

## India : West Bengal Electricity Distribution Grid Modernization Project

### 1. Project Information

Project ID:	P000454	Instrument ID:	L0454A
Member:	India	Region:	Southern Asia
Sector:	Energy	Sub-sector:	Electricity transmission and distribution
Instrument type:	<input checked="" type="checkbox"/> Loan:135.00 US Dollar million <input type="checkbox"/> Guarantee	Lead Co-financier(s):	World Bank
ES category:	B	Borrowing Entity:	Ministry of Finance, India
Implementing Entity:	Government of India		
Project Team Leader:	Pratyush Mishra		
Responsible DG:	Rajat Misra		
Responsible Department:	INF1		
Project Team Members:	Ting Wang, Alternate Counsel; Christopher Damandl, Project Counsel; Aditi Khosla, Alternate Counsel; Guoping Yu, OSD - Procurement Specialist; Shodi Nazarov, OSD - Financial Management Specialist; Parthapriya Ghosh, OSD - Environment & Social Development Specialist		
Completed Site Visits by AIIB:	Jun, 2022 First combined implementation support mission along with the World Bank Mar, 2023 World Bank mission		
Planned Site Visits by AIIB:			
Current Red Flags Assigned:	0		
Current Monitoring Regime:	Regular Monitoring		
Previous Red Flags Assigned:	0		
Previous Red Flags Assigned Date:	2022/12		

### 2. Project Summary and Objectives

The objective of the project is to improve the operational efficiency and reliability of electricity supply in selected areas of West Bengal.

The project aims to modernize West Bengal's electricity distribution system by providing financial and technical support for investments in:

- (i) High voltage distribution system, aerial bunched cabling, 33/11 kilovolt gas insulated substations and underground cables;
- (ii) Smart consumer meters, deployment of distribution automation technologies and improving the existing commercial and enterprise information technology solutions; and
- (iii) Technical assistance for institutional development and capacity building of West Bengal State Electricity

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Distribution Company Limited.

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**3. Key Dates**

Approval:	Jan. 24, 2022	Signing:	Jan. 28, 2022
Effective:	Mar. 15, 2022	Restructured (if any):	
Orig. Closing:	Nov. 30, 2026	Rev. Closing (if any):	

**4. Disbursement Summary (USD million)**

Contract Awarded:		Cancellation (if any):	0.00
Disbursed:	36.35	Most recent disbursement (amount/date):	2.63/Jul. 18, 2023
Undisbursed:	98.65	Disbursement Ratio (%) <sup>1</sup> :	26.93

**5. Project Implementation Update**

Project implementation progress (including physical progress) is satisfactory, Procurement for most components is in advanced stages.

Components	Physical Progress	Environmental & Social Compliance	Procurement
High Voltage Distribution System (HVDS) works in the districts of Howrah, East Medinipur, Bankura, Purulia, Nadia, Murshidabad, Malda, North Dinajpur, South Dinajpur, Cooch Behar, Alipurduar, plain areas of Darjeeling & Kalimpong and Jalpaiguri.	Contracts for these works have been awarded over a period of nearly a year (between March 2021 February 2022). Physical progress till September 2022 varies at each location depending on the date of contract award, with earlier contracts having higher physical progress. Howrah has the highest physical progress at 95%.	Impact on trees and crops: In most of the districts/ packages no tree cutting, and trimming are required. The agricultural land & crops are not likely to be affected. So far, no major issues have been observed during execution of work. Noise and dust: There are no major issues related to particulate matter (PM10 and PM2.5) and fugitive dust pollution has been observed. Emission of gaseous pollutant like SOX, NOX, and CO will not occur. Sprinkling of water has been done during the excavation work when necessary to minimize dust pollution. Construction is being done in the daytime only. So far, no major issues have been observed during execution of work. Safety: The work has been executed so far with compliance of standard safety norms & protocol and	All 14 packages, in the districts of Howrah, Purba Medinipur, Bankura, Purulia, Alipurduar, Coochbehar, Uttar Dinajpur, Dakshin Dinajpur, Malda, Nadia, Murshidabad, Jalpaiguri and plain and hilly areas of Darjeeling & Kalimpong have been awarded.

<sup>1</sup> Disbursement Ratio is defined as the volume (e.g. the dollar amount) of total disbursed amount as a percentage of the net committed volume.

		provision as per IE rules. PPE/ Safety equipment provided to the workers and utilised during execution. So far, no major issues have been observed during execution of work.	
Conversion of Overhead Cables to Underground in Rajarhat, Baguiati & Kestopur, Baruipur, Kharagpur, Asansol and Chandannagar	Contracts have been awarded over a period more than a year ( April 2021 to June 2022). Physical progress ranges between 13% (Chandan Nagar) and 51% (Rajarhat).	As above	Procurement of 7 packages is completed. Bids for the remaining package have been invited for the Siliguri package.
15 GIS Substations in Howrah, East Medinipur, Bankura, Nadia, Murshidabad, Malda, North Dinajpur, South Dinajpur, Alipurduar, and Jalpaiguri	The progress at Alipurduar is 88%. Contracts for the other districts have been awarded in over a period of time with the most recent being in April 2023 and the progress is 3% in the recently awarded locations.	As above	All 10 packages have been awarded.
Implementation of Advanced Metering Infrastructure (AMI) in the form of smart meters	N/A	As Above	Tenders have been awarded in July 2023
Deployment of Supervisory Control and Data Acquisition System (SCADA)/Distribution Management System (DMS)/ Outage Management System (OMS) in Alipurduar, Coochbehar, Jalpaiguri, Raiganj, Balurghat, Burdwan, Newtown, Baruipur	N/A	As Above	Bids for the package have been invited.

**Financial Management:**

The Project expenditure is pre-financed by the GoWB/WBSEDCL, and then reimbursement is sought from IBRD/AIIB. The Government has approved project budget for FY2023/24, equivalent to US\$63 million, which may need to be reassessed and increased considering the progress of the work. The backlog in funds flow to WBSEDCL has been cleared and further

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funds provided by GoWB to create a buffer with WBSEDCL to meet the capital requirement for timely payment of contractor dues. Accounting and financial reporting are up to date, but WBSEDCL was advised to discontinue manual parallel records and use the SAP/ERP system. Internal audit of the Project has been carried out by a private audit firm up to September 2022. The external audit of project financial statements has been completed up to FY2021/22 and primary audit opinion is unqualified. WBSEDCL has proposed to appoint its statutory auditors as the Project auditors for FY2022/23, and the audited Project financial statements for FY2022/23 are due by December 31, 2023.

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

A 3-tiered Grievance Mechanism already exists in the WBSEDCL. To strengthen it to effectively address grievances related to ESMP implementation under the project, two additional bodies are namely a Project Steering Committee at the corporate level and District Grievance Redressal Committees at the district level for subprojects have been established.

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**7. Results Monitoring (please refer to the full RMF, which can be found on the last page of this PIMR)**

Progress towards results indicators is satisfactory

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**Remarks:**

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Project Objective Indicators	Indicator level	Unit of Measure	Cumulative Target Values																			Frequency	Responsibility	Comments
			Baseline		2020		2021		2022		2023		2024		2025		2026		End Target					
			Year	Value	Target	Actual	Year	Target	Actual															
Reduction in Aggregate Technical and Commercial (AT&C) losses in select districts - Bankura district	Project	Percent	2020	37.94	-	-	-	-	-	-	-	-	-	-	-	-	20	-	2026	20	-	Annual	WBSEDCL	
Reduction in Aggregate Technical and Commercial (AT&C) losses in select districts - Nadia district	Project	Percent	2020	26.22	-	-	-	-	-	-	-	-	-	-	-	-	18	-	2026	18	-	Annual	WBSEDCL	
Reduction in Aggregate Technical and Commercial (AT&C) losses in select districts - East Medinapur district	Project	Percent	2020	23.13	-	-	-	-	-	-	-	-	-	-	-	-	17.50	-	2026	17.50	-	Annual	WBSEDCL	
Reduction in Aggregate Technical & Commercial (AT&C) loss in select districts - Alipurduar district	Project	Percent	2020	20.41	-	-	-	-	-	-	-	-	-	-	-	-	16	-	2026	16	-	Annual	WBSEDCL	
Reduction in Aggregate Technical and Commercial (AT&C) losses in select districts - Dakshin Dinajpur district	Project	Percent	2020	42.75	-	-	-	-	-	-	-	-	-	-	-	-	20	-	2026	20	-	Annual	WBSEDCL	
Reduction in SAIDI (System Average Interruption Duration Index) in select towns - Asansol town	Project	Hours	2020	187.43	-	-	-	-	-	-	-	-	-	-	-	-	95	-	2026	95	-	Annual	WBSEDCL	
Reduction in SAIDI (System Average Interruption Duration Index) in select towns	Project	Hours	2020	249.78	-	-	-	-	-	-	-	-	-	-	-	-	125	-	2026	125	-	Annual	WBSEDCL	



Sub-stations integrated with SCADA system	Project	Number	2020	0	-	-	-	-	-	-	-	-	-	-	-	50	2026	50	Annual	WBSEDCL
Person Days of Training Provided to WBSEDCL officials - Total	Project	Number	2020	0	-	-	-	-	-	-	-	-	-	-	-	5,000	2026	5,000	Annual	WBSEDCL
Person-days of ICT/OT technical trainings/capacity building activities (females) in WBSEDCL	Project	Number	2020	0	-	-	-	-	-	-	-	-	-	-	-	1,000	2026	1,000	Annual	WBSEDCL
Grievances received that are addressed within two months of receipt	Project	Percentage	2020	0	-	-	-	-	-	-	-	-	-	-	-	90	2026	90	Annual	WBSEDCL
Percentage increase in total technical/ICT staff (females) in WBSEDCL	Project	Percentage	2020	0	-	-	-	-	-	-	-	-	-	-	-	7.5	2026	7.5	Annual	WBSEDCL
Person-days of internship/ training for students in ICT/OT technical areas (females) provided by WBSEDCL	Project	Number	2020	0	-	-	-	-	-	-	-	-	-	-	-	10,000	2026	10,000	Annual	WBSEDCL