



Regional: Regional Cooperation on Increasing Cross-Border Energy Trading within the Central Asian Power System - Provision of Solutions to Bottlenecks to the Regional Power Trade (Subproject 2)

Project Name	Regional Cooperation on Increasing Cross-Border Energy Trading within the Central Asian Power System - Provision of Solutions to Bottlenecks to the Regional Power Trade (Subproject 2)		
Project Number	52112-003		
Country	RegionalKazakhstanKyrgyz RepublicTajikistanUzbekistan		
Project Status	Proposed		
Project Type / Modality of Assistance	Technical Assistance		
Source of Funding / Amount	TA: Regional Cooperation on Increasing Cross-Border Energy Trading within the Central Asian Power System - Provision of Solutions to Bottlenecks to the Regional Power Trade (Subproject 2)		
	Technical Assistance Special Fund		US\$ 1.00 million
	Regional Cooperation and Integration Fund		US\$ 500,000.00
Strategic Agendas	Inclusive economic growth		
Drivers of Change	Governance and capacity development Knowledge solutions Partnerships		
Sector / Subsector	Energy - Electricity transmission and distribution - Energy sector development and institutional reform		
Gender Equity and Mainstreaming	No gender elements		
Description	This is the second subproject which is being launched simultaneously with the first subproject _Modernization of Coordinating Dispatch Center Energiya (CDC)_. The technical assistance (TA) subproject will have the following outcome: cross-border clean energy trade increased using high-level technology (HLT) by CDC. Specifically, the subproject 2 outcome will contribute to the cluster TA outcome indicators (a) at least 11,000 million kilowatt-hours trade within CAPS annually and (b) at least additional 5,587,560 tCO2 reduction in emission achieved.		

Project Rationale and Linkage to Country/Regional Strategy

Technical constraints on capacity to trade power. During the time of the Soviet Union, the Central Asian energy flow between the electricity grids of southern Kazakhstan, the Kyrgyz Republic, Tajikistan, Turkmenistan, and Uzbekistan was regulated by the United Dispatch Administration of Central Asia (based in Tashkent, Uzbekistan), subordinated to the central dispatch and planning institution in Moscow. Following the collapse of the Soviet Union, United Dispatch Administration became nongovernment organization in 1993 and was renamed to CDC. The governance was assigned to the Central Asia United Power System Council (CAUPS), comprising the heads of the national power systems. The council was responsible for the administration and coordination of the parallel operations of CAPS. In 2004, Kazakhstan, Tajikistan, the Kyrgyz Republic, and Uzbekistan concluded an intergovernmental agreement on the coordination of electricity grids of Central Asia. CDC was given the status of international organization working under the guidance of the CAUPS. Turkmenistan withdrew from CAPS in 2003 and switched to parallel operations with Iran. The signatories provide the financing for CDC. Unlike the national dispatch centers in the Kazakhstan, Kyrgyz Republic, and Tajikistan, no significant technological modernizations were made at CDC since it was established in the 1960s and conversion to a non-governmental organization. CDC relies on outdated technologies to perform its functions, including (i) coordination of the operations of power systems and energy entities within CAPS, (ii) determination of the conditions for the parallel operation of CAPS, (iii) coordination of operation personnel's actions during intersystem emergencies and elimination of intersystem accidents, (iv) coordination of relay protection and automation of circuits and settings, (v) coordination of operation of dispatch data acquisition and transmission systems, and (vi) control over measurements and metering of international power flows within CAPS.

CDC's technological limitations, which constrain regional power trade, include the following: (i) power flows within CAPS are forecast 6 months in advance using historical data and cannot be adjusted using real-time figures; accordingly, power flow planning is not optimized because of unnecessarily high safety factors; (ii) in the event of an accident on the grid, the site of the fault can take a day or longer to locate; (iii) the settlement of power flows between countries is unnecessarily long as the actual metered flows and reported flows do not match up because of the quality of CDC's telemetry; and (iv) newly constructed assets cannot be monitored without taking out something else; thus, CDC does not have a full picture of all important sites at once.

Impact	CAREC 2030 Program Results Framework Countries' emissions reductions target achieved, regional cooperation framework accomplished, and energy security in selected CAREC countries enhanced
Outcome	Cross-border clean energy trade increased using high-level technology by CDC Energiya
Outputs	Solutions to the bottlenecks to regional power trade provided
Geographical Location	Regional

Summary of Environmental and Social Aspects

Environmental Aspects

Involuntary Resettlement

Indigenous Peoples

Stakeholder Communication, Participation, and Consultation

During Project Design

During Project Implementation

Business Opportunities

Consulting Services International and national consultants will be recruited individually through framework agreements wherein short-listed consultants may be hired as needed for the duration of the agreement to provide technical expertise and logistical support to ADB and the implementing agencies. Firms will also be recruited using the quality- and cost-based selection with a 90:10 quality-to-cost ratio. The consultants will be engaged in accordance with the ADB Procurement Policy (2017, as amended from time to time) and the associated project administration instructions and/or staff instructions.

Procurement Procurement by the consultant will follow the ADB Procurement Policy (2017, as amended from time to time).

Responsible ADB Officer Chansavat, Bouadokpheng

Responsible ADB Department Central and West Asia Department

Responsible ADB Division Energy Division, CWRD

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Timetable

Concept Clearance	-
Fact Finding	15 Nov 2018 to 15 Nov 2018
MRM	-
Approval	-
Last Review Mission	-
Last PDS Update	24 Jan 2019

Project Page	https://www.adb.org/projects/52112-003/main
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