

INTEGRATED SAFEGUARDS DATA SHEET

CONCEPT STAGE

Report No.: ISDSC1198

Date ISDS Prepared/Updated: 15-Apr-2016

Date ISDS Approved/Disclosed: 15-Apr-2016

I. BASIC INFORMATION

A. Basic Project Data

Country:	Tajikistan	Project ID:	P150816
Project Name:	Nurek Hydropower Rehabilitation Project Phase I (P150816)		
Task Team Leader(s):	Paivi Koljonen		
Estimated Appraisal Date:	06-Feb-2017	Estimated Board Date:	28-Apr-2017
Managing Unit:	GEE03	Lending Instrument:	Investment Project Financing
Sector(s):	Hydropower (60%), General energy sector (10%), Flood protection (30%)		
Theme(s):	Export development and competitiveness (30%), Rural services and infrastructure (20%), Water resource management (30%), Infrastructure re services for private sector development (20%)		
Financing (In USD Million)			
Total Project Cost:	250.00	Total Bank Financing:	70.00
Financing Gap:	175.00		
Financing Source			Amount
BORROWER/RECIPIENT			5.00
International Development Association (IDA)			70.00
Total			75.00
Environmental Category:	B - Partial Assessment		
Is this a Repeater project?	No		

B. Project Objectives

The project development objective is to increase the generation capacity of the Nurek HPP and strengthen dam safety.

C. Project Description

The project is the first phase of the rehabilitation of the 40-year old Nurek Hydropower Plant (HPP),

comprising the rehabilitation of three of the nine existing generating units and upgrading of dam safety systems. Given the significant cost of rehabilitating the entire plant (\$566-650 million) and the limited volume of financing that would likely be available for Tajikistan, the Government and the Bank have agreed that a phased approach is needed. The first phase includes the three generating units, most of the Balance of Plant equipment, and dam safety; the second phase would include the remaining six units and the remaining Balance of Plant and would be done when additional financing becomes available. This two-phase approach would ensure an early start to the rehabilitation and will reduce the financing required to initiate the works. The implementation period for the first phase is about five years.

The cost estimate of the first phase is \$250 - 300 million, based on the findings of the Feasibility Study Consultants, Tractebel Engineers of France, and following a thorough investigation of the facility. A more precise estimate will be available at the end of CY2016 after the Project Management Consultant has confirmed the scope of the project, including needed dam safety works.

The project would be financed through Investment Project Financing (IPF), supported by an IDA credit of about \$70 million. Co-financing is expected from multilateral and bilateral development financing institutions.

Components:

Component 1: Power Plant Rehabilitation

This component will finance the replacement and refurbishment of mechanical, electrical, and electromechanical equipment and works required for the rehabilitation of the Nurek HPP.

Component 2: Dam Safety

This component will finance activities designed to improve the safety of the operation of the Nurek HPP.

Component 3: Project Management, Technical Assistance, Environment and Social

This component will strengthen the project's management and implementation arrangements, as well as support beneficiary feedback mechanisms.

D. Project location and salient physical characteristics relevant to the safeguard analysis (if known)

The Nurek dam, built across the Vakhsh River, was commissioned during 1972 -1979. It is the second highest earth-fill dam in the world (300 m). The Nurek hydropower plant (HPP) has 3,000 MW of installed capacity provided by nine turbine-generator units. The Vakhsh River is one of the tributaries of Amu Darya, which is the largest river of Central Asia, and one of the two main tributaries of the Aral Sea. The project is located near the town of Nurek, about 80 km from the capital, Dushanbe, with an estimated population of 18,950 in 2008. The city was founded in 1960 alongside the construction of the Nurek HPP.

Downstream of the Nurek dam, many other run-of river hydroplants depend on flows released by the Nurek HPP, as also tens of thousands of irrigated hectares of farmland. Construction of the dam had already heavily influenced water quality and hydrology at large. Consultants have prepared an Environmental and Social Impact Assessment (ESIA) for the project, which currently is under the Bank's review. The Tigrovaya Balka State National Reserve is located in the lowermost part of the Vakhsh River basin, down to its confluence with Pyanj River, close to the border with Afghanistan.

The reserve, with an area of 49,786 ha, is located about 200 km south of Dushanbe. It is of great importance for the conservation of the Tugai ecosystem and its unique fauna and flora. The project is not expected to have any impacts on the Reserve, as the ESIA report suggests.

The project area and the region are largely rural and the economic activity is predominantly dependent on agriculture. There is some tourist activity revolving around Nurek, including guesthouses and hotels and areas for day recreation.

E. Borrowers Institutional Capacity for Safeguard Policies

The Ministry of Energy and Water Resources is responsible for the implementation of policies and laws related to fuel, energy and natural resources. Barqi Tojik (BT) is the national integrated power company of Tajikistan. BT will have the overall responsibility for the project's compliance with national legislation, regional and international agreements, treaties and conventions and international guidelines and good practices for environmental and social aspects.

The Ministry of Energy and Water Resources and its existing Project Implementation Unit (PIU), as well as BT and its existing PIU have accumulated experience in managing projects financed by International Financing Institutions (IFIs) and have capacity to ensure compliance with the Bank's safeguards requirements. However, extra capacity will be required to facilitate ESIA-related consultations during preparation and implementation-stage information dissemination and consultations. In addition, capacity development activities on the ESMP and environmental and social risk management is proposed for the PIU during preparation with additional activities during implementation.

F. Environmental and Social Safeguards Specialists on the Team

Angela Nyawira Khaminwa (GSU03)

Javaid Afzal (GENDR)

II. SAFEGUARD POLICIES THAT MIGHT APPLY

Safeguard Policies	Triggered?	Explanation (Optional)
Environmental Assessment OP/BP 4.01	Yes	<p>The project has prepared a draft Environmental and Social Impact Assessment (ESIA) report, which is currently under the Bank's review. Considering that majority of the proposed works are of rehabilitation in nature, majority of the environmental impacts are limited to the construction site, are temporary and reversible in nature with minimum residual impacts after mitigation measures have been implemented. Therefore, the project is rated as category B project. However, given that Nurek is the world's second highest earth-filled dam, it raises the project's risk level.</p> <p>There are likely to be minimal direct social impacts from the project-financed activities. The draft ESIA and technical studies indicate that under the current design the rehabilitation works will not result in any</p>

		<p>impacts on total downstream discharge and suggest that the electricity output will not decline during winter. In addition, the impacts on local jobs and livelihoods are expected to be minimal.</p> <p>Following consultations with local stakeholders, the final ESIA will be disclosed in the country and at the World Bank's InfoShop around September 2016. The ESIA will be translated into Tajik and Russian and made available at locations that are accessible to stakeholders and on-line.</p>
Natural Habitats OP/BP 4.04	No	The project is not expected to have any impacts in addition to the existing Nurek Hydropower Plant (HPP).
Forests OP/BP 4.36	No	The proposed project will not affect any of the forest or forested land.
Pest Management OP 4.09	No	The project does not involve or promote use of any kind of pesticides.
Physical Cultural Resources OP/BP 4.11	No	The proposed construction works are limited to the existing HPP facility.
Indigenous Peoples OP/BP 4.10	No	No Indigenous Peoples as per OP 4.10 are present in the project area.
Involuntary Resettlement OP/BP 4.12	No	The proposed project activities will not result in any of the impacts detailed in OP 4.12. All project works will take place within the existing power facility. No impacts on downstream flows are expected.
Safety of Dams OP/BP 4.37	Yes	<p>As required by OP4.37 (Safety of Dams), the project will:</p> <p>(i) engage a Panel of Experts to provide independent review and expert advice on dam safety issues and other aspects during both preparation and implementation. In particular, the experts will (a) inspect and evaluate the safety status of the existing dam, its appurtenances, and its performance history; (b) review and evaluate the owner's operation and maintenance procedures; and (c) provide written reports of findings and recommendations for any remedial work or safety-related measures over the course of the project's preparation and implementation.</p> <p>(ii) ensure that the work will be designed and supervised by competent professionals. This will be done by the international Project Management Consultant to be financed by the project and for</p>

		<p>which the ToRs are being finalized.</p> <p>(iii) prepare and implement the following detailed plans: a plan for construction supervision and quality assurance; an instrumentation plan; an operation and maintenance plan; and an emergency preparedness plan.</p>
Projects on International Waterways OP/BP 7.50	Yes	<p>The project is located on the Vakhsh River, one of the main tributaries of the Amu Darya River, which is an international waterway. The other riparian states to the Amu Darya Basin are Afghanistan, Uzbekistan and Turkmenistan, all three being downstream riparians.</p> <p>The rehabilitation of existing hydropower facilities on an international waterway requires the application of OP 7.50. However, according to paragraph 7 of OP 7.50, there are exceptions to the Bank requirement that riparian states be notified of projects on international waterways. The exception under paragraph 7(a) applies “for any ongoing schemes, projects involving additions or alterations that require rehabilitation, construction or other changes that in the judgement of the Bank: (i) will not adversely change the quality or quantity of water flows to the other riparians; and (ii) will not be adversely affected by the other riparians’ possible water use”. This exception applies only to minor additions or alterations to the ongoing scheme that would not exceed the original scheme, change its nature, or so alter or expand its scope and extent as to make it appear a new or different scheme.</p> <p>The project involves a phased replacement of aging generating units, which came into operation in the 1970s. This is a normal process in hydropower plants. Because the project will rehabilitate an existing power plant without exceeding its original scheme or changing its nature, there will be no additional use of water under the project, and no change in water quality. Accordingly, the works to be funded under the project will not (i) adversely change the quality or quantity of water flows to the other riparians; and (ii) be adversely affected by the other riparians’ water use. The project will therefore seek the approval for such an exception.</p>

Projects in Disputed Areas OP/ BP 7.60	No	The project is not located in the 'disputed areas' as defined in the Bank policy.
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III. SAFEGUARD PREPARATION PLAN

A. Tentative target date for preparing the PAD Stage ISDS: 15-Dec-2016

B. Time frame for launching and completing the safeguard-related studies that may be needed. The specific studies and their timing¹ should be specified in the PAD-stage ISDS:

The ESIA is planned to be disclosed in Tajikistan and at the World Bank's InfoShop in September 2016. Consultations on the draft ESIA would take place during April-June 2016.

IV. APPROVALS

Task Team Leader(s):	Name: Paivi Koljonen	
<i>Approved By:</i>		
Safeguards Advisor:	Name: Agnes I. Kiss (SA)	Date: 15-Apr-2016
Practice Manager/ Manager:	Name: Ranjit J. Lamech (PMGR)	Date: 15-Apr-2016

¹ Reminder: The Bank's Disclosure Policy requires that safeguard-related documents be disclosed before appraisal (i) at the InfoShop and (ii) in country, at publicly accessible locations and in a form and language that are accessible to potentially affected persons.