

# Environmental Monitoring Report

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Project Number: 47017-003  
Grant Number: 0417-TAJ  
Semi-Annual Report  
September 2020

## TAJ: Wholesale Metering and Transmission Reinforcement Project

Prepared by: Mercados-Aries International for Barqi Tojik of the Republic of Tajikistan and for the Asian Development Bank (ADB).

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## Abbreviations

ADB	Asian Development Bank
BT	Barqi Tojik
CEMMP	Contractor's Environmental, Health and Safety Management and Monitoring Plan
CT	Current Transformer
EHS	Environmental, Health & Safety
EMP	Environmental Management Plan
ESMP	Environmental and Social Management Plan
HPP	Hydropower Plant
FAT	Factory Acceptance Test
IEE	Initial Environmental Examination
kV	Kilovolt
MVA	Megavolt Ampere (unit used to measure apparent power)
NCN	Non-Conformity Note
OHTL	Overhead Transmission Line
PAM	Project Administration Manual
PIC	Project Implementation Consultant
PMU	Project Management Unit
PPE	Personal Protective Equipment
RoW	Right-of-Way
SS	Substation
SEMP	Specific Environmental Management Plan
SAEMR	Semi - Annual Environmental Monitoring Review
SSEMP	Site-specific Environmental Management Plan
TL	Transmission Line
VT	Voltage Transformer

# **1 INTRODUCTION**

## **1.1 Preamble**

1. This report represents the Semi - Annual Environmental Monitoring Review (SAEMR) for the Wholesale Metering and Transmission Reinforcement Project.
2. This report is the 9<sup>th</sup> EMR for the project for the January-June 2020 reporting period.
3. The Project has been extended until January 2022 after the incorporation of LOT 3.

## **1.2 Headline Information**

4. In Lot 1 on Wholesale Metering System, the meters Factory Acceptance Test (FAT) was conducted successfully in July 2018 by the Contractor Huawei/ TBEA. The Contractor has selected the subcontractor Cuculus GmbH for the software part. A problem with the firmware of the meters has been detected, so the testing of the firmware supposed to be repeated along with the meters firmware update at the in the substations. Firmware activities are still on a pending stage because of movement limitation caused by the Covid-19 virus. Meter deployment in all the substations is undergoing and 87% of them have been installed as of end of June, 2020. The construction of the foundations and erection of the Current and Voltage Transformers inside the substations was completed by September 2019.
5. Regarding the Amendment 2 of Lot 2's work, which includes the renovation of 110 kV switchyard at Rudaki Substation, it started in April 2018. Every activity was developed inside the plot of the Substation and on a working installation. TBEA completed the construction of OHL in October 2018. Renovation of SS Rudaki and extension of SS Ayni were completed in March 2019.
6. The object of the additional subproject (LOT 3) is to enhance the system enabling it to control the fluxes of energy in the Transmission Grid item by item from higher to lower levels, meaning all the items, lines, power transformers and busbars in the levels of voltage 500, 220, 110 and 35 kV. The objective is increasing redundancy of measurements on the top levels and full control of losses. Besides, it can provide relevant information of fluxes of energy between different segments of the grid. LOT 3 activities are executed inside the substations which are already owned by Barqi Tojik and are located geographically around the country at the substations in the Khatlon region (Vakhsh, Yavan, Kulyab and Nurek districts), Sughd region (Isfara, Istarafshan, Khujand, Penjakent) and the Regions of the Republican Subordination (Rasht and Varzob districts). The environmental assessment was carried out and environmental safeguards DDR was approved in 31 March 2020, concluding that the implementation of

this sub-project will have limited potential environmental impacts that will have to be mitigated through the designed Construction Environmental and Social Management Plan (CESMP).

## **2 PROJECT DESCRIPTION AND CURRENT ACTIVITIES**

### **2.1 Project Description**

7. The Republic of Tajikistan has received a grant from the Asian Development Bank (ADB) towards the cost of the Wholesale Metering and Transmission Reinforcement Project. It is expected that the proposed project will improve electricity supply to households and industries in the country by reducing losses through metering entire high and medium voltage transmission grid and expand transmission capacity in Panjakent region that used to suffer from load shedding.

Parts of this financing are being used for payments under the contract for: Lot 1) Installation of 1,682 wholesale meters and settlement system including 846 current transformers and 744 voltage transformers in most of the substations along the country, introduction of an advanced metering infrastructure, and introduction of a settlement system; Lot 2) Rehabilitation of Substation Rudaki, Extension of Substation Ayni and Construction of new 220 kV Over Head Transmission Line (OHTL) between Substation (SS) Ayni 220 kV and SS Rudaki, approximately 95 km of new single circuit single conductor with rated capacity of 320 MVA; and the new Lot 3) . Replacement or installation of 448 smart meters and 121 metering panels in 175 substations, replacement or installation of 300 current transformers (CTs), 105 voltage transformers (VTs) and 196 arresters, installation of modems/data concentrators in the substations, installation of meter cabinets, overvoltage limiters and other minor equipment, communication equipment installation, testing, commissioning and training.

8. The location of the Lot 2 Project component is presented below in Figure 1 in the scale of the country.



Figure 1. Location of the Project (Lot 2)

9. The location of the Project component Lot 3 is presented below in Figure 2.

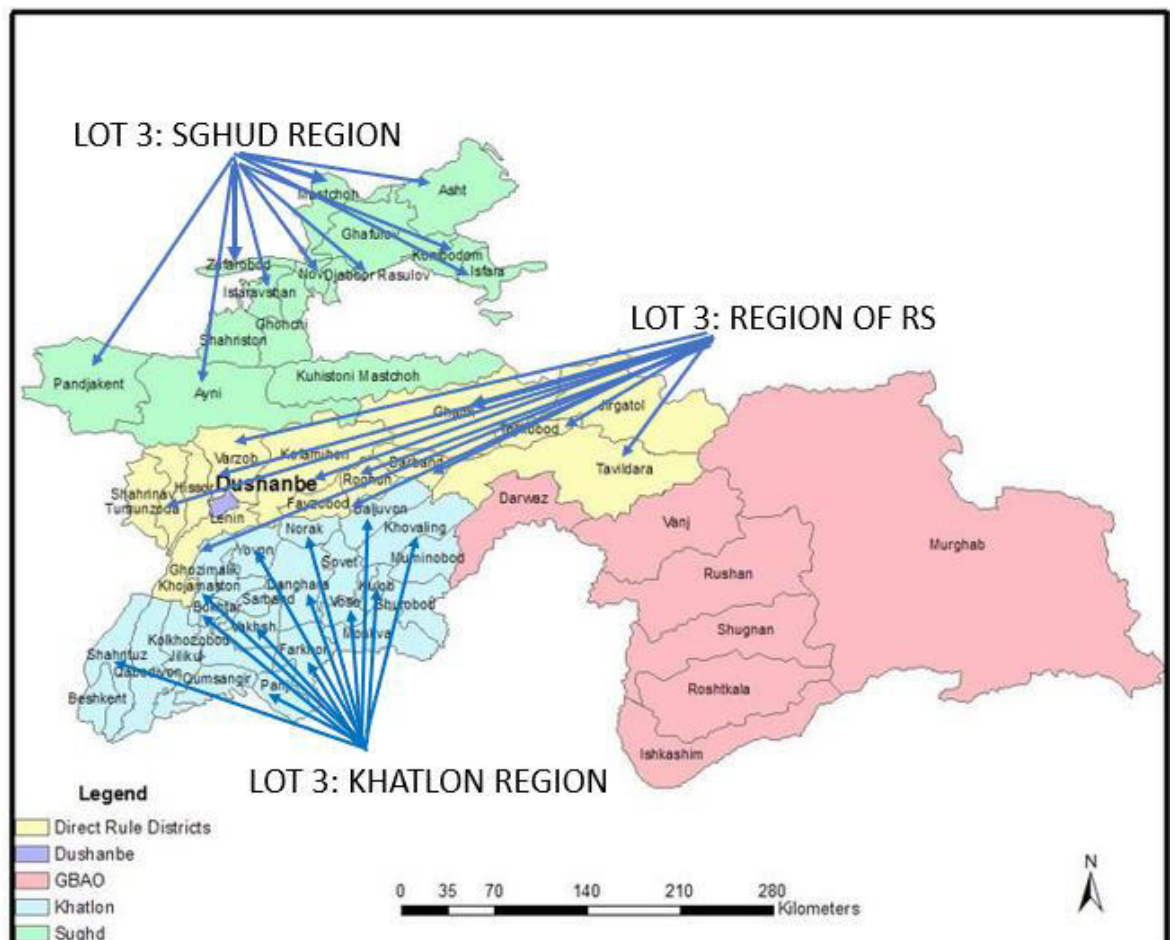


Figure 2. Location (through arrows) of the SSs in the scope of LOT 3 activities.

## **2.2 Project Contracts and Management**

10. The Executing Agency for the Project is the public Open Stock Holding Company Barqi Tojik. The Executing Agency has set up a Project Management Unit (PMU) to manage daily coordination, implementation, monitoring and administration activities of the Project.
11. The PMU includes the Projects Monitoring Department whose responsibilities include, among other things, the management of all social and environmental aspects of the project. The Head of the Environment of the Projects Monitoring Department is Mr. Karimov Sirojiddin. The Chief EHS Specialist at the PMU is Mr. Aziz Holov. Both of them take also formally care of the social aspects.
12. The Project Implementation Consultant (Mercados-Aries International, formerly AF-Mercados) is providing technical assistance to the PMU in the management and reporting of the project. The PIC is responsible for supervising and reporting on the Contractor's performance in the implementation of the environmental safeguards. The contract with Mercados-Aries International was signed on August 2015 and the current closing date is February 2022.
13. The PIC's international environmental safeguards specialist was Mr. Pasi Vahanne and the national environmental safeguards specialist was Ms. Muazama Burkhanova until July 2018. Afterwards, position was taken by the international safeguards specialist is Mrs. Patricia Ramos Peinado. Given that Mrs. Ramos could not travel to Tajikistan during the period January-June 2020 due to the COVID-19 pandemic, the national environmental expert, Isaev Davron took care of the remote monitoring on safeguards for the period 2020.
14. The EHS management of the project for the reporting period 2020 S1 is as shown in the updated Figure 3.



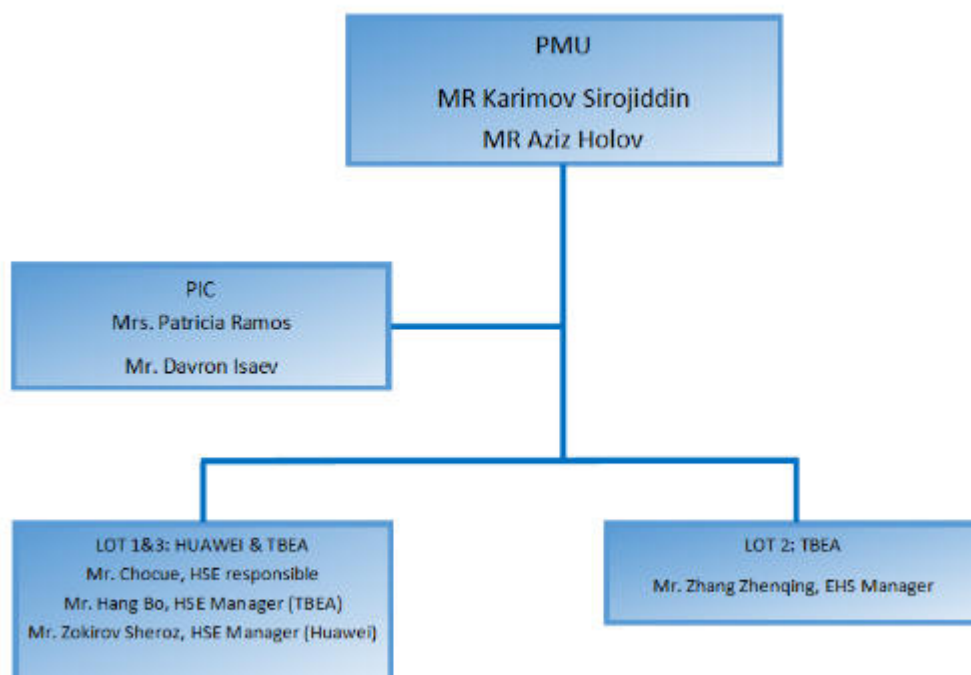


Figure 3. Safeguards management of the project for 2020 S1.

15. The contractors for Lot 1 are Huawei & TBEA. The contract was signed on 6 December 2016 and the original completion date was July 4, 2019. The contract was extended until 1 March 2020. The Contractor has requested a contract extension of 5 months due to the period that the implementation has been on-hold due to the COVID-19 pandemic (from 13 April to end July 2020). The contractor for Lot 2 is TBEA and the contract was signed on 28 December 2015 and its end date as stated in the amendment 4 of the contract is 31 December 2019. The contract was extended until 1 March 2020. The LOT 3 is on a bidding stage. According to revised schedule which takes into account the amendment on the works (LOT 3), the Project will be completed in January 2022.
16. The names of the main parties and focal points involved in the project can be found in Annex I together with their updated contact details.
17. The contracts are being managed by the Project Management Unit of the power utility Barqi Tojik with the support of the consultancy company Mercados-Aries International in the role of Project Implementation Consultant.

## 2.3 Project Activities During Current Reporting Period

18. Construction activities for the reporting period are described in Table 1 below. Lot 2 was fully completed in a previous period and Lot 3 is still on a bidding stage. The

implementation of LOT 3 activities was put on hold since April 13 until at least the end of June due to the COVID-19 pandemic.

Table 1. Progress on the construction activities on Lot 1.

N	Month 2019	Construction activities	Percentage of completion
1	January	Lot 1: Replacement and/or Installation of the CTs/VTs.	100%
		Lot 1: Installation of meters.	65.5%
2	February	Lot 1: Replacement and/or Installation of the CTs/VTs.	100%
		Lot 1: Installation of meters.	75 %
3	March	Lot 1: Replacement and/or Installation of the CTs/VTs.	100%
		Lot 1: Installation of meters.	86.67%
4	April	Lot 1: Replacement and/or Installation of the CTs/VTs.	100%
		Lot 1: Installation of meters.	87%
5	May	Lot 1: Replacement and/or Installation of the CTs/VTs.	100%
		Lot 1: Installation of meters.	87%
6	June	Lot 1: Replacement and/or Installation of the CTs/VTs.	100%
		Lot 1: Installation of meters.	87%

19. In Lot 1 on Wholesale Metering System, the meters Factory Acceptance Test (FAT) was conducted successfully in July 2018 by the Contractor Huawei/ TBEA. The Contractor has selected the subcontractor Cuculus GmbH for the software part. A problem with the firmware of the meters has been detected, so the testing of the firmware will have to be repeated and the firmware at the meters in the substations will have to be updated. Due to the global pandemic situation with COVID-19 selected German subcontractor Cuculus GmbH could not travel to Tajikistan, hence, firmware testing and adjusting activities are still pending. The construction of the foundations and erection of the Current Transformers (for commercial metering points in 110 kV, 35 kV, 10 kV and 6 kV systems) and Voltage Transformers (for commercial metering points in 110 kV, 35 kV, 10kV, 6kV and 0.4 kV) inside the substations was completed by September 2019. Meter deployment in all the substations located along the country is undergoing and 87% of them have been installed now. The meters installation was put on hold on April 13 up to the end of July to reduce the risk of Contractor specialists getting infected by COVID-19 coronavirus when flying to the country and spreading it in Tajikistan as expressed by the Contractor on the letter with reference "Lot 1 -HUAWEI&TBEA-PMU-LE-20-0053".
20. The project activities for Lot 2 are the reinforcement of the transmission grid in the Panjakent area, through the construction of a 220 kV Over Head Transmission Line (OHTL) between Ainy and Rudaki Substations, the enhancement and renovation of

Rudaki SS, and the construction of a new bay in Ainy SS. The Contractor TBEA completed the works on 25 January 2018 for the original scope.<sup>22</sup> Regarding the Amendment 2 of Lot 2's work, which is the renovation of 110 kV switchyard at Rudaki Substation, it started in April 2018. Every activity was developed inside the plot of the Substation and on a working installation. TBEA completed most of the works for the variation order on 13 September 2018.

21. The objective of the additional subproject (LOT 3) is to enhance the system enabling it to control the fluxes of energy in the Transmission Grid item by item from higher to lower levels, meaning all the items, lines, power transformers and busbars in the levels of voltage 500, 220, 110 and 35 kV. The objective is increasing redundancy of measurements on the top levels and full control of losses. Besides, it can provide relevant information of fluxes of energy between different segments of the grid. LOT 3 activities are executed inside the substations which are already owned by Barqi Tojik and are located geographically around the country at the substations in the Khatlon region (Vakhsh, Yavan, Kulyab and Nurek districts), Sughd region (Isfara, Istarafshan, Khujand, Penjakent) and the Regions of the Republican Subordination (Rasht and Varzob districts). As of submitting this report implementation of LOT 3 is on a bidding stage.
22. Face to face public consultations could not be performed due to quarantine measures imposed against the spread of COVID-19 coronavirus. The composed information leaflet and an explanatory letter from the PMU were sent to the heads of district environmental protection departments by e-mail through the Environmental Protection Committee under the Government of the Republic of Tajikistan.
23. In the table below, it can be seen the number of workers employed for each lot during the reporting period.

Table 2. Number of Workers involved in each Lot.

Project lots	Number of workers
Lot 1	40
Lot 2	0
Lot 3	0 (on a bidding stage)

## 2.4 Description of Any Changes to Project Design

24. An Amendment number 2 to the contract with the Lot 2 contractor and the Project

Implementation Consultant (PIC) were signed in order to include in the project scope the rehabilitation of the 110kV bays at Rudaki SS. The “Due Diligence Report Social and Environmental Issues Barqi Tojik and TBEA Amendment no.2 to contract Lot 2” was prepared in October 2017. The implementation of this variation order started in 16 February 2018 and it got mostly completed by 13 September 2018. The completion certificate was issued on 27 September 2018.

25. Lot 3 activities have been added to the project scope in June 2020. The objective of the additional subproject is to enhance the system enabling it to control the fluxes of energy in the Transmission Grid item by item from higher to lower levels, meaning all the items, lines, power transformers and busbars in the levels of voltage 500, 220, 110 and 35 kV. The objective is increasing redundancy of measurements on the top levels and full control of losses. Besides, it can provide relevant information of fluxes of energy between different segments of the grid. Specifically, LOT 3 involves the replacement or installation of 448 smart meters and 121 metering panels in 175 substations, replacement or installation of 300 current transformers (CTs), 105 voltage transformers (VTs) and 196 arresters, installation of modems/data concentrators in the substations, installation of meter cabinets, overvoltage limiters and other minor equipment, communication equipment installation, testing, commissioning and training. LOT 3 activities are executed inside the substations which are already owned by Barqi Tojik and are located geographically around the country at the substations in the Khatlon region, Sughd region and the Regions of the Republican Subordination. The Initial Environmental Examination (IEE) for the whole Project, is being updated to incorporate the LOT 3 activities.

## **2.5 Description of Any Changes to Agreed Construction Methods**

26. No changes.

## **3 ENVIRONMENTAL SAFEGUARD ACTIVITIES**

### **3.1 General Description of Environmental Safeguard Activities**

27. Due to the restrictions of movement for slowing down the infections by COVID-19 coronavirus imposed by the PMU, the Government of Tajikistan and other governments, it was not possible for the International Safeguards Specialist to travel to Tajikistan and perform the site visits. Given that scenario, the National Safeguards Specialist hold meetings and interacted through emails and calls with the PMU and the main contractor to gather the relevant information. No complaints were received, and no accidents

happened during the reporting period, as per information from the PMU. The SSEMPs are being generally implemented except some issues that can be found on Table 4.

### 3.2 Site Inspections

28. No site visits were implemented by the International Safeguards specialist of PIC within January-June 2020 period due to restrictions on movement caused by COVID-19 pandemic. Follow-up on the non-conformities were carried out by HSE engineers of Contractor and ES of PMUES as well as the PIC.
29. Given that no site visits could be performed by the PIC within January-June 2020, site visits will be performed by the PIC in July 2020 and in November or December 2020 (if the situation of the COVID-19 pandemic allows it).
30. This is the summary of the findings of the inspections undertaken in the current period:

Main finding	Corrective actions applied or needed	Status
<u>LOT 2</u> Mayor: The set concrete floors were still in place in the Ayni former labor camp (as informed by the PMU)	Ayni officials asked PMU to demolish the concrete floor and clean the debris to bring the site back to the previous condition before the installation of the labor camp.. Following this, PMU officially notified TBEA . No action has been taken yet by TBEA (see copy of letter in Annex II).	Pending
<u>Lot 2</u> Minor: Waste generated when dismantling the workers camp near Ayni SS was found around.	Collect and manage safely the waste.	Solved. Closed.

### 3.3 Issues Tracking (Based on Non-Conformance Notices)

32. The status of corrective actions proposed during the previous reporting periods that are still pending is presented in Table 5 below. Within the reporting period, PMU issued two major non-conformance notices to the contractor. The first identified non-conformance letter is related to the issue with the Ayni work camp concrete floors removal (see Annex II for the copy of PMU letter to the contractor). The second identified non-conformance letter is related with the lack of submission of the semi-annual safeguards monitoring reports by the contractor (see Annex III for the copy of PMU letter to the contractor).

*Table 5. Environmental issues tracking.*

Date of the SAEMR	Non-conformity	Corrective actions applied or needed	Status
2019 S2	<u>Lot 1 and 2</u> Mayor: Contractor's		Pending.

Date of the SAEMR	Non-conformity	Corrective actions applied or needed	Status
	Monthly Environmental Monitoring Reports not available	Contractor to submit the Monthly Environmental Monitoring Reports since July 2018.	
2019 S2	Lot 1 (Akademgorodok, Vostochnaya and Shursay Substations) Mayor: Reinstatement of the area around the poles of installed CTs and VTs was not done yet, no compacting and gravelling done.	Compacting and gravelling has to be done in the substations in order to reinstate the area around the poles of installed CTs and VTs.	Unknown. No site visit could be performed during January-June 2020 due to the COVID-19 pandemic.
2019 S2	Lot 1 Minor: Some plastic waste, oily rags and empty cans were observed at Akademgorodok substation.	Waste to be collected and disposed safely.	Unknown. No site visit could be performed during January-June 2020 due to the COVID-19 pandemic.
2019 S2	Lot 1 Mayor: No grievance book available at the substations where works are performed.	TBEA workers brigades shall bring a grievance book with them when they move from substation to substation to perform the works.	Pending (as per information facilitated by TBEA)
2019 S2	Lot 2 Mayor: Soil polluted with refrigeration oil from the uninstalled autotransformers in Rudaki Substation. The 7 metal tanks in the regional BT warehouse next to the substitution continue to drip oil.	Barki Tojik has to perform/organize the safe pick-up and disposal of the soil polluted with refrigeration oil. Certificate from the hazardous waste dumping site will have to be submitted to the PIC safeguards Specialist. Fixing the 7 metal tanks (turners and seals) so the refrigeration oil does not get spilled.	Unknown. No site visit could be performed during January-June 2020 due to the COVID-19 pandemic.

33. Summary of Issues Tracking Activity for current period.

*Table 6. Summary of Environmental and H&S Issues Tracking Activity for Current Period*

<b>Total Number of Issues for Project</b>	7
<b>Number of Open Issues or issues with unknown status</b>	6
<b>Number of Closed Issues</b>	1
<b>Percentage Closed</b>	14%
<b>Issues Opened this Reporting Period</b>	1
<b>Issues Closed this Reporting Period</b>	1

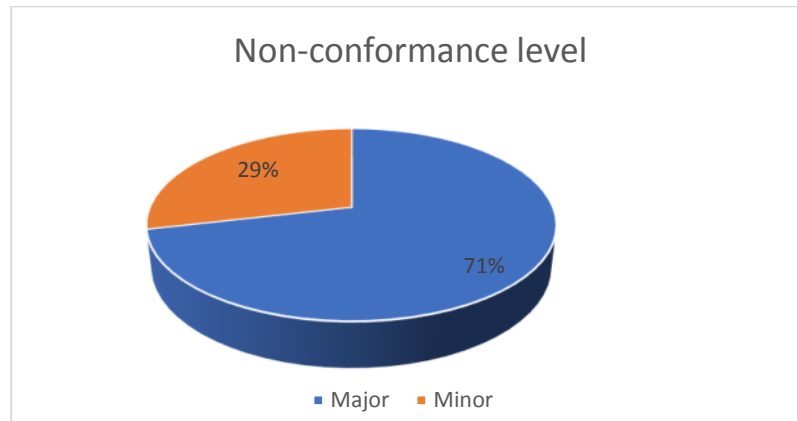


Figure 14. Summary of issues by non-conformance level for Current Period. Note: no site visits could be performed due to COVID-19.

### 3.4 Trends

34. The trends from previous period reports and the current period information are shown in Table 7.

*Table 7. Trends on % of closed issues and % of issues closed late.*

Semi-Annual Report No.	Total No. of Issues	% Issues Closed	% Issues Closed Late or still open
8	7	14	86 (Note: no monitoring site visits could be performed due to COVID-19)
7	9	22	78
6	8	12	88
5	6	50	50
4	11	100	0
3	10	70	30
2	13	85	15
1	12	92	8

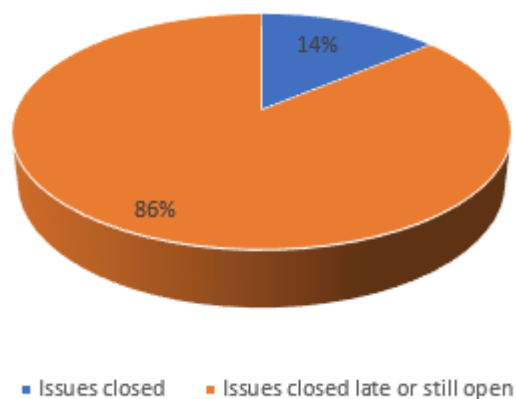


Figure 15. Summary of issues by time it gets to close them in the current semi-annual report.

35. The percentage of issues that get closed early is medium-low. Anyway, during the current reporting period January-June 2020, no site visits could be performed due to the COVID-19 pandemic. Some of the non-conformities which status is unknown might have been solved. There is a recurrent trend for Contractor not submitting the Monthly Safeguards Monitoring Reports. They were received only during the first four months for Lot 2 and they have never been received in relation to Lot 1. Barqi Tojik issued several non-conformance notices on it, the last one dated 16 April 2020 can be found in Annex IV.

### **3.5 Unanticipated Environmental Impacts or Risks**

36. No unanticipated environmental impacts/risks were observed in this reporting period.

## **4 RESULTS OF ENVIRONMENTAL MONITORING**

### **4.1 Overview of Monitoring Conducted during Current Period**

37. Environmental Monitoring typically consists of two kinds of activities; visual inspections and inspections at the construction sites, and measurements to gain numerical data. Environmental Monitoring Lot 1 and Lot 2 of the Wholesale Metering and Transmission Reinforcement Project is based on the IEE and ESMP attached to it, as well as on Contractor's Environmental Monitoring Plan.
- a. Air Quality. In accordance with EMP/SSEMP no instrumental measurement of air quality is foreseen, only visual observations. Vehicles of Contractor were regularly maintained. No other emissions observed/recorded.
  - b. Water Quality. In accordance with EMP/SSEMP no instrumental measurement of water quality is foreseen, only visual observations.
  - c. Noise. All works during the reporting period were conducted inside the SS and included mostly assembly and installation. Therefore, there was no need to measure the noise level.
  - d. Flora and fauna. All works during the reporting period were conducted inside the SS. No illegal pouncing or cutting of trees were recorded.

### **4.2 Trends**

38. Non-applicable.

### **4.3 Summary of Monitoring Outcomes**

39. Non-applicable.



## 4.4 Material Resources Utilization

### 4.4.1 Current Period

40. The contractors are only aware of the cumulative resource utilization.

### 4.4.2 Cumulative Resource Utilization

41. Water consumption in the substations under Lot 1 has been estimated on 8,370 liters for drinking only, the workers stay in dormitories, hotels and houses. The implementation of LOT 1 activities was put on hold since April 13 due to the COVID-19 pandemic.
42. The estimated gasoline consumption for lots 1 and 2 has been 17 tons and 121 tons of diesel since the beginning of the implementation.

### 4.4.3 Waste Management

43. Under Lot 1, 1.5 tons of domestic and hazardous waste have been generated and they have been channelized through the licensed local waste management companies that have frame contracts in place with the BT substations. Un-installed substation equipment will be transferred to several BT's warehouses to reuse the components as spare parts.

### 4.4.4. Cumulative Waste Generation

*Table 8. Cumulative waste generation in the project*

# of Lot	Non-hazardous waste	Hazardous waste	Un-installed equipment
<b>Lot 1</b>	Very limited generation of domestic waste. The wood boxes where the equipment is transported are collected by people to use them. Other non-hazardous waste is managed by the licensed local waste management companies that have frame contracts in place with the BT substations.	The little pieces of cables are given to a cables manufacturing company. Rest of hazardous waste managed by the licensed local waste management companies that have frame contracts in place with the BT substations.	Kept at Barqi Tojik warehouses to be used as spare parts in the future.
<b>Lot 2</b>	Agreement with a certified solid waste management company for all the activities.	Most of them were brought to Dushanbe. During the construction, the gravel polluted with oil was sealed in a box and put on a special dump site near the border with Uzbekistan.	Kept at Barqi Tojik warehouse in Sughd province to be used as spare parts in the future.
<b>Lot 3</b>	On a bidding stage.	On a bidding stage.	On a bidding stage.

## **4.5 Health and Safety**

### **4.5.1 Community Health and Safety**

44. During the current reporting period January–June 2020 no accidents and incidents have been recorded.

### **4.5.2 Workers Health and Safety**

45. Because of COVID-19 coronavirus pandemic, the implementation of LOT 1 activities was put on hold. This measure taken by the Contractor in agreement with the PMU aimed as preserving the good health of the Specialist workers of the Contractor (by avoiding them to fly to Tajikistan) and the community. A five-months contract extension has been requested by the Contractor for this reason. The following related activity has been included in the Action Plan: LOT 1 Contractor should develop a COVID-19 pandemic management plan as part of the SSEMP, the Contractor shall specifically prepare an attachment to the Site-Specific Environmental Management Plan (SSEMP) in terms of health and safety plan (HSP) and emergency response plan (ERP). The basic rules for avoiding the spread of COVID-19 and the main considerations to be incorporated in an updated version of the SSESMP can be found on Annex 4.
46. PIC workers, especially those based in Dushanbe and working through the subcontractor Taj Hydro, were asked to work from home from mid-April and only going to the office if strictly necessary. This affected a Sr. Power Engineer (Mrs. Gulchekhra Samadova) and the office coordinator (Mr. Inomullo Mirboboev). If having to perform site visits, the PMU head requested to get expressly his previous approval. The PIC's Back to the Office Manual for PIC's staff in the Dushanbe office that was issued in June can be found in Annex IV. The PIC also performed a COVID-19 risk analysis of the project at the request of the PMU. That risk analysis foresees a potential 6 months delay in the implementation of LOT 3.
47. In relation to the on-going Lot 1, 4 brigades of TBEA workers move from one substation to another to perform the civil works (mainly digging by hand). They are different to the 6 installation brigades of voltage transformers and current transformers that follow them. The Contractor expressed that there was no accident since they started with the works on October 10, 2018. Some Tajik people have been hired for doing the civil works, but most of them are Chinese workers. After the acceptance of the works in relation to the new foundations for the new equipment, the moved soil has to be compacted, and the gravel has to be put back.
48. The Contractor EHS responsible for LOT 1 pointed out that a training on H&S is provided to all the workers before they start to work in the project. The contents of that

training are: First aid for people who got in touch with electrical current and emergency cases; First aid for people who got injured; Conducting artificial reanimation; Reliving a suffering person from electrical current; Other: safe techniques for decommissioning an electrical device. The document indicates the location of the hospitals in the surrounding of the substations.

49. The Contractor EHS responsible for LOT 1 pointed out that a remainder on H&S is provided to all the workers daily before they start their tasks. He said that the workers are using the required Personal Protective Equipment (PPE).

## 4.6 Grievance and Redress Mechanism

50. There were no complaints recorded during this reporting period as per the PMUES feedback. It will be assessed independently in the next reporting period.

## 4.7 Training

51. Health and safety briefings for workers under Lot 1 were performed on a daily basis before initiating construction and meter installation activities. Because of the health risk posed by COVID-19 coronavirus pandemic, the implementation of LOT 1 activities was put on hold from April 13 until the end of July.

## 5 FUNCTIONING OF THE SEMP

### 5.1 SEMP Review

52. The status of the environmental management plans is presented in Table 9 below.

*Table 9. Status of Environmental Management Plans*

Management Plan	Date of approval	Date of Submission
Contractor's Environmental Management Plan, including H&S Plan	January 2017	June 2016
Contractor's Site Specific Environmental Management Plan for Lot 1 and 2	June 2017	June 2017
Updated Social and Environmental Management Plan (annex to the revised IEE)	January 2017	December 2016

53. The IEE, including the SEMP, is in the process of being updated to include the new LOT 3 in the scope. The safeguards assessment of LOT 3 was approved in 31 March 2020.
54. The Contractor is able in general terms to implement the mitigation and monitoring measures set in the Site-Specific Environmental Management Plans (SSEMPs). The

reporting as required in the SSEMPs for LOT 1 has never been performed by the Contractor despite the non-conformity notices issued by the PMU.

55. The mitigation measures set out in the SEMP are still appropriate and they are working as intended.

## **6 GOOD PRACTICE AND OPPORTUNITY FOR IMPROVEMENT**

### **6.1 Good Practice**

56. No good practices were identified since no site visits could be performed due to the COVID-19 pandemic.

### **6.2 Opportunities for Improvement**

57. In order to complete the installation of the remaining meters under LOT 1 and the correction (by the Contractor) of the identified non-conformances, the coordination among the implementing contractors (TBEA, Huawei and others), PMU, the PIC and Barqi Tojik should be strengthened.

## **7. SUMMARY AND RECOMMENDATIONS**

### **7.1 Summary**

58. There have been no identified significant or unacceptable environmental or safety impacts from the project during the reporting period.
59. Considering the COVID-19 pandemic, the Contractors are doing a good job managing the infection risk. Implementation of LOT 1 activities (the only LOT active at the moment) stopped in April 13 in order to reduce the risk of infections for Specialists workers when flying into Tajikistan and the community and they continue on hold as of the end of June.
60. PMUES and PIC continued monitoring the environmental safeguards and corrective measures implementation during the reporting period, including also the use of virtual tools for this purpose. In total 7 non-conformances should be corrected. The Corrective Action Plan shall be implemented during the period from July to December 2020, if the COVID-19 pandemic does not pose a too high risk for it to happen.
61. Updating of the IEE due to additional works at substations (LOT3) has started.
62. No complaints, accidents or incidents were recorded during the reporting period.
63. Contractor of Lot 1 must develop COVID-19 pandemic management plan as part of its Health and Safety plan on the basis of ADB guidance and recommended measures (*Annex 4*).

## 7.2 Recommendations

63. Since no major effort has been done to reflect on previously-made recommendations from SAEMR for June-December 2019, they are still actual. Those recommendations were: put in place a plan to safely dispose the polluted gravel and soil below most of the old auto-transformers and refrigeration oil tanks in the substations along the country (outside the project scope); hung aside the fire extinguishers bottles that block the way out in Academgorodok SS; improve the condition of the concrete laps over the cable ducts that act as walkways in the substations.
64. Perform a bi-monthly coordination meeting on the ESMP and the Corrective Action Plans implementation between the PMU and the PIC, to which representatives of the Contractors might be invited. By having a more fluid and frequent communication channel, there will be a push for making the implementation of those measures smoother and quicker.
65. All operators in the substations should wear PPE.
66. Put signs and posters indicating the risk of electric shock near new installed transformers within the area of the substations.
67. The following Corrective Action Plan has been prepared to correct the identified non-conformances.

*Table 10. Corrective Action Plan for July- December 2020.*

Issues, actions and responsible party	Criteria	Schedule
1. TBEA to submit the Monthly Environmental Monitoring Reports for LOT 1 and LOT 2 since July 2018.	Environmental and Social Management Plan.	By October 1st, 2020.
2. PMU to extend Non-Compliance notices to the Contractors for the open issues above and to attach this Corrective Action Plan to them.	Best practice. The PMU are the ultimate responsible of the implementation of the safeguards.	By September 20, 2020.
3. The set concrete floors were still in place in the Ayni former labor camp (as informed by the PMU). The concrete floors have to be broken down by the Contractor TBEA.	Environmental and Social Management Plan.	By October 10, 2020.
4. LOT 1 Contractor should prepare an attachment to the Site-Specific Environmental Management Plan (SSEMP) in terms of health and safety plan (HSP) in regards to COVID-19 pandemic management	ADB Security Policy Statement for 2009 (SPS).	October, 2020.

Issues, actions and responsible party	Criteria	Schedule
plan and emergency response plan (ERP).		
5. Lot 1 Contractor (TBEA) to make a grievance book available at the substations where works are performed.	TBEA workers brigades shall bring a grievance book with them when they move from substation to substation to perform the works.	By September 20, 2020.


## ANNEXES

### Annex I: Main parties involved and their updated contact details

Party	Focal point	Contact details of the focal point
Implementing Agency: Barqi Tojik	Head of the Project Management Unit, Mr. Nazarzoda Nazar Rajab	pmu_tj@mail.ru
	Head of the Environmental Sector of the PMU, Mr. Karimov Sirojiddin	pmu_tj@mail.ru
	Chief EHS Specialist at the PMU, Mr. Aziz Holov	pmu_tj@mail.ru
Funding institution: ADB	ADB Regional Environmental Safeguards Consultant. Mrs. Malika Babadzhanova	mbabadjanova1.consultant@adb.org
	ADB National Resettlement Specialist. Mr. Faizullo Kudratov	fkudratov.consultant@adb.org
Project Implementation Consultant: Mercados-Aries International (formerly AF Mercados EMI)	MAI Project Director Mr. Francisco Romero	francisco.romero@mercadosaries.com +34 665024822
	MAI Environmental and Social Specialist, Mrs. Patricia Ramos	patricia.ramos@mercadosaries.com +34 663999667
Lot 1 Contractor: Huawei & TBEA	Mr. Chocue, EHS Responsible Mr. Hang Bo, EHS Manager (TBEA) Mr. Zokirov Sheroz, EHS Manager (Huawei) Mr. Jin Dean, EHS Site Manager (TBEA) Mr. Huseynov Ilhom, EHS Site Manager (Huawei) Mr. Guan Yonggang, EHS Site Manager (TBEA) Mr. Nazarhudoev, EHS Site Manager (Huawei) Mr. Zhurakulov Doshod, EHS Site Manager (Huawei)	
Lot 2 Contractor: TBEA	Mr. Zhang Zhenqing, EHS Manager Mr. Guang Yonggang, EHS Ayni Site Manager Mr. Jin Dean, EHS OHL Site Manager Mr. Che Jinlu, EHS Rudaki Site Manager	
In relation to Lot 2	Specialist of the Environmental Committee of Panjakent District. Mr. Pulodov Murod	+992 927601320

## Annex II: Documents about the Non-Conformance on the concrete floors near Ayni SS

### A. Letter from Ayni authority to PMU on April 7, 2020

  
Ҷумҳурии Тоҷикистон  
Вилояти Суғд  
Мақомоти иҷроияи ҳокимияти давлатии ноҳияи Айнӣ

---

Ҷумҳурии Тоҷикистон, вилояти Суғд, н. Айнӣ, д. Айнӣ, кӯчаи Рӯдакӣ-37, 735520 тел. (8-3479) 2-22-44, e-mail: info@ayni.tj

№ « 13/04 » аз « 04 » 04 2020  
ба № « \_\_\_\_\_ » аз « \_\_\_\_\_ » 2020

Ба Директори иҷроияи  
Муассисаи давлатии  
«Маркази идораи лоиҳаҳои  
баҳши электроэнергетика»  
мухтарам Назарзода Н

Ба Ҳарисов С  
15.04.20

Мақомоти иҷроияи ҳокимияти давлатии ноҳияи Айнӣ мактуби  
Шуморо аз 11.03.2020 №16/751-743 «Оиди таҷзия намудани майдончаи  
бетонии зери биноҳои таҷзия шуда» дар маҳаллида баромала аз Шумо  
хоҳиш менамояд, ки майдонҳои бетони зери биноҳо бар канда қитъаи  
замини зери биноҳо ба ҳолати авала баргардониданида шаванд.

Муовини якуми раиси ноҳия  
Рахматзода С

**Translation:** To Project Management Unit director Nazarzoda N.

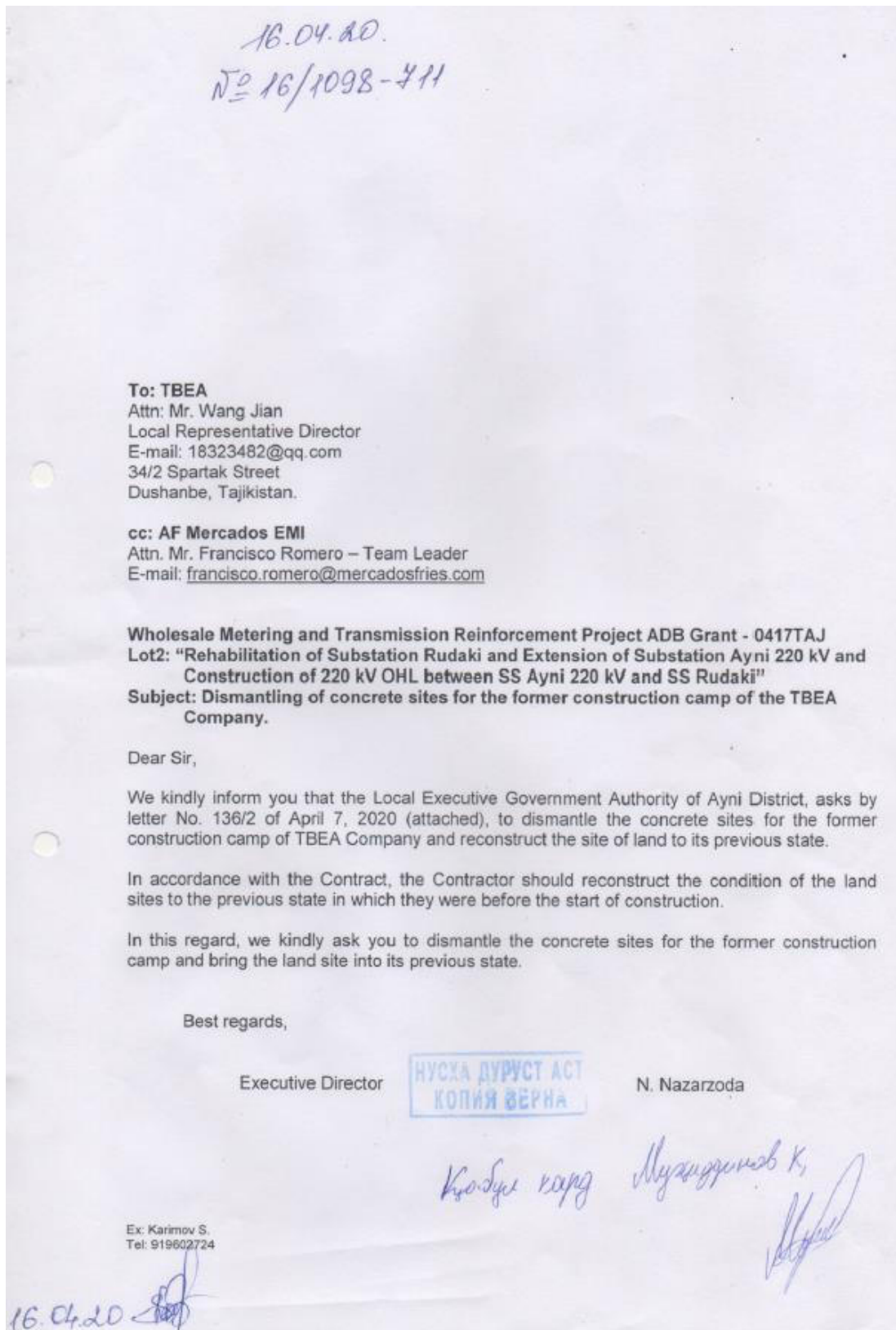
Executive Body of Government Authority of Ayni district has reviewed your latter №16/ 751-743 from March 11, 2020 “on dismantling concrete of the former construction camps of TBEA company” and asks you to remove concrete and reconstruct the area to its previous conditions

First deputy of head of district  
Rakhmatzoda S

Омод намуд Полвонов Г  
Тел 22-6-81





**B. Non-Conformance Notice Letter sent by the PMU to the Contractor on April 16, 2020**



## Annex III: Non-Conformance Notice Letter on the lack of submission of the semi-annual safeguards monitoring reports

Sent by the PMU to the Contractor on January 21, 2020.

<p>ҲУКУМАТИ ҶУМҲУРИИ ТОҶИКИСТОН МУАССИСАИ ДАВЛАТИИ «МАРКАЗИ ИДРОАИ ЛОИҲАҲОИ БАҲШИ ЭЛЕКТРОЭНЕРГЕТИКА»</p>		<p>ПРАВИТЕЛЬСТВО РЕСПУБЛИКИ ТАДЖИКИСТАН ГОСУДАРСТВЕННОЕ УЧРЕЖДЕНИЕ «ЦЕНТР УПРАВЛЕНИЯ ПРОЕКТАМИ ЭЛЕКТРОЭНЕРГЕТИЧЕСКОГО СЕКТОРА»</p>
<p>GOVERNMENT OF THE REPUBLIC OF TAJIKISTAN STATE ESTABLISHMENT "PROJECT MANAGEMENT UNIT FOR ELECTRO – ENERGY SECTOR"</p>		
<hr/>		
<p>734042 м. Душанбе к. Казаров – 39А телефон: 222-25-58; Факс: 222-25-56; E-mail: pmu_tj@mail.ru</p>		
<p>29.01.20 № 16/331-412</p>		
<p>6а: _____ м _____</p>		
<p>To: JV TBEA/HUAWEI At: Mr. Kasymov Marufjon Phone/Fax: +992 918 69 54 50               +992 988 88 65 50 E-mail: stascenko.maria@huawei.com; marufjon.kasymov@huawei.com 21a, Mirzo Tursunzade Street, "Asia Grand" Hotel 401 Dushanbe, Tajikistan, 734013</p>		
<p>C.c.: Mr. Wang Jian Director of Branch Company E-mail: 18323482@qq.com; tbea011@gmail.com 34/2 Spartak Street.</p>		
<p>Wholesale Metering and Transmission Reinforcement Project, Tajikistan (ADB Grant 0417-TAJ)</p>		
<p>Lot 1: "Replacement of electricity meters, replacement of several current transformers, replacement of several voltage transformers, introduction of an advanced metering infrastructure and introduction of a settlement system"</p>		
<p>Dear Sir,</p>		
<p>The Project Administration Manual of the Wholesale Metering and Transmission Reinforcement Project clearly states that the Contractor shall monitor and report the progress of the Environmental Management Plan implementation. This responsibility is also stated in the clause number 46 of the contract signed with TBEA &amp; Huawei JV Consortium for Lot 1 the Project.</p>		
<p>Therefore, please submit Semi-Annual Safeguards Monitoring Reports for July - December 2019. We remind you that failing the submission of the Semi-Annual Safeguards Monitoring Reports is a violation of contractual obligations.</p>		
<p>Truly yours,</p>		
<p>N. Nazarzoda Executive Director</p>		
		

## **Annex IV: Covid-19 spread prevention measures**

### **A. Covid-19 spread prevention measures: guidance of the ADB**

COVID-19 (Coronavirus) shall be taken into account on every occasion. The guidance of ADB and World Health Organization should be noticed. Special guidance can be found e.g. from Internet pages maintained by FIDIC <https://fidic.org/COVID-19>

Basic rules to avoid the spreading of Coronavirus are

Avoid face-to-face meetings and large groups

Practice social distancing (2 m)

Use face masks, wash hands regularly or use hand sanitizer frequently

Clean/sanitize your working environment

As for the potential COVID-19 impacts, the contractor needs to include specifications to the HSEMP (Health, Safety and Environment Management Plan). The provisions may include the following:

- How to protect from the virus? Stay home if you have respiratory symptoms (coughing, sneezing, shortness of breath) and/or a temperature above 37.0 C; Leave work if you develop these symptoms while at the workplace; Wash hands often with soap and water for at least 20 seconds or use an alcohol-based hand sanitizer; Shield coughs and sneezes with a tissue, elbow, or shoulder (not the bare hands); It's sensible to avoid shaking hands entirely to reduce the risk of spreading infection. If there is a meeting, provide room to allow attendees to sit or stand at least six feet/ 2 meters away from others.
- When to exclude workers or visitors from the workspace? Public health organizations recommend that companies bar employees or visitors from coming to the workplace for a period 14 days after a "medium" or "high-risk" exposure to the virus — generally meaning having been in close contact with someone who is known to be infected, or having traveled from a high-risk region; Dedicated staff often resist taking sick days, instead dragging themselves into work where they may infect others. Given the threat this epidemic presents, managers shouldn't hesitate to send employees who present Covid-19 symptoms home.
- Revising benefits policies in cases where employees are barred from the work site or it is closed? The likelihood that increasing numbers of employees will be unable to work either because they are sick or must care for others means that companies should review their paid time off and sick leave policies now. Policies that give employees confidence that they will not be penalized and can afford to take sick leave are an important tool in encouraging self-reporting and reducing potential exposure; Companies should promulgate clear policies on this now and communicate about these with employees.
- Maximize the employees' ability to work remotely? While many jobs (retail, manufacturing, health care) require people to be physically present, work, including meetings, that can be done remotely should be encouraged if coming to work or traveling risks exposure to the virus. Videoconferencing, for instance, is a good alternative to risky face-to-face meetings.
- Have reliable systems for real-time public health communication with employees? Dangerous rumors and workers' fears can spread as quickly as a virus. It is imperative for companies to be able to reach all workers, including those not at the worksite, with regular, internally coordinated, factual updates about infection control, symptoms, and company policy regarding remote work and circumstances in which employees might be excluded from or allowed to return to the workplace; These communications should come from or be vetted by the emergency response team, and they should be carefully coordinated to avoid inconsistent policies being communicated by different managers or functions.

Postpone or cancel scheduled conferences or meetings if there is an epidemic on? Yes. There is mounting evidence that social distancing can delay the epidemic and potentially save lives, so most meetings and conferences should be converted from in-person to virtual; If you have a meeting, discourage hand-shaking and assure that proper handwashing facilities (and/or hand

sanitizers) are easily available.

## **B. Covid-19 spread prevention measures: PIC's Back to the Office Manual for PIC's staff in the Dushanbe office**

### **PREVENTIVE MEASURES AGAINST COVID-19**

#### **Work Premises:**

- The number of attendants should be limited to a maximum of 6 persons, including the Office Manager.
- Sitting plan: Security distance of 2 m shall be kept at any time.
- The use of masks is mandatory.
- Visitors are not permitted, except messengers and staff for delivering of supplies and any visit from BT can be allowed.

#### **Rules to follow by attendants:**

- Used masks and used papers in drying hands must be disposed in the specific place(s) destined for that purpose.
- The Facilities shall be periodically ventilated, with a minimum of five minutes every day.
- Sharing of equipment: pens, computer, etc shall be avoided.
- No agglomerations are allowed at any given time.
- Frequent hand washing with soap and water or hydroalcoholic sanitizer liquid, specially, after coughing, sneezing or after touching a potentially contaminated surface.

For any doubt please contact Mr. Furkat Kadirov and/or Mr. Francisco Romero, to get more detailed information.

Date: June 2020.