

Project Implementation Monitoring Report (#21)

Reporting Period From 2024/04 To 2024/11

Pakistan : Tarbela 5 Hydropower Extension

1. Project Information

Project ID:	P000005	Instrument ID:	L0005A
Member:	Pakistan	Region:	Southern Asia
Sector:	Energy	Sub-sector:	Renewable energy generation-hydropower
Instrument type:	<input checked="" type="checkbox"/> Loan:300.00 US Dollar million <input type="checkbox"/> Guarantee	Lead Co-financier (s):	World Bank
ES category:	A	Borrowing Entity:	Ministry of Finance, Pakistan
Implementing Entity:	Wapda and Power Development Authority		
Project Team Leader:	Jianshi Yao		
Responsible DG:	Konstantin Limitovski		
Responsible Department:	PSC2		
Project Team Members:	Yi Geng, SFD - Financial Management Specialist; Liu Yang, Project Counsel; Shonell Robinson, SFD - Financial Management Specialist; Guoping Yu, SFD - Procurement Specialist; Mudassar Hassan, SFD - Environment Specialist; Xiaojun Zhou, SFD - Social Development Specialist; Yanyang Shi, Project admin		
Completed Site Visits by AIIB:	Nov, 2017 May, 2019 Visits by WB Jun, 2022 Aug, 2023 AIIB team visited project site together with WB Jul, 2024 AIIB team visited project site		
Planned Site Visits by AIIB:	Jun, 2025 Visit planned in June/July 2025		
Current Red Flags Assigned:	0		
Current Monitoring Regime:	Regular Monitoring		
Previous Red Flags Assigned:	0		
Previous Red Flags Assigned Date:	2024/03		

2. Project Summary and Objectives

The objective of the Project is to facilitate the sustainable expansion of Pakistan's electricity generation capacity and provide a low cost, clean, renewable energy option. The Project will add a generation capacity of 1,410 Megawatt (MW), with annual electricity generation of over 1,800 Gigawatt-hours (GWh), primarily during the summer season when demand is the highest. The total capacity at Tarbela with the induction of Tarbela 5 Hydropower (T5HP) extension will become 6,928 MW and annual average generation is expected to increase to 19,000 GWh.

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The shortage of energy has held back Pakistan's economic performance. The Project will support generation of low-cost renewable energy during the peak demand period of summer months when shortage is at the worst. Increased supply at competitive prices from the Project would support economic growth for all enterprises that use electricity, regardless of size or sector. In addition to increasing the supply thus reducing load shedding it will also supplement government's reform program to reduce power sector subsidies and improve its financial viability by reducing the dependence on imported fuels and lowering the cost of supply. The Project has major incremental benefits, accruing to all consuming sectors (industry, agriculture, commercial and residential), by making available required energy as well as non-incremental benefits, by replacing the expensive and unclean thermal generation.

Main components of the Project are indicated below. Of these, AIB is co-financing the first two components: the civil works and electro-mechanical equipment.

- (i) The construction of a power-house and modification of the existing Tunnel 5 to house the power plant
- (ii) The installation of power units and ancillary equipment
- (iii) The provision of technical assistance to support implementation of a social action plan, environmental and social management plan, and dam safety monitoring surveillance program
- (iv) The provision of technical assistance to carry out construction supervision, monitoring and evaluation of project progress, quality, and impacts as well as independent supervision of the social action plan and environmental and social management plan
- (v) The project management, and strengthen capacity to plan, develop and manage the hydropower infrastructure in the long term

3. Key Dates

Approval:	Sep. 27, 2016	Signing:	Jan. 18, 2017
Effective:	Aug. 11, 2017	Restructured (if any):	
Orig. Closing:	Jun. 30, 2022	Rev. Closing (if any):	Jun. 30, 2025

4. Disbursement Summary (USD million)

Contract Awarded:		Cancellation (if any):	0.00
Disbursed:	137.69	Latest disbursement (amount/date):	4.36/Nov. 14, 2024
Undisbursed:	162.31	Disbursement Ratio (%) ¹ :	45.90

5. Project Implementation Update

The physical works in T5HP are carried out under two main contracts: (i) civil works contract for construction of powerhouse connection to tunnel and intakes; and (ii) Electro-mechanical (EM) contract for supply and installation of EM equipment and substation.

Project implementation is behind original schedule. The delays were caused by selection of the Construction Supervision Consultant, which, as a result, has also delayed the selection of civil works and EPC contractor. The delayed procurement activities of the two major contracts were resolved with signing of major contracts respectively in May 2021 and June 2021. Project Team therefore decided to remove the three red flags in 2021, while noting the historical delays. The project has been monitored since then based on the new baseline established

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.

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for these two contracts. Since the signing of these contracts, works have been ongoing on all major worksites, including Tunnel 5, intake, penstock, powerhouse, T5 tailrace, outlet culvert and switchyard. AIIB and WB have been emphasizing that T5HP shall be commissioned in 2025 provided contractor deploy additional resources and implement its work in accordance with workplan.

However, the construction progress and resource mobilization by the contractor are slower than required. WAPDA and its senior management are monitoring the progress of works and regularly convening review meetings with staff, contractors and consultants. The delivery of the electro-mechanical equipment is on schedule and expected to arrive timely to the site. WAPDA has been reminded to mitigate the risk of affecting the supply schedule because of delays in civil works by providing warehouse facilities.

Given the implementation delay, WB already agreed to extend the loan closing date for the Project and is monitoring the project implementation based on the new timeline. AIIB may update the RMF accordingly after AIIB approves the request from the borrower on extending the execution period of the loan.

Components	Physical Progress	Environmental & Social Compliance	Procurement
Component A: Powerhouse and Tunnel Works	<p>Contractor has mobilized by establishing its camp and site offices. Major activities currently underway include surveys and excavation at intake area; penstock and T5 outlet; powerhouse; tailrace culvert canal and switchyard. T5 has been handed over to the contractor after which contractor has access to all work sites.</p> <p>By September 2024 the actual cumulative overall physical progress of Civil contracts works remained 31.56% against the planned 68.32% till the end of reported month.</p>	<p>An Environmental and Social Assessment (ESA) of the Project has been prepared jointly by WAPDA and National Transmission and Dispatch Company (NTDC). The Resettlement Action Plan (RAP) for the transmission line has been prepared and approved. The contractors have prepared Contractor's ESMPs that have been approved by PMU. The implementation of these site specific ESMPs is being carried out by the contractors at site and is monitored by the supervision consultants and PMU.</p>	<p>Civil Works contract (approximately valued at USD 356 million) was signed in May 2021. The revised Contract Price is about USD 389 million equivalent. The increased contract prices are from the variations agreed between both parties and determined by the Engineer.</p>
Component B1: Turbines generators and related equipment	<p>Contract for electromechanical works was awarded in June 2021 and contractor has mobilized. Contractor has delivered the initial manufacturing and design drawings, and system calculations for</p>	<p>An Environmental and Social Assessment (ESA) of the Project has been prepared jointly by WAPDA and NTDC. The Resettlement Action Plan (RAP) for the transmission line has been prepared and approved. The contractors have prepared Contractor's ESMPs that have been approved by PMU. The implementation of these site</p>	<p>EM Works contract (approximately valued at USD 209 million) was signed in June 2021.</p>

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	key components as per the contract provisions.	specific ESMPs is being carried out by the contractors at site and is monitored by the supervision consultants and PMU.	
Component B2: Transformers, switchyard electrical connection	<p>Contract for electromechanical works was awarded in June 2021 and contractor has mobilized. Contractor has delivered the initial manufacturing and design drawings, and system calculations for key components as per the contract provisions. Manufacturing and shipment of equipment such as Embedded Pipes, Pier Nose, Foundations, Relief Valve, is underway.</p> <p>Installation:</p> <ul style="list-style-type: none"> • Survey of 500KV and 11KV Transmission Line Route between Powerhouse and Switchyard completed and Proposal is submitted to the Project Manager. The same is under review with Project Manager <p>By September 2024 the overall cumulative actual physical progress of EM contracts works remained 44.5% against the planned 75.29% till the end of reported month.</p>	<p>An Environmental and Social Assessment (ESA) of the Project has been prepared jointly by WAPDA and NTDC. The Resettlement Action Plan (RAP) for the transmission line has been prepared and approved. The contractors have prepared Contractor's ESMPs that have been approved by PMU. The implementation of these site specific ESMPs is being carried out by the contractors at site and is monitored by the supervision consultants and PMU.</p>	<p>EM Works contract (approximately valued at USD 209 million) was signed in June 2021.</p>

Financial Management:

The existing FM arrangements at WAPDA have consistently enabled the provision of reliable financial information on implementation progress. WAPDA has submitted the Interim Unaudited Financial Reports (IUFRs) up to June 2024, which have been deemed to be acceptable. The audit report for the financial year which ended June 30, 2024, is due on December 31, 2024. With the project extension, approximately USD 216 million (PKR 60 billion) in expenditures is anticipated from August 2024 to June 2025 for the ongoing construction of T5HP, necessitating adequate budgetary allocations.

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6. Status of the Grievance Redress Mechanism (GRM)

A Project-specific Grievance Redress Mechanism has been established. A tripartite Grievance Redress Committee to address the grievances of labor and project affected community has been operational during Tarbela 4 Hydropower Project and continues to address labor and community complaints and employment issues under the Project. A total 112 workplace related grievances were registered under GRM of T5HPP during the reporting period, out of which 75 cases have been resolved and closed and 37 cases are under process, which are related to unfair termination and delay or less in payment of service benefits. Measures to address 23 out of 37 pending cases have been agreed by relevant parties and Contractor has promised for implementation in November 2024. Remaining complaints are being closely reviewed.

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

Project implementation was delayed and implementation of major works commenced at end of 2021. Implementation is monitored based on the revised workplan and results are tracked accordingly.

Remarks:
