**Afghanistan: North-South Power Transmission Enhancement Project (Additional Financing)**

**Project Name**: North-South Power Transmission Enhancement Project (Additional Financing)

**Project Number**: 46392-002

**Country / Economy**: Afghanistan

**Project Status**: Proposed

**Project Type / Modality of Assistance**: Grant

**Source of Funding / Amount**: Grant: North-South Power Transmission Enhancement Project (Additional Financing)

- **Asian Development Fund**: USD 60.00 million

**Operational Priorities**:
- OP1: Addressing remaining poverty and reducing inequalities
- OP3: Tackling climate change, building climate and disaster resilience, and enhancing environmental sustainability
- OP7: Fostering regional cooperation and integration

**Sector / Subsector**: Energy / Electricity transmission and distribution

**Gender**: No gender elements

**Description**: The additional financing will allow the construction of a fully equipped incoming line bay, including two reactors, at Dashte Alwan 500-kilovolt (kV) substation for the energization of the 500-kV overhead transmission line from Turkmenistan to Dashte Alwan. The additional financing will also cover cost overruns of the 500-kV transmission line from the Dashte Alwan substation in Baghlan to the Arghundy substation in Kabul and the 500-kV/220-kV substation in Arghundy, Kabul. The project supports the National Energy Supply Program of the Government of Afghanistan, with the strategic objective of developing domestic power generation from fossil fuels and renewable energy while increasing its power imports. Afghanistan also plans to develop a transit transmission system through the country to supply power from energy-rich Central Asian countries to consumers in energy-scarce South Asia.

**Project Rationale and Linkage to Country/Regional Strategy**: The Afghanistan Power Sector Master Plan (2012-2032) envisaged Pul-e-Khumri substation to be a hub for imports from Tajikistan, Turkmenistan, and Uzbekistan (actual project substation is Dashte Alwan, adjacent to Pul-e-Khumri). As these three countries were not operating in parallel mode, in 2014 the Government of Afghanistan decided to construct a 500-MW back-to-back high voltage direct current (HVDC) converter station so that Afghanistan could develop a unified AC grid while trading with its neighboring countries in asynchronous mode. However, the recent developments in the region such as Uzbekistan’s changed policy on regional power trade and series of high-level meetings between the Governments of Afghanistan, Tajikistan, Turkmenistan, and Uzbekistan on regional trade development, led to Afghanistan’s aspiration to join Central Asia Power System (CAPS). Subsequently, in October 2019, the Government of Afghanistan decided to cancel the 500-MW back-to-back HVDC converter station package.

The technical assistance on the Regional Cooperation on Increasing Cross-Border Energy Trading within the Central Asian Power System reviewed the technical aspects of the cancellation of the 500-MW back-to-back converter station package, especially in connection with the reactive power of the newly constructed 500-kV transmission line. The study found that reactors for energizing the 500-kV transmission line were no longer available as they were part of the cancelled back-to-back converter station package. Based on these findings, DABS prepared the scope for additional financing to allow energizing the 500-kV transmission line from Turkmenistan to Dashte Alwan. The Asian Development Bank (ADB) approved the $216.00 million North-South Power Transmission Enhancement Project on 25 November 2013. The project was signed on 14 December 2013 and became effective on 10 March 2014. The grant closing date is 30 June 2021, with the expected project completion date on 31 December 2020. The project is co-financed by the Government of Japan ($104.00 million) through the Afghanistan Infrastructure Trust Fund. ADB financing of $99.00 million is provided through the Asian Development Fund. The expected output of the original project is a 500-kV transmission line from Baghlan to Kabul (Dashte Alwan to Arghundy), including a 500-kV/220-kV substation in Arghundy, Kabul. The North-South Power Transmission Enhancement Project and its additional financing will add 1,000-1,300 megawatts (MW) to the existing 300 MW of constrained transmission capacity between northern and southern Afghanistan. The new line will transmit electricity produced domestically by hydropower and fossil fuel generation in the country’s northern region. It will also accommodate power imports from neighboring Tajikistan, Turkmenistan, and Uzbekistan to supply Afghanistan’s domestic needs and onward exports to Pakistan. The impact will be increased regional power trade between Afghanistan and its neighbors, and a higher rate of electrification within the country. The outcome of the project will be an increased supply of power from the north of Afghanistan to its southern and eastern regions.

**Impact**: Increased power trade between Afghanistan and its neighbors, and a higher rate of electrification within the country (National Energy Supply Program)

**Outcome**: Supply of power from the north of Afghanistan to the south and east increased

**Outputs**: A 500 kV transmission line from Baghlan to Kabul (Dashte Alwan to Arghundy) commissioned, including a 500 kV/220 kV substation in Arghundy, Kabul

500kV/200kV Dashte Alwan substation upgraded

**Geographical Location**: Nation-wide

**Safeguard Categories**

- **Environment**: B
- **Involuntary Resettlement**: B
- **Indigenous Peoples**: C

**Summary of Environmental and Social Aspects**

- **Environmental Aspects**
- **Involuntary Resettlement**
- **Indigenous Peoples**

**Stakeholder Communication, Participation, and Consultation**
## Timetable

<table>
<thead>
<tr>
<th>Event</th>
<th>Date</th>
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<tbody>
<tr>
<td>Concept Clearance</td>
<td>10 Jun 2022</td>
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<tr>
<td>Fact Finding</td>
<td>06 Jun 2020 to 10 Jun 2020</td>
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<tr>
<td>MRM</td>
<td>21 Sep 2020</td>
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<td>Approval</td>
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<td>Last Review Mission</td>
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<td>Last PDS Update</td>
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## Project Details

**Project Page**

**Request for Information**

**Date Generated**
28 September 2023

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