

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	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; Calvin Quek, OSD - Environment & Social Development Specialist		
Completed Site Visits by AIIB:	Jun, 2022 First combined implementation support mission along with the World Bank		
Planned Site Visits by AIIB:			
Current Red Flags Assigned:	0		
Current Monitoring Regime:	Regular Monitoring		
Previous Red Flags Assigned:			
Previous Red Flags Assigned Date:			

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 Distribution Company Limited.

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):	
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4. Disbursement Summary (USD million)

Contract Awarded:		Cancellation (if any):	0.00
Disbursed:	13.53	Most recent disbursement (amount/date):	2.86/Nov. 28, 2022
Undisbursed:	121.47	Disbursement Ratio (%) ¹ :	10.02

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 42% while surveys are still ongoing at Darjeeling & Kalimpong.	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 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.	13 packages (in the districts of Howrah, Purba Medinipur, Bankura, Purulia, Alipurduar, Coochbehar, Uttar Dinajpur, Dakshin Dinajpur, Malda, Nadia, Murshidabad, Jalpaiguri and plain areas of Darjeeling & Kalimpong) have been awarded. Tender for hilly areas of areas of Darjeeling & Kalimpong has been invited.

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

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 10% (Chandan Nagar) and 31% (Baruipur).	As above	Procurement of all 7 packages is completed.
15 GIS Substations in Howrah, East Medinipur, Bankura, Nadia, Murshidabad, Malda, North Dinajpur, South Dinajpur, Alipurduar, and Jalpaiguri	The progress at Alipurduar is 40%. Contracts for 4 other districts have been awarded in April 2022 and the progress is 2%.	As above	Out of 10 packages, 7 packages have been awarded. Technical, financial evaluation & administrative approval is progress for balance packages
Implementation of Advanced Metering Infrastructure (AMI) in the form of smart meters	N/A	As Above	Tenders have been invited
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	Bid documents under preparation

Financial Management:

The Project expenditure is pre-financed by the GoWB/WBSEDCL, and then reimbursement is sought from IBRD/AIIB. During the last implementation support mission conducted in May 2022, some delays in releasing loan and counterpart funds to WBSEDCL were observed, which have been subsequently addressed. Consequently, WBSEDCL was meeting the Project expenditure from its sources, including short-term borrowing. That delay downgraded the FM performance rating from Satisfactory to Moderately Satisfactory. The mission requested GoWB to release funds (counterpart and loan) on time to expedite Project implementation and disbursements. Accounting is done on WBSEDCL's SAP/ERP for which a specific work order has been created for the Project. Financial reporting is through submitting interim unaudited financial reports or IFRs, which are up to date and submitted to the WB and AIIB. WBSEDCL has

appointed its statutory auditors (a private audit firm). The first audit will cover the period up to March 2022, and audited Project financial statements will be shared with the Bank by December 31, 2022.

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.

7. Results Monitoring

Progress towards results indicators is satisfactory

Project Objective Indicators #1

Reduction in Aggregate Technical and Commercial (AT&C) losses in select districts - Bankura district (Percent)

Year	Target	Actual	Comments, if any
Mar. 31, 2020	N/A	37.94	Baseline
Jul. 31, 2026	20	N/A	End Target

Project Objective Indicators #2

Reduction in Aggregate Technical and Commercial (AT&C) losses in select districts - Nadia district (Percent)

Year	Target	Actual	Comments, if any
Mar. 31, 2020	N/A	26.22	Baseline
Jul. 31, 2026	18	N/A	End target

Project Objective Indicators #3

Reduction in Aggregate Technical and Commercial (AT&C) losses in select districts - East Medinapur district (Percent)

Year	Target	Actual	Comments, if any
Mar. 31, 2020	N/A	23.13	Baseline
Jul. 31, 2026	17.50	N/A	End Target

Project Objective Indicators #4

Reduction in Aggregate Technical & Commercial (AT&C) loss in select districts - Alipurduar district (Percent)

Year	Target	Actual	Comments, if any
Mar. 31, 2020	N/A	20.41	Baseline

Jul. 31, 2026	16	N/A	End Target
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Project Objective Indicators #5

Reduction in Aggregate Technical and Commercial (AT&C) losses in select districts - Dakshin Dinajpur district (Percent)

Year	Target	Actual	Comments, if any
Mar. 31, 2020	N/A	42.75	Baseline
Jul. 31, 2026	20	N/A	End Target

Project Objective Indicators #6

Reduction in SAIDI (System Average Interruption Duration Index) in select towns - Asansol town (Hours)

Year	Target	Actual	Comments, if any
Mar. 31, 2020	N/A	187.43	Baseline
Jul. 31, 2026	95	N/A	End Target

Project Objective Indicators #7

Reduction in SAIDI (System Average Interruption Duration Index) in select towns - Kharagpur town (Hours)

Year	Target	Actual	Comments, if any
Mar. 31, 2020	N/A	249.78	Baseline
Jul. 31, 2026	125	N/A	End Target

Project Objective Indicators #8

Reduction in SAIFI (System Average Interruption Frequency Index) in select towns - Asansol town (Number)

Year	Target	Actual	Comments, if any
Mar. 31, 2020	N/A	117.28	Baseline
Jul. 31, 2026	85	N/A	End Target

Project Objective Indicators #9

Reduction in SAIFI (System Average Interruption Frequency Index) in select towns - Kharagpur town (Number)

Year	Target	Actual	Comments, if any
Mar. 31, 2020	N/A	114.92	Baseline
Jul. 31, 2026	80	N/A	End Target

Intermediate Result Indicators #1

Distribution Lines constructed (Km)

Year	Target	Actual	Comments, if any
Mar. 31, 2020	N/A	0	Baseline
Jul. 31, 2026	1,900	N/A	End Target

Intermediate Result Indicators #2

Increase in Distribution Transformation Capacity (KVA)

Year	Target	Actual	Comments, if any
Mar. 31, 2020	N/A	0	Baseline
Jul. 31, 2026	85,300	N/A	End Target

Intermediate Result Indicators #3

Distribution lines retrofitted to reduce energy use (Km)

Year	Target	Actual	Comments, if any
Mar. 31, 2020	N/A	0	Baseline
Jul. 31, 2026	12,100	N/A	End Target

Intermediate Result Indicators #4

Distribution lines moved under the ground to reduce exposure to storm and tree damage (Km)

Year	Target	Actual	Comments, if any
Mar. 31, 2020	N/A	0	Baseline
Jul. 31, 2026	1,700	N/A	End Target

Intermediate Result Indicators #5

Consumers put on advanced metering infrastructure (AMI) meters (for efficient and reduced energy consumption) (Number)

Year	Target	Actual	Comments, if any
Mar. 31, 2020	N/A	0	Baseline
Jul. 31, 2026	200,000	N/A	End Target

Intermediate Result Indicators #6

Sub-stations integrated with SCADA system (Number)

Year	Target	Actual	Comments, if any
Mar. 31, 2020	N/A	0	Baseline
Jul. 31, 2026	50	N/A	End Target

Intermediate Result Indicators #7

Person Days of Training Provided to WBSEDCL officials - Total (Number)

Year	Target	Actual	Comments, if any
Mar. 31, 2020	N/A	0	Baseline
Jul. 31, 2026	5,000	N/A	End Target

Intermediate Result Indicators #8

Person-days of ICT/OT technical trainings/capacity building activities (females) in WBSEDCL (Number)

Year	Target	Actual	Comments, if any
Mar. 31, 2020	N/A	0	Baseline
Jul. 31, 2026	1,000	N/A	End Target

Intermediate Result Indicators #9

Grievances received that are addressed within two months of receipt (Percentage)

Year	Target	Actual	Comments, if any
Mar. 31, 2020	N/A	0	Baseline
Jul. 31, 2026	90	N/A	End Target

Intermediate Result Indicators #10

Percentage increase in total technical/ICT staff (females) in WBSEDCL (Percentage)

Year	Target	Actual	Comments, if any
Mar. 31, 2020	N/A	0	Baseline
Jul. 31, 2026	7.5	N/A	End Target

Intermediate Result Indicators #11

Person-days of internship/ training for students in ICT/OT/ technical areas (females) provided by WBSEDCL (Number)

Year	Target	Actual	Comments, if any
Mar. 31, 2020	N/A	0	Baseline
Jul. 31, 2026	10,000	N/A	End Target

Remarks: