The World Bank
Tarbela Fourth Extension Hydropower Project (P115893)

Implementing Agencies: PMU T4HP, WAPDA, Water and Power Development Authority (WAPDA)

Key Dates

**Key Project Dates**
- Bank Approval Date: 20-Mar-2012
- Effectiveness Date: 27-Apr-2012
- Planned Mid Term Review Date: 31-Oct-2016
- Actual Mid-Term Review Date: --
- Original Closing Date: 31-Dec-2018
- Revised Closing Date: 31-Dec-2018

Project Development Objectives

Project Development Objective (from Project Appraisal Document)
The Objective of the Project is to facilitate a sustainable expansion of the Borrower’s electricity generation capacity.

Has the Project Development Objective been changed since Board Approval of the Project Objective?
No

Components

<table>
<thead>
<tr>
<th>Name</th>
<th>Previous Rating</th>
<th>Current Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>Component A: Construction of Power House and Modification to the Tunnel: (Cost $309.60 M)</td>
<td>Satisfactory</td>
<td>Satisfactory</td>
</tr>
<tr>
<td>Component B: Power Units and Ancillary Equipment: (Cost $431.50 M)</td>
<td>Satisfactory</td>
<td>Satisfactory</td>
</tr>
<tr>
<td>Component C: Social Action and Environmental Management Plans, Dam Monitoring and Surveillance: (Cost $29.00 M)</td>
<td>Satisfactory</td>
<td>Satisfactory</td>
</tr>
<tr>
<td>Component D: Construction Supervision, Monitoring and Evaluation of the Project Impacts and Social Action and Environmental Management Plans: (Cost $26.40 M)</td>
<td>Satisfactory</td>
<td>Satisfactory</td>
</tr>
<tr>
<td>Component E: Project Management Support, Capacity Building of WAPDA, Technical Assistance and Training: (Cost $34.00 M)</td>
<td>Satisfactory</td>
<td>Satisfactory</td>
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</tbody>
</table>

Overall Ratings

<table>
<thead>
<tr>
<th>Name</th>
<th>Previous Rating</th>
<th>Current Rating</th>
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</thead>
<tbody>
<tr>
<td>Progress towards achievement of PDO</td>
<td>Satisfactory</td>
<td>Satisfactory</td>
</tr>
<tr>
<td>Overall Implementation Progress (IP)</td>
<td>Satisfactory</td>
<td>Satisfactory</td>
</tr>
<tr>
<td>Overall Risk Rating</td>
<td>Substantial</td>
<td>Substantial</td>
</tr>
</tbody>
</table>
Implementation Status and Key Decisions

Implementation of Tarbela Fourth Extension Hydropower project (T4HP) is progressing well. Brief status of key items is given below:

(i) Work on the two major contracts for civil works (construction of power house) and electro-mechanical (installation of turbines and equipment) is progressing well. However, completion by June 2017 under an accelerated program may not be possible.
(ii) Works under the Social Action Plan consisting of community infrastructure have been completed. These schemes include dispensaries, drinking water, sewage, rehabilitation of drainage systems and upgradation/construction of schools and hospitals and will be benefiting over 100,000 people in several villages and settlements around project area. WAPDA intends to reconstitute Resettlement Claims Commission (RCC) to start the second round of out-of-court settlements for cases pending in courts related to original construction of Tarbela Dam Project and Ghazi Barotha Project. The Grievance Redressal Committee (GRC) is also functional and is meeting periodically to address any complaints/cases received from aggrieved persons including labour and local communities. All grievances can be registered at the public information center/GRC office, Ghazi.
(iii) T5HP design has been finalized, environmental and social assessment studies have been disclosed on WAPDA website and World Bank's Infoshop. Pre-qualification application for the two major contracts (a) Civil and (b) Electromechanical are being evaluated.

Risks

Systematic Operations Risk-rating Tool

<table>
<thead>
<tr>
<th>Risk Category</th>
<th>Rating at Approval</th>
<th>Previous Rating</th>
<th>Current Rating</th>
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<tbody>
<tr>
<td>Political and Governance</td>
<td>--</td>
<td>Moderate</td>
<td>Moderate</td>
</tr>
<tr>
<td>Macroeconomic</td>
<td>--</td>
<td>Substantial</td>
<td>Substantial</td>
</tr>
<tr>
<td>Sector Strategies and Policies</td>
<td>--</td>
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<td>Substantial</td>
</tr>
<tr>
<td>Technical Design of Project or Program</td>
<td>--</td>
<td>Moderate</td>
<td>Moderate</td>
</tr>
<tr>
<td>Institutional Capacity for Implementation and Sustainability</td>
<td>--</td>
<td>Low</td>
<td>Low</td>
</tr>
<tr>
<td>Fiduciary</td>
<td>--</td>
<td>Substantial</td>
<td>Substantial</td>
</tr>
<tr>
<td>Environment and Social</td>
<td>--</td>
<td>High</td>
<td>High</td>
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<tr>
<td>Stakeholders</td>
<td>--</td>
<td>Moderate</td>
<td>Moderate</td>
</tr>
<tr>
<td>Other</td>
<td>--</td>
<td>--</td>
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<tr>
<td>Overall</td>
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Results
## Project Development Objective Indicators

### Generation Capacity of Hydropower constructed or rehabilitated under the project (Megawatt, Core)

<table>
<thead>
<tr>
<th></th>
<th>Baseline</th>
<th>Actual (Previous)</th>
<th>Actual (Current)</th>
<th>End Target</th>
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<tr>
<td>Value</td>
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<td>0.00</td>
<td>0.00</td>
<td>1410.00</td>
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<tr>
<td>Date</td>
<td>30-Jun-2012</td>
<td>30-Sep-2015</td>
<td>31-Mar-2016</td>
<td>30-Jun-2018</td>
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</table>

### Generation Capacity of Hydropower constructed under the project (Megawatt, Core Breakdown)

<table>
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<td>0.00</td>
<td>0.00</td>
<td>1410.00</td>
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<tr>
<td>Date</td>
<td>30-Jun-2012</td>
<td>30-Sep-2015</td>
<td>31-Mar-2016</td>
<td>30-Jun-2018</td>
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</tbody>
</table>

### 1 Annual Energy Supply (GWh) (Gigawatt-hour (GWh), Custom)

<table>
<thead>
<tr>
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<th>Baseline</th>
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<tr>
<td>Value</td>
<td>14175.00</td>
<td>14758.51</td>
<td>14758.51</td>
<td>18015.00</td>
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</table>

### 2 Generation Capacity (MW) (Megawatt, Custom)

<table>
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<tr>
<td>Value</td>
<td>3478.00</td>
<td>3478.00</td>
<td>3478.00</td>
<td>4888.00</td>
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<td>30-Sep-2015</td>
<td>31-Mar-2016</td>
<td>30-Jun-2018</td>
</tr>
</tbody>
</table>

### 3 Reduction in overall production cost of energy (Number, Custom)

<table>
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<tr>
<th></th>
<th>Baseline</th>
<th>Actual (Previous)</th>
<th>Actual (Current)</th>
<th>End Target</th>
</tr>
</thead>
</table>
### Comments
Numbers are in UScents/kWh. Impact will be measured when generation starts keeping the fuel cost and generation mix constant at the levels assumed by NEPRA in its FY2010-11 Tariff Determinations.

#### 4 Preparation hydro project and capacity building (Percentage, Custom)

<table>
<thead>
<tr>
<th>Baseline</th>
<th>Actual (Previous)</th>
<th>Actual (Current)</th>
<th>End Target</th>
</tr>
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<tr>
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<td>30-Jun-2012</td>
<td>30-Sep-2015</td>
<td>30-Jun-2018</td>
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#### Overall Comments

**Intermediate Results Indicators**

##### Component A-1 Powerhouse construction (Percentage, Custom)

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<td>Date</td>
<td>30-Jun-2012</td>
<td>30-Sep-2015</td>
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##### Component A-2 Construction of intake modification (Percentage, Custom)

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<td>Date</td>
<td>30-Jun-2012</td>
<td>30-Sep-2015</td>
<td>30-Jun-2018</td>
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## Component B-1 Installation of number of power units (Number, Custom)

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<th>End Target</th>
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<td>0.00</td>
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<td>30-Sep-2015</td>
<td>31-Mar-2016</td>
<td>30-Jun-2018</td>
</tr>
</tbody>
</table>

## Component B-2 Installation of transformers and electrical connection (Percentage, Custom)

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<th>Actual (Current)</th>
<th>End Target</th>
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</thead>
<tbody>
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<td>40.00</td>
<td>60.00</td>
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<tr>
<td>Date</td>
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<td>30-Sep-2015</td>
<td>31-Mar-2016</td>
<td>30-Jun-2018</td>
</tr>
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</table>

Comments
Assuming following weights (%):

## Component C-1 Implementation of SAP and EMP (Percentage, Custom)

<table>
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<tr>
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<th>End Target</th>
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<td>30-Sep-2015</td>
<td>31-Mar-2016</td>
<td>30-Jun-2018</td>
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</table>

## Component C-2 Operation of dams monitoring system (Percentage, Custom)

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<th>End Target</th>
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<td>30-Jun-2012</td>
<td>30-Sep-2015</td>
<td>31-Mar-2016</td>
<td>30-Jun-2018</td>
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</tbody>
</table>
## Component D-1 Construction supervision and implementation support (CSC Consultants) (Text, Custom)

<table>
<thead>
<tr>
<th>Value</th>
<th>Baseline</th>
<th>Actual (Previous)</th>
<th>Actual (Current)</th>
<th>End Target</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant support and supervision by the CSC</td>
<td></td>
<td>CSC are providing implementation support</td>
<td>CSC are providing implementation support</td>
<td>Constant support and supervision by the CSC</td>
</tr>
<tr>
<td>Date</td>
<td>30-Jun-2012</td>
<td>30-Sep-2015</td>
<td>31-Mar-2016</td>
<td>30-Jun-2018</td>
</tr>
</tbody>
</table>

## Component D-2 Independent M&E of Project impact of SAP and EMP (Text, Custom)

<table>
<thead>
<tr>
<th>Value</th>
<th>Baseline</th>
<th>Actual (Previous)</th>
<th>Actual (Current)</th>
<th>End Target</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regular Support and monitoring</td>
<td></td>
<td>Regular Support and monitoring</td>
<td>Regular Support and monitoring</td>
<td>Regular Support and monitoring</td>
</tr>
<tr>
<td>Date</td>
<td>30-Jun-2012</td>
<td>30-Sep-2015</td>
<td>31-Mar-2016</td>
<td>30-Jun-2018</td>
</tr>
</tbody>
</table>

## Component E-1 Effectiveness of PMU (Text, Custom)

<table>
<thead>
<tr>
<th>Value</th>
<th>Baseline</th>
<th>Actual (Previous)</th>
<th>Actual (Current)</th>
<th>End Target</th>
</tr>
</thead>
<tbody>
<tr>
<td>Recruitment of CSC and MSC on time and award of works contracts</td>
<td></td>
<td>PMU is fully staffed and functional.</td>
<td>PMU is fully staffed and functional.</td>
<td>Completion of project on time, smooth transition to O&amp;M arrangements</td>
</tr>
<tr>
<td>Date</td>
<td>30-Jun-2012</td>
<td>30-Sep-2015</td>
<td>31-Mar-2016</td>
<td>30-Jun-2018</td>
</tr>
</tbody>
</table>

## Component E-2 Capacity Building of WAPDA (Percentage, Custom)

<table>
<thead>
<tr>
<th>Value</th>
<th>Baseline</th>
<th>Actual (Previous)</th>
<th>Actual (Current)</th>
<th>End Target</th>
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<td>31-Mar-2016</td>
<td>30-Jun-2018</td>
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</tbody>
</table>

### Overall Comments
Data on Financial Performance

Disbursements (by loan)

<table>
<thead>
<tr>
<th>Project</th>
<th>Loan/Credit/TF</th>
<th>Status</th>
<th>Currency</th>
<th>Original</th>
<th>Revised</th>
<th>Cancelled</th>
<th>Disbursed</th>
<th>Undisbursed</th>
<th>Disbursed</th>
</tr>
</thead>
<tbody>
<tr>
<td>P115893</td>
<td>IBRD-81440</td>
<td>Effective</td>
<td>USD</td>
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<td>400.00</td>
<td>0.00</td>
<td>112.09</td>
<td>287.91</td>
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<tr>
<td>P115893</td>
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<td>Effective</td>
<td>USD</td>
<td>440.00</td>
<td>440.00</td>
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<td>124.25</td>
<td>282.41</td>
<td>28%</td>
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Key Dates (by loan)

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<tr>
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<th>Loan/Credit/TF</th>
<th>Status</th>
<th>Approval Date</th>
<th>Signing Date</th>
<th>Effectiveness Date</th>
<th>Orig. Closing Date</th>
<th>Rev. Closing Date</th>
</tr>
</thead>
</table>

Cumulative Disbursements

Restructuring History

Level 2 Approved on 28-Jan-2015
### Related Project(s)

P157372-Additional Financing to PK: Tarbela 4th Extension Hydropower Project