

## 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:        | Large hydropower generation  |
| AIB Financing Type:           | Loan: 300 USD million  | Co-financier(s):   | WB (IBRD)                    |
| E&S category:                 | A  | Borrower:          | Islamic Republic of Pakistan |
| Red Flags Assigned:           | 3  | Monitoring Regime: | Watchlist                    |
| Implementing Agency:          | Water and Power Development Authority (WAPDA), National Transmission and Dispatch Company (NTDC)   |                    |                              |
| Project Team Leader:          | Ghufran Shafi  |                    |                              |
| Project Team Members:         | Giacomo Ottilini, Principal Procurement Specialist<br>Liu Yang, Project Counsel - Investment Operations<br>Marife Principe, Senior Social Development Specialist<br>Shonell Robinson, Financial Management Specialist<br>Zhixi Zhu, Environmental Specialist |                    |                              |
| Completed Site Visits by AIB: | Nov, 2017<br><br>May, 2019<br>Visits by WB<br><br>Oct, 2019<br>Visits by WB  |                    |                              |
| Planned Site Visits by AIB:   | TBD  |                    |                              |

#### 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.

#### 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 (USD million)

|                 |        |   |                    |
|-----------------|--------|---|--------------------|
| a) Committed:   | 300    | b) Cancellation (if any):                       |                    |
| c) Disbursed:   | 3.36   | d) Most recent disbursement:<br>(amount / date) | 417, Jun. 15, 2020 |
| e) Undisbursed: | 296.64 | f) Disbursement Ratio(%) <sup>1</sup> :         | 1.1                |

<sup>1</sup> 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 has started, but currently is behind original schedule, mainly due to delays in procurement of the Construction Supervision Consultant (CSC), which also delayed the procurement of civil works and electro-mechanical work contracts.

The CSC has come on board. Shortlisting of construction contractors has been completed and civil works and EM contractors have been pre-qualified. Tendering of both contracts is currently ongoing after the approval of bidding documents. These bidding documents are based on the updated design finalized with the assistance

of CSC.

| Components   | Physical Progress | Environmental & Social Compliance | Procurement                                  |
|--|-------------------|-----------------------------------|--|
| Component A: Powerhouse and Tunnel Works (USD133.2 M)                    | 0                 | No issue                          | Delayed. Tendering of civil works is ongoing |
| Component B1: Turbines generators and related equipment (USD110.6 M)     | 0                 | No issue                          | Delayed. Tendering of EM works is ongoing    |
| Component B2: Transformers, switchyard electrical connection (USD30.1 M) | 0                 | No issue                          | Delayed. Tendering of EM works is ongoing    |

#### Financial Management:

No Issue

### 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: Jun. 30, 2020

| Project Objective Indicators   | Year         | Target    | Actual | Others, if any |
|--|--------------|-----------|--------|----------------|
| Indicator #1: Generation Capacity of Hydropower Constructed Under the Project (MW)                                   | Jan. 1, 2022 | 1410      | -      |                |
| Indicator #2: Electricity supply of renewable energy annually (GWh)  | Jan. 1, 2018 | 17,200GWh | -      |                |
| Indicator #2: Electricity supply of renewable energy annually (GWh)  | Jan. 1, 2019 | 17,200GWh | -      |                |
| Indicator #2: Electricity supply of renewable energy annually (GWh)  | Jan. 1, 2020 | 17,200GWh | -      |                |
| Indicator #2: Electricity supply of renewable energy annually (GWh)  | Jan. 1, 2021 | 19,000GWh | -      |                |
| Indicator #2: Electricity supply of renewable energy annually (GWh)  | Jan. 1, 2022 | 19,000GWh | -      |                |
| Indicator #3: Availability of generation capacity during summer months (MW)  | Jan. 1, 2018 | 4,888MW   | -      |                |
| Indicator #3: Availability of generation capacity during summer months (MW)  | Jan. 1, 2019 | 4,888MW   | -      |                |
| Indicator #3: Availability of generation capacity during summer months (MW)  | Jan. 1, 2020 | 4,888MW   | -      |                |
| Indicator #3: Availability of generation capacity during summer months (MW)  | Jan. 1, 2021 | 6,298MW   | -      |                |
| Indicator #3: Availability of generation capacity during summer months (MW)  | Jan. 1, 2022 | 6,298MW   | -      |                |
| Indicator #4: Preparation of hydropower project, completion of pilot solar project and capacity building program (%) | Jan. 1, 2018 | 40%       | -      |                |

|  |              |           |   |  |
|--|--------------|-----------|---|--|
| Indicator #4: Preparation of hydropower project, completion of pilot solar project and capacity building program (%) | Jan. 1, 2019 | 60%       | - |  |
| Indicator #4: Preparation of hydropower project, completion of pilot solar project and capacity building program (%) | Jan. 1, 2020 | 80%       | - |  |
| Indicator #4: Preparation of hydropower project, completion of pilot solar project and capacity building program (%) | Jan. 1, 2021 | 100%      | - |  |
| Indicator #4: Preparation of hydropower project, completion of pilot solar project and capacity building program (%) | Jan. 1, 2022 | 100%      | - |  |
| Indicator #1: Generation Capacity of Hydropower Constructed Under the Project (MW)                                   | Jan. 1, 2017 | 0 MW      | - |  |
| Indicator #2: Electricity supply of renewable energy annually (GWh)  | Jan. 1, 2017 | 14,175GWh | - |  |
| Indicator #3: Availability of generation capacity during summer months (MW)  | Jan. 1, 2017 | 3,478MW   | - |  |
| Indicator #4: Preparation of hydropower project, completion of pilot solar project and capacity building program (%) | Jan. 1, 2017 | 20%       | - |  |

| Intermediate Result Indicators   | Year         | Target | Actual | Others, if any |
|--|--------------|--------|--------|----------------|
| Indicator #1: Component A. Construction of T5 power house and connection to Tunnel 5 | Jan. 1, 2018 | 20%    | -      |                |
| Indicator #1: Component A. Construction of T5 power house and connection to Tunnel 5 | Jan. 1, 2019 | 40%    | -      |                |
| Indicator #1: Component A. Construction of T5 power house and connection to Tunnel 5 | Jan. 1, 2020 | 80%    | -      |                |
| Indicator #1: Component A. Construction of T5 power house and connection to Tunnel 5 | Jan. 1, 2021 | 100%   | -      |                |
| Indicator #1: Component A. Construction of T5 power house and connection to Tunnel 5 | Jan. 1, 2022 | 100%   | -      |                |
| Indicator #2: Component A. Construction of intake modification for Tunnel 5          | Jan. 1, 2019 | 20%    | -      |                |
| Indicator #2: Component A. Construction of intake modification for Tunnel 5          | Jan. 1, 2020 | 40%    | -      |                |
| Indicator #2: Component A. Construction of intake modification for Tunnel 5          | Jan. 1, 2021 | 80%    | -      |                |
| Indicator #2: Component A. Construction of intake modification for Tunnel 5          | Jan. 1, 2022 | 100%   | -      |                |
| Indicator #3: Component B. Installation of number of power units on Tunnel 5         | Jan. 1, 2021 | 3      | -      |                |
| Indicator #3: Component B. Installation of number of power units on Tunnel 5         | Jan. 1, 2022 | 3      | -      |                |
| Indicator #4: Component B. Construction of T5 Switchyard                             | Jan. 1, 2018 | 20%    | -      |                |
| Indicator #4: Component B. Construction of T5 Switchyard                             | Jan. 1, 2019 | 40%    | -      |                |
| Indicator #4: Component B. Construction of T5 Switchyard                             | Jan. 1, 2020 | 80%    | -      |                |
| Indicator #4: Component B. Construction of T5 Switchyard                             | Jan. 1, 2021 | 100%   | -      |                |

|  |              |      |   |  |
|--|--------------|------|---|--|
| Indicator #4: Component B. Construction of T5 Switchyard                             | Jan. 1, 2022 | 100% | - |  |
| Indicator #5: Component B. Transmission line for power evacuation                    | Jan. 1, 2018 | 20%  | - |  |
| Indicator #5: Component B. Transmission line for power evacuation                    | Jan. 1, 2019 | 40%  | - |  |
| Indicator #5: Component B. Transmission line for power evacuation                    | Jan. 1, 2020 | 80%  | - |  |
| Indicator #5: Component B. Transmission line for power evacuation                    | Jan. 1, 2021 | 100% | - |  |
| Indicator #5: Component B. Transmission line for power evacuation                    | Jan. 1, 2022 | 100% | - |  |
| Indicator #1: Component A. Construction of T5 power house and connection to Tunnel 5 | Jan. 1, 2017 | 0    | - |  |
| Indicator #2: Component A. Construction of intake modification for Tunnel 5          | Jan. 1, 2017 | 0    | - |  |
| Indicator #3: Component B. Installation of number of power units on Tunnel 5         | Jan. 1, 2017 | 0    | - |  |
| Indicator #4: Component B. Construction of T5 Switchyard                             | Jan. 1, 2017 | 0    | - |  |
| Indicator #5: Component B. Transmission line for power evacuation                    | Jan. 1, 2017 | 0    | - |  |

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