Early Warning System

WB-P179429

Transmission Network Expansion in Central and Southern Region

Early Warning System

Transmission Network Expansion in Central and Southern Region

WB-P179429

Quick Facts

Countries	Bangladesh
Financial Institutions	World Bank (WB)
Status	Proposed
Bank Risk Rating	A
Voting Date	2026-05-11
Borrower	People's Republic of Bangladesh
Sectors	Energy
Investment Type(s)	Loan
Investment Amount (USD)	$ 450.00 million
Loan Amount (USD)	$ 450.00 million
Project Cost (USD)	$ 680.00 million

Project Description

According to the World Bank project page, the proposed project aims to increase the transmission capacity and reliability of the electricity network in central region, establish back one grid network for future regional grid integration through northern region and evacuate renewable energy-based generation in northern and southern regions.

The project will involve the construction of 3 new 400kV and 5 new 230kV substations with a total capacity of 17,400MVA. The project will also capture the upgradation of 4 existing substations, the construction of 274ct-km of 400kV of new transmission lines and 95ct-km of 230kV transmission lines. The activities under the project are largely distributed across the Southern, Central, and Northern Regions of the country. With the added lines and substations, the system will be able to respond to the increasing electricity demand, improve reliability and support economic growth in the project areas. It will help provide evacuation corridors for new generation plants (including renewable energy-based generation) – expected to be financed mostly by the private sector – by removing transmission bottlenecks and enabling better access to the end-use market. The project will also facilitate regional power import, enhance grid resilience and introduce grid digitization.

Sub-component 1 – Grid enhancement for improving reliability in central region (IDA USD330 million): This subcomponent will cover the construction and upgradation of the required transmission lines and substations to establish 400kV ring network for Dhaka region and improve system reliability. Electricity demand in this area is significantly increasing due to the growing development activities. Currently about 35 to 40 percent of generated electricity is consumed in Dhaka city and electricity demand of this area is forecasted to be tripled by 2041 (PSMP2016). The activities under this component are to (i) construct three (3) new 400 kV high-capacity transmission rings, one (1) new 400/230/132kV substation and four (4) new 230/132 kV substations; and (ii) upgrade four (4) existing 230/132 kV substations.

Sub-component 2 – Grid enhancement for enabling renewable energy integration in the southern region (IDA USD68 million): This sub-component will address the future demand of the southern region and ensure transmission facilities for evacuation of renewable energy generation in that area. Demand of electricity in Barisal and Patuakhali will go up as significant industrialization is expected to take place in that area after completion of some of the major infrastructure projects namely the Padma Multipurpose Bridge project and Payra Port. The activities under this component are to construct one (1) new 400/230/132 kV substation and one (1) new 230/132kV substation.

Sub-component 3 – Grid Enhancement for Enabling Renewable Energy Integration and Facilitation of Regional Import in Northern Region (IDA USD22 million): This sub-component will build one (1) new 400/230 kV substation at Parbatipur to facilitate regional power interconnection with India in the future to transport power from/to neighboring countries like Bhutan and Nepal through the Indian grid. This 400kV substation is planned to be a key hub to facilitate grid connected RE integration to the rest of the grid from the Northern region power corridor. Furthermore, since there is no 400kV substation in that part of the country, the introduction of Parbatipur 400kV substation would help in improving the voltage profile in the Northern part allowing better quality of power flow to and from Dhaka and other areas, where the loads are concentrated.

Sub-component 4- Grid Modernization and Digitization (IDA USD15 million): This component will have provisions for the following activities that is expected to improve the efficiency of operations and maintenance practices of the implementing agency. The proposed activities are: i. Installation of Emergency Restoration System (ERS) for 400 kV voltage levels in selected project areas to reduce downtime in restoring damaged towers due to natural disasters and improve grid resilience. ii. Procurement of (a) Protection Coordination Software to improve operations of PGCB and (b) additional live line maintenance tools which are critical equipment to restore line outages at minimal outage duration without shutting down the entire circuits. iii. Deployment of Geographical Information System (GIS) infrastructure to inculcate best practice to enhance system planning and operational activities within PGCB. This is also intended to tie into an integrated planning system across the generation, transmission and distribution sectors in Bangladesh.

Early Warning System Project Analysis

According to the World Bank, the E&S risks related to the project are 'High'.

Investment Description

- World Bank (WB)

Contact Information

Team Leaders:

Mohammad Anis,Anthony Granville

Implementing Agency:

Power Grid Company of Bangladesh

Golam Kibria,

Managing Director,

md@pgcb.gov.bd

ACCESS TO INFORMATION

To submit an information request for project information, you will have to create an account to access the Access to Information request form. You can learn more about this process at: https://www.worldbank.org/en/access-to-information/request-submission

ACCOUNTABILITY MECHANISM OF THE WORLD BANK

The World Bank Inspection Panel is the independent complaint mechanism and fact-finding body for people who believe they are likely to be, or have been, adversely affected by a World Bank-financed project. If you submit a complaint to the Inspection Panel, they may investigate to assess whether the World Bank is following its own policies and procedures for preventing harm to people or the environment. You can contact the Inspection Panel or submit a complaint by emailing ipanel@worldbank.org. Information on how to file a complaint and a complaint request form are available at: https://www.inspectionpanel.org/how-to-file-complaint

Bank Documents

- Concept Environmental and Social Review Summary [Original Source]
- Project Information Document [Original Source]