

## INTEGRATED SAFEGUARDS DATA SHEET CONCEPT STAGE

Report No.: AC1649

**Date ISDS Prepared/Updated: 06/27/2005**

### I. BASIC INFORMATION

#### A. Basic Project Data

Country: Kazakhstan	Project ID: P095155
Project Name: Kazakhstan - North-South Electricity Transmission Project	
Task Team Leader: Istvan Dobozi	
Estimated Appraisal Date: July 11, 2005	Estimated Board Date: October 27, 2005
Managing Unit: ECSIE	Lending Instrument: Specific Investment Loan
Sector: Power (100%)	
Theme: Infrastructure services for private sector development (P)	
IBRD Amount (US\$m.):	100.00
IDA Amount (US\$m.):	0.00
GEF Amount (US\$m.):	0.00
PCF Amount (US\$m.):	0.00
Other financing amounts by source:	
BORROWER	4.55
EUROPEAN BANK FOR RECONSTRUCTION AND DEVELOPMENT	13.14
BORROWING COUNTRY'S FIN. INTERMEDIARY/IES	43.40
Financing Gap	0.00
	61.09

#### B. Project Objectives [from section 2 of PCN]

The primary project development objective is to ensure that business enterprises and households in southern Kazakhstan have adequate access to reliable, cost effective and high quality supply of electricity. In addition, the project will support regional integration objectives with respect to optimizing the use of energy resources through intra-regional trade, allowing low-cost producers in Kazakhstan, Tajikistan and Kyrgyzstan to compete on the broader regional electricity market, including Russia. The project is a step towards regional power market liberalization to eventually involve all five Central-Asian countries.

#### C. Project Description [from section 3 of PCN]

The second North-South (N/S) electricity transmission line project includes the construction of 1,115 km of overhead 500 kV line and upgrades of four high voltage air-insulated substations (1150/500 kV Ekibastuz, 500 kV Agadyr, 500 kV YukGRES and 500 kV Shu). The project is to be carried out in three phases: Phase I (YukGRES-Shu, 250 km), Phase II (Ekibastuz-Agadyr, 475 km) and Phase III (Agadyr-YukGRES (390 km). In March 2004, the Kazakhstan Electricity

Grid Operating Company (KEGOC, the state-owned transmission company) signed loan agreements with EBRD and KDB to finance Phase I construction (total cost: US\$81 million). KEGOC has requested a World Bank loan of US\$100 million for Phase II financing. The request is supported by the GOK through a US\$100 million sovereign guarantee included in the 2005 state budget.

The components of Phase II (the subject project) are as follows:

- Construction of a 500 kV overhead transmission line from Ekibastuz to Agadyr (length: 475 km), including a Fiber Optic Communication Line.
- Substation automation and protective relaying (SAPR) in the existing Ekibastuz substation.
- SAPR and Power Line Carrier in the existing Agadyr substation.
- Technical assistance for project management for the construction of the transmission line and completion of transmission sector reforms (establishment of real-time electricity balancing market and introduction of zonal transmission tariffs).

#### **D. Project location (if known)**

The entire route of the new N/S interconnector passes through four regions of Kazakhstan: Pavlodar, Karanganda, Almaty and Zhambyl, largely within existing corridors. The route for all three phases will be on state-owned land of no or low agricultural value. None of the land to be utilized includes protected areas or proven mineral deposits. Furthermore, it is far removed from populated areas, hence no resettlement is required. Almost the entire length of the line is pasture land (steppe). The route of Phase II (the subject project) passes through two regions, Pavlodar and Karaganda, within an abandoned corridor of a 1,150 kV transmission line (which was largely dismantled after the breakup of the USSR).

#### **E. Borrower's Institutional Capacity for Safeguard Policies [from PCN]**

In February 2004, the Kazakh Ministry of Environment (MOE) reviewed the final feasibility study for the overall project and approved it as a preliminary Environmental Impact Assessment (EIA). The State Environmental Expert Commission (SEEC) noted that in general overhead transmission lines and outdoor switchgear do not represent an active source of adverse environmental impact. The lines do not generate harmful emissions into the air, water or ground.

Under the final project feasibility study, the potential environmental impacts were identified as follows: permanent land occupation (only for the sites of line tower construction under Phase II), groundwater contamination from reactor/transformer oil leaks, audible noise, electromagnetic radiation and hazards to wildlife.

The proposed measures to limit any impacts associated with the project are simple, cost effective and consist primarily of sound engineering design and practice. Based upon this review, SEEC approved the project and requested that its comments and recommendations be addressed in the final working design of the project to be developed by the turnkey contractor to be selected competitively by KEGOC separately for each section of the N/S line (by September

2006 for Phase II). (Note: The comments and recommendations include the need to provide: (i) more detailed information on the natural environment of the project areas; (ii) component-by-component environmental assessment; (iii) environmental risk assessment of the proposed final design solutions; and (iv) environmental monitoring program during construction and decommissioning of the transmission line.) Under Kazakh legislation, the turnkey firm should engage a competent Kazakh agency (certified by the MOE) for the preparation of the final, full-scope EIA based on detailed working design of the project. The MOE shall approve the final EIA. Construction works are not allowed to commence before obtaining this approval. The detailed environmental protection requirements will be included in the tender documents to be used for the selection of the turnkey contractor.

It is recommended that for purposes of satisfying the Bank's Environmental Assessment (EA) procedures, an Environmental Management Plan (EMP) be prepared by KEGOC in accordance with Bank requirements for EA document content, including a detailed description of the expected environmental impacts, proposed mitigation measures, monitoring, required, if any, environmental capacity improvements in KEGOC, consultation with affected stakeholders and public disclosure of the EMP. KEGOC agreed to provide the Bank with the draft EMP in the required format. The EMP should cover both the transmission line to be built between Ekibastuz and Agadyr and the two substations (Ekibastuz and Agadyr) to be modernized. The final EMP shall reflect the comments and recommendations made by SEEC.

KEGOC has an experienced and well-qualified environmental staff. Under the ongoing, Bank-supported Transmission Rehabilitation Project (Loan No. IBRD 45260 KZ), the agreed EMP has been carried out satisfactorily as evidenced by a number of site visits during the Bank's supervision missions (reported in mission Aide-Memoires). The Bank's Safeguard Implementation Effectiveness Review for Kazakhstan (conducted by Amy Evans in April 2005) has noted that KEGOC has strong capacity to implement the agreed environmental safeguards under the EMP and has appropriate record keeping and documentation in place.

## **II. SAFEGUARD POLICIES THAT MIGHT APPLY**

Safeguard Policies Triggered	Yes	No	TBD
<b>Environmental Assessment (OP/BP 4.01)</b>	X		

For Phase I of the N/S line (already approved), the EBRD rated the project Category B for environmental aspects. A similar World Bank rating is proposed for Phase II for the following reasons:

- The project will be implemented within an exiting right of way or within existing substation property areas. None of these locations include environmentally sensitive areas or involve land of any particular value from an ecological, economic or cultural perspective (no natural habitats, protected areas/forests and areas/structures of cultural value are involved). Modernization of the two substations (Ekibastuz and Agadyr) does not require any land acquisition as it will be done by extending the existing bays to accommodate the new line.

- The project presents well-defined and well-understood environmental issues of narrow scope. The expected environmental impacts are minor, of limited duration, influence a relatively small area and occur primarily during the construction phase. The impacts can be effectively

Safeguard Policies Triggered	Yes	No	TBD
mitigated with well-known and long-accepted practices of sound engineering design and construction management. The fertile topsoil around the tower sites will be removed before the beginning of the earthwork. On completion of the construction, the topsoil will be reclaimed for the whole area disturbed during construction. Construction materials and equipment will be transported using a temporary central road. All vehicles will be serviced in special service areas only. All construction waste will be collected and removed to the sites designated for dumping grounds.			
According to GP 4.01 (Environmental Assessment) Annex B, electrical transmission projects are identified as typical Category B projects.			
The project is expected to bring environmental benefits from transmission loss reduction in the KEGOC-operated high voltage grid from 5.8% in 2003 to 4.5% by 2009. The resulting annual electricity and the associated fuel savings are estimated at 1 TWh and 600,000 tons, respectively. Additional fuel savings will stem from the improved economic dispatch under the new transmission line (i.e., the more fuel efficient, lower cost generators in the north enabled to be brought online more intensively to meet power demand).			
<b>Natural Habitats (OP/BP 4.04)</b>	X		
<b>Forests (OP/BP 4.36)</b>	X		
<b>Pest Management (OP 4.09)</b>	X		
<b>Cultural Property (OPN 11.03)</b>	X		
<b>Indigenous Peoples (OD 4.20)</b>	X		
<b>Involuntary Resettlement (OP/BP 4.12)</b>	X		
<b>Safety of Dams (OP/BP 4.37)</b>	X		
<b>Projects on International Waterways (OP/BP 7.50)</b>	X		
<b>Projects in Disputed Areas (OP/BP 7.60)</b>	X		

**Environmental Category:** B - Partial Assessment

### III. SAFEGUARD PREPARATION PLAN

- A. Target date for the Quality Enhancement Review (QER), at which time the PAD-stage ISDS would be prepared: 07/11/2005
- B. For simple projects that will not require a QER, the target date for preparing the PAD-stage ISDS: N/A
- C. Time frame for launching and completing the safeguard-related studies that may be needed. The specific studies and their timing<sup>1</sup> should be specified in the PAD-stage ISDS.

---

<sup>1</sup> 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.

Preparation of the draft EMP is underway and is expected to be received by end-May, 2005. The final EMP will contain concrete arrangements (including manner of notification, list of attendees and summary minutes of discussion) for the consultation with affected stakeholders and NGOs. KEGOC has already engaged a number of stakeholders (in particular, municipalities) along the N/S line, including preliminary discussions on purchasing/renting construction sites for the line towers. A media campaign has also been launched to sensitize the potentially affected stakeholders to the project

KEGOC agreed with the Bank to publish, by June 15, 2005, the Russian language version of the EMP on its website and provide an English version of the EMP for disclosure at the Bank's InfoShop before appraisal.

#### IV. APPROVALS

<i>Signed and submitted by:</i>		
<b>Task Team Leader:</b>	<b>Mr Istvan Dobozi</b>	<b>05/25/2005</b>
<i>Approved by:</i>		
<b>Regional Safeguards Coordinator:</b>	<b>Mr Ronald N. Hoffer</b>	<b>05/25/2005</b>
<i>Comments:</i>		
<b>Sector Manager:</b>	<b>Mr Motoo Konishi</b>	<b>05/25/2005</b>
<i>Comments:</i>		