

Environmental Monitoring Report

Bi-annual Report (CJSC High Voltage Electric Networks)
Covering the period of January – June 2016

ARM: Power Transmission and Rehabilitation Project

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Prepared by the Closed Joint Stock Company High Voltage Electric Networks (HVEN), with the assistance of CONSECOARD LLC, for the Republic of Armenia and the Asian Development Bank (ADB).

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Table of Contents

Part I	Introduction	1
Part II	Environmental Monitoring	1
Part III	Environmental Management.....	2
Part IV	Action Plan for the Next Period	3

PART I INTRODUCTION

Power Transmission Rehabilitation project will increase the efficiency of power system operation and reduce transmission losses, which are essential to improve operational energy security and reduce emissions of greenhouse gases. Rehabilitation of existing substations will improve the reliability and quality of power supply to urban and rural consumers, alleviating regional disparities within Armenia and supporting inclusive and sustainable economic development. In addition, an efficient and reliable power system will facilitate expanding cross-border power trade in the region.

The Project covers the following components: **Rehabilitation and Extension of four High-Voltage (HV) Grid Substations**. This component covers the substations Agarak 2, Shinuhayr, Yeghegnadzor and Ararat 2. Agarak 2 and Shinuhayr substations (Lot 1) will be financed by ADB.

The rehabilitation of the substations includes the installation of new autotransformers (only in Agarak 2), replacement of obsolete voltage transformers, surge arrestors, circuit breakers, disconnectors, post insulators, steel gantries, towers (supports) and foundations, control & monitoring equipment, protection equipment, batteries and other secondary systems. The rehabilitation of “Agarak 2” and “Shinuhayr” substations will be from 2016 up to end-2018.

On 5 September 2014 project Loan Agreement was signed between Republic of Armenia (Borrower) and Asian Development Bank in the amount 23.400.000 USD. Co-financing part (taxes and duties) is the responsibility of HVEN.

The project classified as environmental "B" category.

The Project will be implemented by High Voltage Electric Networks Closed Joint Stock Company (HVEN CJSC) who will be the Project Executing Agency, according to the Loan Agreement.

The Project Implementation Unit (PIU) in HVEN will manage the project on behalf of HVEN.

PART II ENVIRONMENTAL MONITORING

No environmental monitoring program is developed and implemented during the reporting period. Also no on-site monitoring was needed since no construction activities were implemented during the reporting period.

The monitoring program will be developed with the construction contractor as a part of contractor's SEMP prior to the start of construction activities. Monitoring plan will be approved by PIU and Supervision consultant.

The Program is subject to amendments and update upon the need during the implementation of the Project.

The most important ones are the followings:

1. The Mission requested that until PSMC and PIU's environment staff are mobilized the PIU's Environment consultant will ensure Construction Contractor's tender documents include the approved EMP and a safeguard manager position.
2. PIU is in the process of establishment of GRM. Logbooks will be kept in each substation.
3. When PIU and consultant's environmental staff will be on board ADB's National environmental consultant will provide trainings on ADB's and national legislation safeguard requirements. With assistance of the ADB's consultant, PIU and PSMC will determine the need and appropriate steps for PCB-oil test of the equipment which was tested during the IEE stage.

All these suggestion has been taken into consideration and will be included in the tender documentation.

PART III ENVIRONMENTAL MANAGEMENT

The PIU has been established within Correct Investment Department. PIU is going to hire environmental specialist in the III quarter of 2016.

During the feasibility study phase, Fichtner company (selected by ADB for technical assistance) has conducted studies and an Initial Environmental Examination (IEE) report has been prepared. The final IEE has been approved by ADB in May 2014. In this phase there were also implemented public notice and public hearings.

Project Supervision and Management Consultant Contract for the rehabilitation of four (4) Substations (Agarak-2, Shinuhayr Eghegnadzor, Ararat-2) was signed on 20.11.2015 between HVEN CJSC and CESI S.p.A, INCICO S.p.A. JV. The effective date of the contract is June 13, 2016. At that point CESI S.p.A, INCICO S.p.A. JV are mobilizing the team. Environmental specialist of consulting company Mrs. Nicoletta Cremonesi confirmed her availability to work for the project. Rehabilitation of 220/110kV Agarak-2 and Shinuhayr substations contract was concluded on 06.05.2016 between HVEN CJSC and Liaoning-Efacec Electrical Equipment Co. LTD, Northeast China International Electric Power Corporation JV. The effective date of the contract is June 23, 2016. The environmental team of General Contractor has not been made up. It is envisaged that Contractor will start preparation of the required environmental documents (HSE plan) in the third quarter and Supervision Consultant and PIU will approve the documents. The contractor shall follow these management plans and shall, additionally to their HSE policy and goals, prepare a project specific HSE policy, outlining the HSE targets and plans which, after approval PIU and Supervision Consultant, shall undergo the continuous implementation, updating and improving during the various project phases.

PART IV ACTION PLAN FOR THE NEXT PERIOD

The project feasibility study, technical specifications and bidding documents for the works contracts have already been prepared in accordance with the respective ADB procurement policies and guidelines.

Based on the developed Environmental Management Plan the selected general contractor must establish an action plan for every 6 months which will be approved by PIU and supervision consultant.

Based on the IEE, as well as on its studies, the general contractor, after the erection, will develop the Site specific Environmental Management Plan 28 days before the construction works start.