



Tajikistan: Reconnection to the Central Asian Power System Project

Project Name	Reconnection to the Central Asian Power System Project
Project Number	52122-001
Country	Tajikistan
Project Status	Proposed
Project Type / Modality of Assistance	Grant
Source of Funding / Amount	Grant: Regional Power Interconnection concessional ordinary capital resources lending / Asian Development Fund US\$ 35.00 million
Strategic Agendas	Environmentally sustainable growth Inclusive economic growth Regional integration
Drivers of Change	Governance and capacity development
Sector / Subsector	Energy - Electricity transmission and distribution
Gender Equity and Mainstreaming	No gender elements
Description	<p>In April 2018, Tajikistan started to export power to Uzbekistan on an islanded mode. However, in order to synchronize the systems and achieve power trade target, the relay protection system in Tajikistan has to be modernized and new interconnection points established. The proposed project will: (i) install modern relays, circuit breakers, instrumental transformers and ancillary equipment and systems at eight 220kV and two 500kV interconnection points; (ii) establish two new 500kV interconnections; and, (iii) provide capacity building to Barki Tojik staff in reliability of parallel operations.</p> <p>These solutions will result in the following outcome: regional energy resource utilization among CAPS countries improved.</p>
Project Rationale and Linkage to Country/Regional Strategy	<p>The Central Asian republics are endowed with significant energy related natural resources, however, the distribution of these is highly skewed. The Kyrgyz Republic and Tajikistan have abundant hydro resources, while in contrast Kazakhstan, Turkmenistan and Uzbekistan are rich with fossil fuels. During the Soviet Union era these resources were managed at the regional level. Energy systems were designed to take into account the location of various energy sources and needs of entire region. The hydropower resources in Kyrgyz Republic and Tajikistan were operated primarily as an irrigation systems with power generation being secondary. Energy and water infrastructure, inherited by these countries, implicitly contemplated energy and water transfer across administrative boundaries that later have become national borders.</p> <p>However, the obsolete infrastructure systems in Tajikistan left from the former Soviet Union era that has neither been properly maintained nor replaced, especially during the civil war. This significantly deteriorated the reliability of the protection systems, which is one of the key elements for the parallel operation of the power systems. For the lack of sufficient infrastructure, the Tajikistan system has not been reconnected to the Central Asia Power System (CAPS) since its disconnection in 2009.</p> <p>In 2017, Tajikistan and Uzbekistan started working together to interconnect the electricity systems. In early 2018, the governments of both countries signed the Memorandum of Understanding according to which Tajikistan will start to exports summer surplus power to Uzbekistan. Initially, vertically integrated state power utility JSC Barki Tojik will start exporting 1.5 TWh on islanded mode in Uzbekistan (asynchronous operation) and after achieving full parallel operation, the export volume will increase to 5 TWh. This project will provide the infrastructure necessary for achieving full parallel operation of the two systems.</p>
Impact	Regional energy trade expanded
Outcome	Regional energy efficiency among CAPS countries improved.
Outputs	Tajikistan and Uzbekistan electricity grids synchronized Interconnection between Tajikistan and Uzbekistan expanded Capacity in Tajikistan for stable parallel operation improved
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

During Project Design

During Project Implementation

Responsible ADB Officer	Inoue, Yuki
Responsible ADB Department	Central and West Asia Department
Responsible ADB Division	Energy Division, CWRD
Executing Agencies	<i>Open Stock Holding Company "Barqi Tojik" 64 Ismolili Somini Avenue, Dushanbe Tajikistan, Postal Code 734026</i>

Timetable

Concept Clearance	26 Jul 2018
Fact Finding	05 Jun 2018 to 13 Jun 2018
MRM	30 Aug 2018
Approval	-
Last Review Mission	-
Last PDS Update	03 Aug 2018

Project Page	https://www.adb.org/projects/52122-001/main
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