SBF Project Implementation Monitoring Report

Pakistan: Tarbela 5 Hydropower Extension Project

1. Project Information

Project ID:	000005	Investment Number:	L0005A
Member:	Pakistan	Region:	Southern asia
Sector:	Energy	Sub-sector:	
AIIB Financing Type:	Loan: 300 USD million	Co-financier(s):	WB (IBRD)
E&S category:	A	Borrower:	Islamic Republic of Pakistan
Red Flags Assigned:	1	Monitoring Regime:	Regular Monitoring
Implementing Agency:	Water and Power Development Authority (WAPDA), National Transmission and Dispatch Company (NTDC)		
Project Team Leader:	Ghufran Shafi		
Project Team Members:	Liu Yang, Project Counsel - Investment Operations Marife Principe, Senior Social Development Specialist Shonell Robinson, Financial Management Specialist Bernadette Ndeda, Procurement Specialist Zhixi Zhu, Environmental Specialist		
Completed Site Visits by AIIB:	Nov, 2017 May, 2019 Visits by WB Oct, 2019 Visits by WB Dec, 2020 Consultation with WB after its Mission		
Planned Site Visits by AIIB:	AIIB visit will be planned after the Covid-imposed travel restrictions are eased by the Bank.		

2. Project Summary and Objectives

To facilitate the sustainable expansion of Pakistan’s electricity generation capacity providing a low cost, clean, renewable energy option. The Project will add 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 highest. The total capacity at Tarbela with the induction of Tarbela 5 Hydropower extension will become 6,928 MW and annual average generation is expected to increase to 19,000 GWH.

The shortages of energy have 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 shortages are at their 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.

Main components of the project are indicated below. Of these, AIIB 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):	

4. Disbursement Summary (million)

Currency:	USD		
a) Committed:	300	b) Cancellation (if any):	
c) Disbursed:	3.76	d) Most recent disbursement: (amount / date)	0.814, Dec. 31, 2020
e) Undisbursed:	296.24	f) Disbursement Ratio(%)[1]:	1.3

[1] Disbursement Ratio is defined as the volume (i.e. the dollar amount) of total disbursed amount as a percentage of the net committed volume, i.e., f = c / (a – b)

5. Project Implementation Update

Project implementation was delayed because of delays in selection of Construction Supervision Consultant (CSC) which, in turn, also delayed the procurement of construction contracts. However, T5HP designs were finalized after extensive additional geotechnical and site investigations after coming on board of CSC. The CSC also updated the forecast of electricity generation, and confirmed the constructability of the project. The analysis confirmed the strong economic returns of the T5HP and that the costs are within the budget provided for the project at approval in 2016.

After pre-qualification of civil and electro-mechanical contractors, tendering process commenced. Bids for the two main contracts (i) works contract for construction of powerhouse connection to tunnel and intakes; and (ii) supply and installation of electro-mechanical equipment and substation were respectively received on November 25 and 26, 2020. Bids were successfully evaluated and WB authorized pre-award disccussions with both civil and electro-mechanical (EM) contractors. PMU issued Letter of Acceptance for civil works on April 8, 2021. The pre-award discussions are significantly complete with EM contractors and Letter of Acceptance wil be issued after WB's approval.

The contracts are expected to be signed one after another in May-June, with commencement of both works planned in July, 2021. Based on these timelines, the plant is expected to be commissioned in 2024. The Implementation period and loan agreement will accordingly be extended. The disbursement projection shown below are based on the extended implementation period.

Components	Physical Progress	Environmental & Social Compliance	Procurement
Component A: Powerhouse and Tunnel Works (USD133.2 M)	0	An Environmental and Social Assessment (ESA) of the Project, prepared jointly by WAPDA and NTDC, considers adverse environmental and social issues likely to arise during the complete project cycle, including the preconstruction, construction, and operation phases	Delayed. However WAPDA has significantly completed the tendering of civil works. Contract will be executed after WB's authorization, expected in May.
Component B1: Turbines generators and related equipment (USD110.6 M)	0	An Environmental and Social Assessment (ESA) of the Project, prepared jointly by WAPDA and NTDC, considers adverse environmental and social issues likely to arise during the complete project cycle, including the preconstruction, construction, and operation phases	Delayed. However WAPDA has significantly completed the tendering of EM works. Contract will be executed after WB's authorization, expected in June.
Component B2: Transformers, switchyard electrical connection (USD30.1 M)	0	An Environmental and Social Assessment (ESA) of the Project, prepared jointly by WAPDA and NTDC, considers adverse environmental and social issues likely to arise during the complete project cycle, including the preconstruction, construction, and operation phases	Delayed. However WAPDA has significantly completed the tendering of EM works. Contract will be executed after WB's authorization, expected in June.

Financial Management:

No AIIB disbursement has been made yet. However, as there have been disbursements under the project by the World Bank and WAPDA, the project financial statements for the period ended June 30, 2020 became due on December 31, 2020. The project financial statements were submitted to the World Bank, however, the audit opinion on the financial statements remains outstanding. The entity audit report also remains outstanding. AIIB/WB are following up on the outstanding reports.

6. Status of the Grievance Redress Mechanism (GRM)

A Project-specific Grievance Redress Mechanism will be used for the Project. It will address any complaints from the community during the implementation phase. A tripartite Grievance Redress Committee on labor issues has been operational during Tarbela 4 Hydropower Project and will continue to address labor complaints and employment issues under the Project. Health hazards to labor will be managed through comprehensive training and provision of protective equipment. Further, labor camps required during the construction phase will be carefully built or existing sites will be upgraded to ensure that living conditions are healthy and do not lead to any conflicts. A Labor Monitoring Plan will also ensure that suitable working conditions are in place.

7. Results Monitoring

Project implementation is delayed and major works are still under procurement. There is therefore no results to report.

Baseline Year: Jan. 1, 2017 End Target Year: Dec. 31, 2024

Project Objective Indicators #1

Indicator #1: Generation Capacity of Hydropower Constructed Under the Project (MW)

Year	Target	Actual	Others, if any
Dec. 31, 2024	1410	-	

Project Objective Indicators #2

Indicator #2: Electricity supply of renewable energy annually (GWh)

Year	Target	Actual	Others, if any
Dec. 31, 2024	19,000GWh	-	

Project Objective Indicators #3

Indicator #3: Availability of generation capacity during summer months (MW)

Year	Target	Actual	Others, if any
Dec. 31, 2024	6,298MW	-	

Project Objective Indicators #4

Indicator #4: Preparation of hydropower project, completion of pilot solar project and capacity building program (%)

Year	Target	Actual	Others, if any
Dec. 31, 2023	100%	-	

Intermediate Result Indicators #1

Indicator #1: Component A. Construction of T5 power house and connection to Tunnel 5

Year	Target	Actual	Others, if any
Dec. 31, 2024	100%	-	

Intermediate Result Indicators #2

Indicator #2: Component A. Construction of intake modification for Tunnel 5

Year	Target	Actual	Others, if any
Dec. 31, 2024	100%	-	

Intermediate Result Indicators #3

Indicator #3: Component B. Installation of number of power units on Tunnel 5

Year	Target	Actual	Others, if any
Dec. 31, 2024	3	-	

Intermediate Result Indicators #4

Indicator #4: Component B. Construction of T5 Switchyard

Year	Target	Actual	Others, if any
Dec. 31, 2024	100%	-	

Intermediate Result Indicators #5

Indicator #5: Component B. Transmission line for power evacuation

Year	Target	Actual	Others, if any
Dec. 31, 2024	100%	-	

Remarks: Since the project implementation is still under procurement stage, no result has been generated.