



Project Summary Information

Date of Document Preparation: September 1, 2026

Project Name	Grid Stability Enhancement Project
Project Number	P001032
AIIB member	Pakistan
Sector/Subsector	Energy/Electricity transmission and distribution
Alignment with AIIB's thematic priorities	Green Infrastructure
Status of Financing	Under Preparation
Objective	The Project aims to boost Pakistan's national grid resilience against operational disturbances, expand south-to-north transmission capacity, optimize generation resource utilization, lower consumer power costs, and modernize the transmission network to reliably serve present and future electricity demand.
Project Description	Project Structure. The proposed AIIB Project is part of the first phase of the Boosting Energy Security through Transmission in Pakistan (BEST-PAK) Multiphase Programmatic Approach (MPA) of the World Bank (WB). The WB MPA, with a total program envelope of USD 2,712.9 million, comprises four phases: • Phase 1 – Grid Stability Enhancement for USD 694.8 million • Phase 2 – 750 megawatt hours (MWh) Battery Energy Storage Systems (BESS) for USD 377 million • Phase 3 – Matiari–Moro–Rahim Yar Khan (MMR) 500 kV Transmission Line for USD 859.0 million • Phase 4 – Strengthening Existing Assets (Central and Northern Regions) USD 782.1 million. Implemented by the National Grid Company (NGC), the Project supports the installation of reactive power compensation devices to tackle critical grid stability challenges, including system reliability constraints and enabling full-scale integration of Variable Renewable Energy (VRE). It also includes technical assistance (TA) for Project delivery and preparation of subsequent phases under the WB's MPA. In detail, this Project consists of:

	Component 1: Grid Stability Enhancement (USD688.8 million). (a) Subcomponent 1.1. Static Synchronous Compensator (STATCOMs): Supporting the installation of: (1) Two 400-megavolt-ampere reactive (MVAR) modular STATCOMs for 500 kilovolts (kV) at Dadu substation. (2) Two 400 MVAR modular STATCOMs for 500 kV at Rahim Yar Khan substation. (3) One 400 MVAR modular STATCOM for 500 kV at Guddu substation. (b) Subcomponent 1.2. Fixed Reactive Power Compensation Devices: Supporting the installation of fixed reactive power compensation devices, including: (1) Switched capacitor banks, comprising a bank of 2x48 MVAR capacitors at each of the 17 substations. (2) Bus-connected reactors totaling 1,132 MVAR at nine substations rated 765, 500, and 220 kV with associated spares. (3) 259 MVAR line-connected reactors at the Islamabad West terminals of the double-circuit 500 kV line to the Maira substation. Component 2: Project Implementation Support TA (USD6.0 million, WB). This component provides hands-on TA to the NGC's Project Management Unit (PMU) to facilitate the delivery of Phase 1 and accelerate readiness for subsequent BEST-PAK phases. It finances: (a) An experienced owner's engineer/project management firm to support the preparation of bidding documents and oversee design, procurement, factory acceptance testing, installation, and commissioning. (b) NGC institutional strengthening to upgrade planning and analytical tools, and support targeted upskilling and twinning partnerships with international utilities on advanced transmission planning and operations. (c) Fiduciary capacity building. (d) E&S capacity building to operationalize the Environmental and Social Framework (ESF), including grievance redress and other compliance requirements. (e) Support for stakeholder coordination and timely effectiveness of Phase 1, as well as readiness for future phases in line with the WB requirements (including the ESF).
Expected Results	The Project will increase the power transfer capability on the south-to-north transmission interface, including: • Renewable energy capacity in southern Pakistan increased to 13,851 MW from the 2025 baseline of 12,720 MW upon project completion in 2029. • Maximum utilization capacity of the south-central HVDC link increased to 4,000 MW from the 2025 baseline of 2,000 MW by 2029. • Five-year average annual Energy Not Served (ENS) declined to 45 GWh from the 2025 baseline of 60 GWh by 2029.
Environmental and Social Category	B

Environmental and Social Information	Applicable Policy and Categorization: To support a harmonized approach to addressing Environmental and Social (ES) risks and impacts of the Project, and as permitted under AIIB's Environmental and Social Policy (ESP), the WB ESF and relevant Environmental and Social Standards (ESSs) are applicable for this Project in lieu of AIIB's ESP. The Bank has reviewed the WB ESF and ESSs and is satisfied that (i) the ESF and ESSs are consistent with the Bank's Articles of Agreement and materially consistent with the provisions of AIIB's ESP, including the relevant ESS and the Environmental and Social Exclusion List (ESEL), and (ii) the monitoring procedures that are in place are appropriate for the Project. The Project has been rated by the WB as Moderate ES Risk (equivalent to Category B under AIIB's ESP) as the anticipated ES risks and impacts are site-specific, limited in scale, and reversible. Environmental and Social Instruments: An Environmental and Social Management Plan (ESMP), a Stakeholder Engagement Plan (SEP) and an Environmental and Social Commitment Plan (ESCP) have been prepared by the National Grid Company of Pakistan Limited (NGC). The instruments have been assessed as adequate to manage the ES risks and impacts of the Project. Environmental Aspects: The environmental risks and impacts are typical of energy distribution projects and are expected to include construction-related impacts from civil works, including air emissions from machinery and vehicles; dust, noise and vibration generation from excavation and vehicle movement; soil and water contamination from improper handling of materials or wastewater; and generation of hazardous and non-hazardous waste, including e-waste. These impacts are largely site-specific, reversible, and can be addressed through well-established mitigation measures. A mitigation framework is included in the Project's ESMP, and Contractors will develop this into site specific plans and procedures. This is reinforced through the ESCP which also sets out minimum ES capacity requirements and capacity building measures for all project parties. No impacts on biodiversity are anticipated, as the works remain within existing infrastructure and do not involve new land disturbance or expansion into ecologically sensitive areas. There will be very limited clearing of natural vegetation and trees only. Social and Gender Aspects: The Project will be implemented in both semi-rural and rural areas. The Project is expected to generate moderate social risks and impacts, which are site-specific, largely reversible, and can be effectively mitigated through the implementation of appropriate management measures. The key social risks relate to labor and working conditions, as well as community health and safety concerns arising from construction activities. No land acquisition, physical displacement, or economic displacement is anticipated, as all Project activities will be carried out within the boundaries of existing, secured grid station (GS) premises. As such, impacts related to involuntary resettlement are not expected. Overall, the identified risks are considered manageable with the implementation of appropriate mitigation measures, including labor management procedures, gender-based violence (GBV) risk mitigation measures, and community health and safety plans. Occupational Health and Safety (OHS), Labor and Working Conditions (LWCs): Key risks relate to LWCs and OHS, use of heavy equipment, electrical hazards (and associated fire and electrocution risks), and exposure to extreme climatic conditions.
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	These risks will be managed through appropriate OHS measures, worker training, and emergency preparedness. Labor risks associated with contractor management and compliance with terms and conditions of employment will be addressed in line with applicable national laws and relevant international standards. The ESCP includes provisions to ensure that workers are engaged in accordance with the WB's ESS2. This includes, inter alia, the implementation of site-specific OHS plans, the establishment of a worker grievance mechanism and Codes of Conduct, as well as the incorporation of ES requirements into bidding and contractual documents. Stakeholder Consultation and Information Disclosure: A series of consultations have been carried out with the communities living near the GSs and with the stakeholders concerned between May and December 2025. Feedback received from stakeholders primarily relates to potential construction-related disturbances, including noise impacts, security arrangements, and the prioritization of local labor. These concerns will be addressed through the implementation of appropriate mitigation measures included in the ESMP. An SEP which outlines the stakeholder's identification and engagement strategies, has also been prepared to ensure ongoing consultation and effective communication with affected parties throughout the project lifecycle. The SEP and ESCP are disclosed on the website of WB¹. The ES instruments will be disclosed on AIIB's website in accordance with AIIB's ESP requirements. Project Grievance Redress Mechanism (GRM): A two-tiered project-level GRM will be established and functional. The first tier is managed at the PMU level, enabling timely receipt, registration, and resolution of grievances by designated focal points. The second tier provides escalation to the headquarters level for cases that are not resolved at the PMU level or require further review and decision-making. The GRM includes multiple accessible channels for submitting complaints, including a dedicated phone number, email, grievance boxes, in-person submissions, and letters. It is designed to facilitate access for all stakeholders, including vulnerable groups, to raise concerns in a safe and accessible manner. The information about the established GRMs will be timely disclosed in an appropriate manner. Monitoring and Reporting Arrangements: The NGC, through the PMU, will be responsible for monitoring and submitting the semi-annual implementation progress reports to AIIB based on agreed format. The ESCP defines key commitments, milestones, and reporting obligations aimed at enabling effective management of ES risks and impacts throughout construction and operation. AIIB will conduct semi-annual supervision missions, including site visits, to monitor and support all aspects of Project implementation in close coordination with the WB, the lead co-financier.
Cost and Financing Plan	Total Project Cost: USD694.8 million Financing Plan: o WB: USD375.9 million

¹ <https://projects.worldbank.org/en/projects-operations/document-detail/P504536?type=projects>.

	- o IsDB: USD92.7 million - o AIIB: USD92.5 million - o NGC: USD133.7 million			
Borrower	Islamic Republic of Pakistan			
Implementing Entity	National Grid Company, Pakistan			
Estimated date of loan closing (SBF)	December 2030			
Contact Points:	AIIB	World Bank	Borrower	Implementation Organization
Name	Jianshi Yao	Mohammad Anis	Abbas Khan	Sohail Bajwa
Title	Senior Investment Officer	Senior Energy Specialist	Senior Joint Secretary, Ministry of Economic Affairs, Government of Pakistan	Executive Director (Strategic Asset Planning), National Grid Company of Pakistan
Email Address	Jianshi.yao@aiib.org	manis@worldbank.org	comisb@hotmail.com	sohailbajwa@ntdc.com.pk
Date of Single Review Decision	September 21, 2026			
Estimated Date of Financing Approval	Q4 2026			
Independent Accountability Mechanism	The Project will be co-financed with WB. AIIB has agreed with WB that it will rely on WB's independent accountability mechanism (IAM) to handle submissions relating to ES issues under the Program. Consequently, in accordance with the Bank's Policy on Project-affected People's Mechanism (PPM), submissions of such complaints to the PPM under this Project will not be eligible for consideration by the PPM.			