	

# Project Objective Indicators #3

Daily load shedding in Chattogram (Unit: %)

Year	Target	Actual	Others, if any
Dec. 31, 2018	-	11.5 (Baseline)	
Dec. 31, 2019	0	-	
Dec. 31, 2020	0	-	
Dec. 31, 2021	0	-	
Dec. 31, 2022	6	-	

## Project Objective Indicators #4

400kV transmission lines constructed (Unit: km)

Year	Target	Actual	Others, if any
Dec. 31, 2018	-	0 (Baseline)	
Dec. 31, 2019	0	-	
Dec. 31, 2020	0	-	
Dec. 31, 2021	15	-	
Dec. 31, 2022	27	-	

# Project Objective Indicators #5

230kV transmission lines constructed (Unit: km)

Year	Target	Actual	Others, if any
Dec. 31, 2018	-	0 (Baseline)	
Dec. 31, 2019	0	-	
Dec. 31, 2020	0	-	
Dec. 31, 2021	12	-	
Dec. 31, 2022	19	-	



# 230kV GIS substations constructed (Unit: No.)

Year	Target	Actual	Others, if any
Dec. 31, 2018	-	0 (Baseline)	
Dec. 31, 2019	0	-	
Dec. 31, 2020	0	-	
Dec. 31, 2021	1	-	
Dec. 31, 2022	2	-	

# Project Objective Indicators #7

# 230kV line bays constructed (Unit: No.)

Year	Target	Actual	Others, if any
Dec. 31, 2018	-	0 (Baseline)	
Dec. 31, 2019	0	-	
Dec. 31, 2020	0	-	
Dec. 31, 2021	1	-	
Dec. 31, 2022	2	-	

# Intermediate Result Indicators #1

### No intermediate result indicators

Year	Target	Actual	Others, if any
Dec. 31, 2018	-	-	

### Remarks: