Bi-annual Report  
Covering the period of January – June 2015

KGZ: Power Sector Improvement Project

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Abbreviations

ADB Asian Development Bank
SP Affected people
DESC Detailed Engineering and Supervision by Consultants
EARF Environment Assessment and Review of Framework
EIA Environmental Impact Assessment
EMP Environmental management plan
ES Environmental specialist
GRM Grievance redress mechanism
IEE Initial environmental examination
NPE Nature protection examination
PMIC Project Management and Institutional Consultant
PIU Project Implementation Unit
KR Kyrgyz Republic
SNCO State non-commercial organization
PSIP “Power Sector Improvement” project
NEGK National Electrical Grid of Kyrgyzstan
LIG Lahmeyer International/group of Independent Engineers Geneva
SAEPF State Agency for Environmental Protection and Forestry under the
  Government of the Kyrgyz Republic

EMR Environmental Monitoring Report
I. INTRODUCTION

1.1 Project description

1. The Government of the Kyrgyz Republic received the Grant and Loan on December 8, 2010 from Asian Development Bank (ADB) to finance the “Power Sector Improvement” project. The goal of the project is modernization of power transmission networks of the Kyrgyz Republic.

2. Project consists of the following components:
   (i) Equipment supply to replace the existing 500 kV, 220 kV, 110 kV by new ones as well as replacement of instrument transformers and 6/10 kV Switchgears;
   (ii) Equipment procurement – Designing, Supply and Installation of new OPGW, new system of SCADA and Commercial Wholesale metering system (AIMSCAE).

3. This project covers the whole territory of the Kyrgyz Republic. The project will be implemented at 107 substations in Chui, Issyk-Kul, Talas, Naryn, Osh and Jalal-Abad oblasts (Picture 1).

![Picture 1: Project implementation area](image-url)

1.2 Implementation process

4. On March 5, 2013 the JSC “NEG of Kyrgyzstan” (NEGK) signed the Contract with Suppliers Alstom Grid Enerji Endustrisi A.S./Ulusoy Elektrik Imalat Taahhut Ticaret A.S., to supply the equipment. Only supply of equipment was envisaged within the framework of this Contract. The construction and erection (installation) works will be carried out at the expenses of the JSC “NEG of Kyrgyzstan”.

5. On December 1, 2014 the JSC “NEG of Kyrgyzstan” informed ADB regarding the negative take results of tests for presence/absence of PCB in oil filled equipment performed by the Kazakhstan laboratory, whereupon the construction-erection of supplied equipment shall be carried out. At present all the equipment was supplied (500 kV, 220 kV, 110 kV circuit breakers, 500 kV, 220 kV, 110 kV 35 kV, 6/10 kV current and voltage transformers, and 6/10 kV Switchgears). Furthermore, the evaluation of Bids submitted on SCADA and AIMSCAE under second component is being carried out. It is being planned to sign the Contract in July 2015.
6. Currently the Ministry of Energy and Industry of the Kyrgyz Republic (MOEI) is conducting selection of Environmental Specialist, who will procure PCB express analyzers. After procurement of PCB analyzers, the equipment replacement works will start based on the schedule of civil works, which will enable parallel PCB sampling in oil filled equipment.

1.3 Project organizational structure and changes


8. MEI is responsible for (I) management of analysis of calculation mechanisms on electricity wholesale transactions; (II), consulting services management to build the JSC NEGK capacity; (III) control over the project implementation by the JSC NEGK.

9. The JSC NEGK is responsible for management of investment in the project. The existing Project Implementation Unit (PIU) will be the contact person of the JSC NEGK and Department on Project Implementation. Its task will cover the preparation of Bidding Documents, evaluation of Bids, Contract Award, Supervision over the Civil Work and accountability to Government of the Kyrgyz Republic and the ADB.

10. The Consultant on projects management (CPM) - Lahmeyer International/GIEG renders technical assistance to the PIU in management and project reporting. Environmental specialist of CPM is responsible for supervision over the civil and erection works to supervise over the impact on the environment, in particular, to control reporting and submit the reports on implementation of IEE.

11. There were structural changes in the project management:
   - Since the end of December 2014 the JSC NEGK terminated cooperation with the Consultant on project management - Lahmeyer International/GIEG because of poor services when rendering technical assistance to the PIU. Also for incompetence of Consultant on project management in preparation of ecological report that was not acceptable for ADB and the JSC NEGK as well as completion of validity of the Contract.
   - In this connection the JSC “NEGK” plans to employ local specialist on environmental protection in August, 2015.

1.4 Goal and methodology of semiannual report

12. Initial Environmental Examination (IEE) prepared in August, 2010 (updated in June, 2014) contains the Environmental Management Plan (EMP) with accurate arrangements on prevention
and monitoring during the process of planning, construction and operation. One of the important aspects of this plan is distinct description of activities regarding the PCB. In compliance with the ADB’s Safeguards Policy Statement (SPS, 2009) this project corresponds to the category B.

13. The goal of this semi-annual report on environmental monitoring is follow-up the project activity for compliance with the requirements of the EMP. This semi-annual report on environmental monitoring covers the period of January to June, 2015.

II. ENVIRONMENTAL MONITORING

2.1. Environmental monitoring program

14. No construction works were carried out during reporting period and that’s why the environmental conditions (noise and vibration, quality of water and air) were not monitored by tools.

III. ENVIRONMENTAL MANAGEMENT

3.1. Environmental protection program

15. The Initial environmental examination (IEE) was developed under the “Power Sector Improvement” project that was performed in compliance with the requirements of the ADB and approved by the State Agency for Environmental Protection and Forestry under the Government of the Kyrgyz Republic. The ADB approved to post the IEE on JSC “NEG of Kyrgyzstan” web-site and ADB web-site.

16. Environmental management plan (EMP) was developed in the IEE which shall be used for the whole period of project implementation. The following was specified in the EMP:
   (i) Suggested measures to mitigate the impact;
   (ii) Waste oil management;
   (iii) Used electrical equipment management;
   (iv) The List of certified laboratories to test PCB was prepared and approved by the ADB;
   (v) Institutional conditions and measures on capacity development to implement the EMP;
   (vi) Environmental monitoring and report preparation;
   (vii) Initial cost evaluation to carry out the environmental activities.

17. The potential negative impact on the environment might be mitigated through implementation of EMP. Additional environmental investigations shall be continued during project implementation and the EMP shall be updated depending on the new data got to achieve the project environmental goals.

3.2. PCB

18. According to the EMP, the next step is a procurement of PCB express analyzers by the Ministry of Energy and Industry of the Kyrgyz Republic using ADB Grant funds.

19. At the request of the Ministry of Energy and Industry of the Kyrgyz Republic, the JSC “NEG of Kyrgyzstan” submitted the specifications for PCB express analyzers to announce the tender for recruitment of the Consultant within the framework of the given project, who will arrange procurement of PCB express analyzer, conduct training for NEGK staff on proper use of this equipment and do PCB express analyses jointly with NEGK staff on couple of substations included in EMP, as on-site training.

20. At present, the Ministry of Energy and Industry of the Kyrgyz Republic is engaged in development of Terms of Reference for the National Environmental Consultant.
21. Before the civil works start, the JSC “NEGK” will develop the civil works schedule which includes concurrently with the civil work the PCB express analyses of oil filled equipment to identify the PCB content and to inform the Committee on results of the analyses;

   (II) Rapid analyses will be carried out by the “NEGK” laboratory in the presence of the Committee;
   (III) Results will be recorded as the Protocol and should be signed by the Committee members;
   (IV) Equipment with identified PCB is a subject to full laboratory tests.

3.3 Management of SF6 equipment

22. On June 2, 2014, the JSC “NEG of Kyrgyzstan” sent a letter to ADB requesting for approval of installation of SF6 equipment to replace the existing ones. In its turn, the JSC “NEG of Kyrgyzstan” undertook to meet the environmental requirements, specified in the Initial Environmental Examination (IEE) developed in compliance with requirements of the nature conservation legislation of the Kyrgyz Republic and Safeguard Policy Statement (SPS) of ADB. In reply to that, the ADB gave “no objection” on June 4, 2014 to carry out installation of SF6 equipment replacing the existing ones.

23. At present, the erection of SF6 equipment replacing the existing ones is being carried out. The old SF6 equipment is under operation now.

3.4. Grievance Redress Mechanism

24. Requirements, to redress the complaints, of Reporting Mechanism Policy of the ADB (2012) and Safeguard Policy Statement of ADB (SPS, 2009) principally meet the requirements of the Law of the Kyrgyz Republic “On processing of complaints of citizens” (2007). The existing differences in terms to process the complaints, specified as 30 days in the Law of the Kyrgyz Republic and 14 days specified in the Reporting Mechanism Policy of the ADB were eliminated by the Order of the General Director of the JSC “NEG of Kyrgyzstan” on May 22, 2014. The Order aims “NEGK” quick response to process the complaints.

25. The applications (written requests) and complaints received shall be registered in the General Clerical Department in the Log Book and handed over to the administration for consideration. Taking into account the nature and the subject matter, next step shall be to assign responsible person, who is competent to consider the complaint received, that shall be considered within 30 days, the applicant or claimant shall be provided with an answer which shall be recorded in the Log upon execution.

26. No complaints or requests, related to the project, were received during the reporting period in 2014.

3.5. Meetings and communication

27. Meetings were held regularly during the reporting period, where the representatives of the JSC “NEG of Kyrgyzstan”, ADB and Consulting Company (LIG) participated several times. The environmental issues were discussed regularly at those meetings.

3.6. Consultations with public

28. In order to inform the public on the project implementation and measures, that shall be taken to provide with environmental safety, the JSC “NEG of Kyrgyzstan” posted the IEE and Environmental monitoring report (EMR), approved by the ADB, on the web-site.

3.7. Comments on deviations
29. In connection with the fact, that the civil work under the project is being delayed because of the PCB issues had been suspended, the Ministry of Energy and Industry of the Kyrgyz Republic is recommended to accelerate the procurement of PCB rapid analyzers.

30. Since the end of December 2014 the JSC “NEGK” terminated cooperation with the Consultant on project management - Lahmeyer International/GIEG because of poor services when rendering technical promotion to the PIU. Another reason was incompetence of Consultant on project management in preparation of ecological report that was not acceptable for ADB and the JSC “NEGK”. In this connection, the JSC “NEG of Kyrgyzstan” should employ the local specialist on environmental protection in August, 2015.

3.8. Corrective Action Plan

31. During reporting period the project has been implemented in accordance with the ADB Policy on environmental protection, but the project implementation is being delayed to some extent because of PCB testing issues suspension. Further, the Corrective Action Plan is given to solve above mentioned problems.

32. MOEI of the Kyrgyz Republic, within the frame of the project supposed to hire Environmental Specialist with PCB sampling experience. This person will be responsible for procurement of two sets of PCB express analyzers and training of NEGK technical staff.

33. NEGK Environmental specialist will be responsible for overall environmental compliance of the project, including environmental monitoring, reporting.

34. In order to achieve the compliance with the EMP, the following corrective actions should be carried out in close cooperation with the ADB, MEI, and Contractor (Table 1):

<table>
<thead>
<tr>
<th>№</th>
<th>Environmental issues identified</th>
<th>Corrective actions taken</th>
<th>Terms to solve the issues</th>
<th>Responsible for implementation/supervision</th>
</tr>
</thead>
</table>
| 1. | Lack of portable PCB analyzers for rapid test of transformer oil. | - ToR developed. 
- Selection of Environmental Specialist (ES) by MOEI; 
| 2. | Lack of environmental specialists | - Development of TOR. 
- Selection of Environmental Specialist. | - April, 2015. - August, 2015. | PIU, JSC “NEGK” |