

Environmental and Social Safeguard Monitoring Report

Project No. 54107-002
Semi-Annual Report
November 2022

Nepal: Electricity Grid Modernization Project – Additional Financing

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Consultancy Services for Project Supervision Consultant for Electricity Grid Modernization Project

Semi Annual Environmental and Social Monitoring Report #3 (Jan-Jun 2022)

Nepal Electricity Authority (NEA)
Kathmandu | Nepal

RESTRICTED

30 November 2022

REPORT
Revision 01



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SEMI-ANNUAL ENVIRONMENTAL AND SOCIAL MONITORING REPORT #3 (JAN-JUN, 2022)



Our ref.: P.019119-Y-11209-E003

Imputation: P.019119

RESTRICTED

Client : Nepal Electricity Authority, Project Management Directorate

Project : **Consultancy Services for Project Supervision Consultant for Electricity Grid Modernisation Project**

Subject : Semi-Annual Environmental and Social Monitoring Report-(Jan – Jun, 2022)

Comments:

Revision No.	Date	Prepared / Revision By	Description
00	2022.07.14	Vikash Kumar Prasad	Issued for approval
01	2022.11.30	H.P. Biswas	Issued for Information & Record

01	22/11/30	For Information & Record	H.P. Biswas	H.P Biswas	Rashmi Verma	H.P Biswas
00	22/07/14	For Information & Record	Vikash Kumar Prasad	H.P Biswas	Rashmi Verma	H.P Biswas
REV.	YY/MM/DD	STAT.	WRITTEN	VERIFIED	APPROVED	VALIDATED

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LIST OF ATTACHMENTS

Attachment		Description
Attachment # 1	:	MOM to include EMP as part of the Contract of Dadakhet – Rahughat Project.
Attachment # 2		Field Visit Report on Safeguard Management #01 (May 2022)
Attachment # 3		Actions taken on Environment Safeguard Consideration during Design and Pre-construction Phase (Presentation of ADB dated April 04, 2022)
Attachment # 4	:	EHS Report for Construction of Dadakhet-Rahughat Project
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Attachment # 7	:	Final Route Map of Dadakhet Rahughat 132 kV Transmission Line
Attachment # 8	:	Details of Land Acquisition & List of Individual Landowners for EGMP Projects
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Attachment # 10	:	Letter regarding formation of GRC for Keraun Substation
Attachment # 11		Minutes of CDC Meeting of Dhading District
Attachment # 12		Comments of PSC on CESMP submitted by the Contractor of DRTLSS project.

LIST OF ABBREVIATIONS

Acronyms	Description
ADB	Asian Development Bank
ADSP	Air Insulated Substation at Dumkibas
AF	Additional Financing
AIS	Air insulated substation

Acronyms	Description
AP	Affected People
BNRTLSS	Borang Lapsang Ratmate Transmission Line and Associated Substations Project
CDO	Chief District Officer
CDC	Compensation Determination Committee
CE	Common Era
CEMP	Construction Environmental Management Plan
CEPRP	Construction Emergency Preparedness and Response Plan
CHSMP	Construction Health and Safety Management Plan
CO ₂	Carbon dioxide
CTMP	Construction Traffic Management Plan
CWMP	Construction Waste Management Plan
DRTLSS	Dadakhet Rahughat Transmission Line & Associated Substations Project
DCC	Distribution Command and Control Centre Project
DO	Dissolved Oxyge
EGMP	Electricity Grid Modernization Project
EGMP-AF	Additional Financing for Electricity Grid Modernization Project
EHS	Environment, health, and safety
EIA	Environmental impact assessment
EMF	Electromagnetic field
EMP	Environment Management Plan
EMR	Environmental Monitoring Report
EOI / EoI	Expression of Interest
ERP	Enterprise Resource Planning
EPI	Environmental performance index
GAP	GESI Action Plan
GESI	Gender Equality and Social Inclusion
GKTLSS	Ghorahi-Khungri (Madichaur) Transmission Line & associated Substations
GIS	Gas Insulated Substation
GRM	Grievance Redress Mechanism
GSAP	Grid Substation Automation Project

Acronyms	Description
HDI	Human Development Index
IEE	Initial Environmental Examination
IEEE	Institute of Electrical and Electronics Engineer Inc.
IFC EHS	International Finance Corporation, World Bank Group Environment Health and Safety Guide
ICNRP	International Commission on Non-Ionizing Radiation Protection
KNTLSS	Kohalpur Nepalgunj Transmission Line and associated Substation
KRON	Keraun Substation with associated 33 kV Sub-Transmission Lines
LA	Loan Agreement
LARC	Land Acquisition Resettlement & Compensation
LDC	Load Dispatch Centre
LPG	Liquified Petroleum Gas
masl	meters above sea level
MOEWRI	Ministry of Energy, Water Resources and Irrigation
MSCP	Mulapani Substation Construction Project
MSL	Mean Sea Level
NEA	Nepal Electricity Authority
NTFP	Non-timber Forest Product
PAM	Project Administration Manual
PAP	Project Affected People
PCB	Polychlorinated biphenyls
PM2.5	Fine particulate matter below 2.5 micrometres
PMD	Project Management Directorate
PPE	Personal Protective Equipment
PTDEEP	Power Transmission and Distribution Efficiency Enhancement Project
PTDSSP	Power Transmission and Distribution System Strengthening Project
PSSP	Pangtan Substation and associated bay extension works at Bahrabise Substation
REOI	Request for Expression of Interest
EOI	Expression of Interest

Acronyms	Description
RIPP	Resettlement and Indigenous People's Plan
RMS	Revenue Management System
ROW	Right of Way
RRP	Report & Recommendation of President to the Board of Directors
SASEC	South Asia Sub-Regional Economic Cooperation
SF6	Sulphur hexafluoride
SNNP	Shivapuri Nagarjun National Park
SPCC	Spill Prevention Control and Countermeasures
SM	Smart Metering
SS	Substation
SSEMD	Social Safeguard and Environment Management Department
TL	Transmission Line
TLUP	Transmission Line Conductor Upgradation
TREACTEBEL	Tractebel Engineering Pvt. Ltd.
TMS	Total Management Services Pvt. Ltd.
TOR	Terms of Reference
UNESCO	United Nations Educational, Scientific and Cultural Organization
USD / \$	United States Dollar

WEIGHTS AND MEASURES

Acronyms	Description
A / amp	ampere
Ft	foot / feet
g	gram
ha	hectare
Hz	hertz
kA	kilo ampere (1,000 ampere)

Acronyms	Description
kg	kilo gram (1,000 gram)
km	kilo meter (1,000 meter)
kV	kilo volt (1,000 Volt)
mm	milli metre (1/1000 meter)
$\mu\text{g}/\text{m}^3$	Micro gram per cubic meter
M^3/s	Meter cubed per second
MVA	Megavolt Ampere
MW	Mega Watt
Sft / Sqft	Square feet
Sqm	Square meter
s / sec	second
V	volt
W	Watt

CONVERSION OF AREA

1 ha	=	2.47 acre
1 ha	=	10,000 sq. m
1 ha	=	1.48 bigha
1 acre		100 decimals
1 bigha		20 katta
1 bigha		6772.63 sq. m
1 katta		20 dhur
1 bigha		0.68 ha
1 Ropani		0.05 ha
16 ana		1 Ropani
16 ana		0.05 ha

CURRENCY EQUIVALENTS

(as of 7 January 2020)

Currency unit	Nepalese Rupee (NRs)
NRs.1.00	\$ 0.008694
\$1.00	NRs. 115.01

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Summary of the report

This semi-annual report summarizes the environmental, social safeguard compliances and monitoring for the period January to June 2022.

Nepal Electricity Authority (NEA) is the responsible agency for the supervision, monitoring, and reporting of Electricity Grid Modernization Project (EGMP) and Additional Financing for Electricity Grid Modernization Project (EGMP-AF). The Project Management Directorate (PMD) with the consultation of Project Supervision Consultant (PSC) is responsible for the environmental monitoring and reporting. Initial Environment Examination (IEE) documents with Environment Management Plan (EMPs) are part of the contractual documents and are provided to the Contractors, PSCs.

1. EXECUTIVE SUMMARY

Electricity Grid Modernization Project (EGMP) and Additional Financing for Electricity Grid Modernization Project (EGMP-AF) are implementing under the joint financial support of ADB and Government of Nepal. The main objective of the projects are to increase and modernize the power transmission system capacity in Kathmandu valley and outside valley, which will increase the access of connectivity of electricity grid power of those parts where people are facing low quality and unreliable electricity supply.

This monitoring report is prepared as a requirement for ADB Safeguards compliance for the ADB funded project to ensure national as well as international safeguards requirements of the project are fulfilled during its implementation. All subprojects covered in this report are being funded by ADB under 2 nos. loan agreement as mentioned below: -

1. **Loan No. 4014-NEP:** Electricity Grid Modernization Project (EGMP) is a \$156 million ADB loan project for 9 project components distributed all over Nepal, capacity building for approximately 2,000 electricity consumers on safe and efficient use of electricity, capacity building of NEA staffs in relation to implementation of its Corporate Development Plan & operation of automated grid substation and support for implementation of NEA's gender equality and social inclusion (GESI) strategy.
2. **Loan No. 4109-NEP:** Additional Financing for Electricity Grid Modernization Project (EGMP-AF) is a \$60 million ADB loan project for 4 project components related to strengthening & modernisation of electricity transmission capacity and 1 modernisation of electricity distribution system in project areas.

The above project components are being executed by Nepal Electricity Authority (NEA) between 2020 and 2026. As of June 2022, the project components are in its initial stage where only for five components, contracts have been awarded while the rest are in numerous stages of bidding process.

Among five contract awarded project, Construction of Distribution Command and Control Centre (DCC) at Kathmandu in Bagmati Providence and Dadakhhet – Rahughat 132 kV Transmission Line and associated substations at Dadakhhet & Rahughat at Myagdi district in Gandaki Province (DRTLSS) have started physical activities at site. The Contractor of Dadakhhet-Rahughat Transmission Line Project have submitted CEMP, which is under review by PSC & NEA. GRM will be made functional in next quarter. Till end of June 2022, no grievance have been filed. EMP has included as part of the contract for the contracts, which have been signed. Process of inclusion of EMP parts in the tender documents is the main concern for the other components for this stage.

The components have received national environmental regulatory approval through relevant agencies.

TABLE 1.1: SUMMARY OF THE PROJECT PROGRESS

Details	Loan No. 4014-NEP: EGMP	Loan No. 4109-NEP: EGMP-AF
Executing Agency	Nepal Electricity Authority	Nepal Electricity Authority

Details	Loan No. 4014-NEP: EGMP	Loan No. 4109-NEP: EGMP-AF
Implementing Agency	Nepal Electricity Authority	Nepal Electricity Authority
Environment Safeguards Categorization	B	B
Environment Safeguards Documentation	IEE, Existing Facilities Audit, EMP	IEE, Existing Facilities Audit, EMP
IR/IP Categorisation	B	B
Social Safeguard documentation	IEE, Existing Facilities Audit, EMP	Existing Facilities Audit, EMP
Project Stage Obtained	Contract signed for 5 subprojects. 2 subprojects (DCC & DRTLSS) are in Construction stage. Other 3 subprojects are in Design/ Pre-Construction stage. Balance 4 sub projects are in different stages of tendering.	All of the 4 subprojects are in different stages of Tendering.
Detailed Design Required Post-Approval	There is no change from that assessed in the IEE, as per design & finalization of route done so far for DRTLSS Project.	Will be known after award of contract.
Contracts Awarded	<ul style="list-style-type: none"> - Construction of Dadakhet - Rahughat 132 kV Transmission Line and associated Substations at Gandaki Province (DRTLSS) - Construction of 132/33/11 kV substation at Keraun (Morang) at Province 1 (KRON) - Construction of Distribution Command and Control Centre at Bagmati Province (DCC) - 132kV Transmission Line Conductor Upgradation in Provinces 1 & 2. (TLUP) - Construction of 132/33/11 kV Pangtan Substation and associated bay extension works at Bahrabise Substation. (PSSP) 	Nil
Bidding Document(s) Include EMP Cleared by ADB	For Dadakhet – Rahughat Project Bidding document does not include EMP cleared by ADB. Information about other Projects will be included in next report.	Will be complied
Contract(s) Awarded Include EMP Cleared by ADB	EMP included in the contract of Dadakhet – Rahughat Project with a separate MOM. 1 st page of MOM is available in Attachment #1 . Information about other Projects will be included in next report.	Will be complied
National Environment, Health and Safety Clearance(s) Obtained	Details of which subprojects needed the clearances and when they were obtained/valid to will be included in next report.	Will be complied

Details	Loan No. 4014-NEP: EGMP	Loan No. 4109-NEP: EGMP-AF
Contractor(s) Given Access to Site	<p>Access to the Contractor have been provided for following subprojects: -</p> <ul style="list-style-type: none"> - Dadakhet - Rahughat - 132/33/11 kV substation at Keraun - Distribution Command and Control Centre <p>For other projects access to site is yet to be provided.</p>	After award of contract
Construction Progress (%)	<ul style="list-style-type: none"> - 20% in Construction of Distribution Command and Control Centre at Bagmati Province - 5% in Dadakhet - Rahughat Project 	After award of contract
Unanticipated Impacts including Change of Scope or Design	<p>There is no deviation in Dadakhet-Rahughat Transmission Line route from that assessed in IEE.</p> <p>For Keraun Substation Project, there is change in 33 kV line route. Details will be reported in the next report.</p>	After award of contract
Number of Site Inspections and Audits Undertaken by Environment Safeguards Staff in Reporting Period	<p>Safeguard staffs of PSC and NEA undertook field visits of following projects in May 2022.</p> <ol style="list-style-type: none"> 1. 132 kV Underground Transmission Line from Chobhar to Lagankhel 2. Mulpani 132/11kV GIS Substation 3. Dadakhet – Rahughat 132 kV Transmission Line and associated substations. 4. 132 kV Kohalpur – Nepalgunj Transmission Line 5. Ghorahi - Madichaur 132 kV Transmission Line and associated substation. 6. Borang - Lapang - Ratmate (132/220kV) Transmission Line and associated substation. <p>The above projects are covered under Category-1 projects, which comes under scope of supervision by PSC.</p> <p>Field visit report is attached as Attachment #2.</p>	Nil
Corrective Action Required from Previous Reporting Period	<p>Corrective action required from previous reporting period is being taken care.</p> <p>For details of actions taken on the corrective actions suggested by ADB during presentation on April 04, 2022, please refer Attachment #3.</p>	No

Details	Loan No. 4014-NEP: EGMP	Loan No. 4109-NEP: EGMP-AF
Outstanding Corrective Action this Reporting Period	No	-
Non-Compliances Recorded this Reporting Period	Non-Compliance and corrective actions suggested by ADB during presentation on April 04, 2022. For details, please refer Attachment #3 .	-
Corrective Action Required	For details of corrective actions required, please refer Attachment #3 .	-
Number of Health and Safety Incidents	No Health & Safety incidents took place till the end of this reporting period.	-
GRM Functional	GRM will be made functional within 2022.	-
Number of Unresolved Grievances from Prior Reporting Period	-	-
Number of Grievances Received in Reporting Period	-	-
Number of Grievances Resolved this Reporting Period	-	-
Number of Grievances Still Outstanding	-	-
Number of Grievances referred to Court of Law	-	-
Number of Grievances referred to the Accountability Mechanism	-	-

Overall social safeguarded component's main achievement f till this reporting period is summarized below: -

- a) 8 substations land acquisition has been completed.
- b) Total 173 identified affected household of 8 substitutions.
- c) Total 18 household are physically displaced of two (Dandakhet and Lapang) substations
- d) Total acquire land 26.899 ha for 8 substations.
- e) Total impacted plots are 252 and 246 are acquired.
- f) The PSC and individual Consultants procurement is completed and mobilized.
- g) Field visit monitoring has been operating from the SSEMD and PSC.
- h) The local level grievance committed has formed in 132kV Keraun substation and 33/11kV TL construction.
- i) The check survey is ongoing from the Dandakhet – Rahughat 132 kV TL.

- j) The Project has consulted with the different stakeholders including affected peoples and local people informal and formal dialogue/discuss during in different project phases to build the consensus with the stakeholders.
- k) The necessary project related information has informed and discloser to the project stakeholders through national newsletter, noticeboard, media, the project staff etc.

Implementation of RIPP will be progressed in Dandakhet – Rahughat 132kV Transmission Line after the finalization of check survey by the contractor. The project site level ESMU is necessary to establish to manage the environmental and social safeguard compliances.

2. INTRODUCTION

2.1. Overall Project Description

About 63% of the population of Nepal had access to electricity in 2010 which has increased to 90% including solar energy in 2020. Nepal is planning to achieve 100 percent access to electricity by 2023 and reliable and efficient electricity for all by 2030. Where the demand has been rapidly increasing, the quality and reliability of electricity supply do not meet the requirement. NEA is working on both meeting the electricity demand and improving the quality and reliability of electricity supply. The current challenges, to meet electricity demand and improve quality and reliability of supplied electricity, are the construction of new transmission infrastructure and upgradation of existing infrastructures. Further, meeting electricity demand through expansion of transmission infrastructures and enhancing quality and reliable electric supply can be helpful to exploit full potential benefit of the investment made in electricity sector which will play valuable role in poverty alleviation, industrialization of nation and improvement of quality of life of the people.

The executing authority, NEA, have identified numerous project components to include construction of new transmission lines, new substation, new distribution lines, upgradation of existing transmission lines & substations, automation of existing substations, upgradation of command-and-control centre, installation of smart meters, strengthening of institutional capacity and capacity of NEA to implement its Corporate Development Plan. Details of the project, its location and map are below.

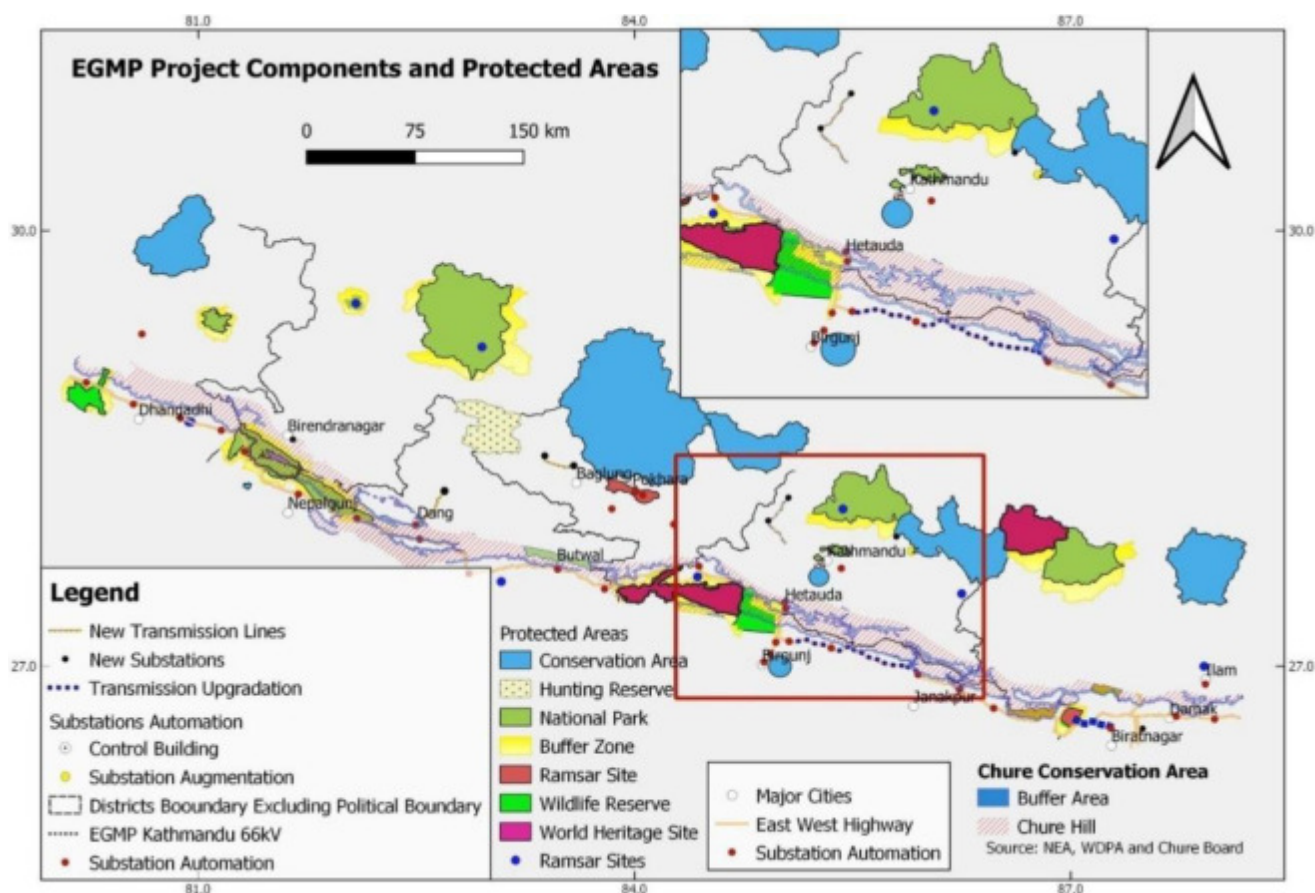


Figure 2.1: Project area of EGMP

Major objective of the above projects is to modernize transmission and distribution systems to ensure reliable power to consumers.

Implementation of the grid modernisation projects as mentioned above, are being funded by ADB under 2 nos. loan agreement as mentioned below: -

1. **Loan No. 4014-NEP:** Electricity Grid Modernization Project (EGMP) is a \$156 million ADB loan project for 9 project components distributed all over Nepal and 1 capacity building of NEA staffs and implementation of Corporate Development Plan strengthening.
2. **Loan No. 4109-NEP:** Additional Financing for Electricity Grid Modernization Project (EGMP-Af) is a \$60 million ADB loan project for 4 project components related to strengthening & modernisation of electricity transmission capacity and 1 modernisation of electricity distribution system in project areas.

Tractebel Engineering Pvt. Ltd. (TRACTEBEL), based in Gurgaon, India, in association with Total Management Services Pvt. Ltd. (TMS) based in Nepal has been awarded the Contract for "Consultancy Services for Project Supervision Consultant for Electricity Grid Modernisation Project".

Association of TRACTEBEL & TMS are providing services as Project Supervision Consultant to NEA and assisting NEA in the following major activities:

- Project Supervision, implementation, monitoring and reporting
- Safeguard Management, implementation, monitoring and reporting
- Capacity Building of NEA Staff.

This Semi-Annual Environmental and Social Monitoring Report (Jan – Jun, 2022) is intended to cover compliance with environmental & Social Safeguard requirements for the Electricity Grid Modernization Project (EGMP) till the end of reporting first half of year 2022.

2.2. Details of EGMP & EGMP-AF Projects

The Electricity Grid Modernization Project and Additional Financing for Electricity Grid Modernization Project will finance high priority electricity grid modernization investments both in transmission and distribution system in Nepal -. The outcome of the project is to improve reliability, efficiency, and financial sustainability of electricity supply in Nepal.

Details of EGMP & EGMP-AF Projects are provided below.

Table 2.1: Details of EGMP Project Components (Loan No. 4014-NEP)

Sl. No.	Project Component	Scope/Activities under Component
1	Construction of Dadakhet – Rahughat 132 kV Transmission Line and associated Substations at Gandaki Province	a. Construction of 25km long 132 kV overhead transmission line from Dandhakhet – Rahughat b. Construction of new 220/132 kV substation at Rahughat c. Construction of new 132/33 kV substation at Dadakhet
2	Construction of Ghorahi – Madichaur 132 kV Transmission Line and associated substation at Lumbini Province	a. Construction of 40 km long 132 kV overhead transmission line from Ghorahi to Madichaur b. Construction of new 132/33 kV substation at Madichaur c. Extension of Ghorahi substation
3	Construction of Borang – Lapang – Ratmate (132/220kV) Transmission Line and associated substations at Bagmati Province	a. Construction of 25 km long 220 kV overhead transmission line from Ratmate to Lapang b. Construction of 23 km long 132 kV overhead transmission line from Lapang to Borang c. Construction of new 220/132/33 kV substation at Lapang d. Construction of new 132/33 kV substation at Borang
4	Construction of 132/33/11 kV Substation at Pangtan at Bagmati Province	Construction of new 132/33 kV substation at Pangtan and extension of Barhabise Substation
5	Construction of 132/33/11 kV substation at Keraun (Morang) at Province 1	Construction of new 132/33 kV substation at Keraun. Construction of 30 km associated 33 kV distribution lines.
6	Grid Substation Automation (Outside Kathmandu Valley) throughout Nepal	Installation of substation automation system at 39 nos. of 400/220/132/66/33/11 kV existing substations outside of the Kathmandu Valley Final number of substations will be reported in next report.
7	Construction of Distribution Command and Control Centre at Bagmati Province	Construction of Distribution Command and Control Centre Building and associated infrastructure, hardware, and software

Sl. No.	Project Component	Scope/Activities under Component
8	Smart Metering in Kathmandu Valley (2 nd Phase) in Bagmati Province	Installation of 350,000 smart meters and associated facilities in 9 distribution centers of NEA.
9	132 kV/66 kV Transmission Line Conductor Upgradation in Provinces number 1 and 2	a. Upgrading conductor (DC) on 102km 132kV Pathlaiya-Dhalkebar transmission line b. Upgrading conductor (DC) on 28 km 132kV SC Duhabi-Kusaha transmission line c. Upgrading conductors (DC) on 14 km 66kV transmission lines inside Kathmandu valley
10	Project Supervision Consultant	a. Consultancy services for project supervision consultant for electricity grid modernisation project b. Preparation of Monthly, Quarterly, Semi Annually and Annual Project progress report.

TABLE 2.2: DETAILS OF EGMP:AF PROJECT COMPONENTS (LOAN NO. 4109-NEP)

Sl. No.	Project Component	Scope/Activities under Component
1	Construction of 132 kV Underground Transmission Line from Chobhar to Lagankhel in Bagmati Province	a. Construction of 5 km, 132 kV Underground Transmission Line from Chobhar to Lagankhel b. upgradation of existing Lagankhel Substation with 2x45 MVA 132/11 kV transformers
2	Construction of Mulpani 132/11kV GIS Substation in Bagmati Province	Construction of 2x45 MVA 132/11kV GIS Substation at Mulpani
3	Construction of 132 kV Kohalpur – Nepalgunj Transmission Line and associated substation at Nepalgunj in Lumbini Province	a. Construction of 17 km transmission line between Kohalpur and Nepalgunj b. Construction of 132/11 kV substation at Nepalgunj
4	Construction of 132/ 33/ 11 kV Air Insulated Substation at Dumkibas, Binayi Triveni Rural Municipality, Nawalparasi (Bardaghat-Susta East) District in Lumbini Province	Construction of 132/ 33/ 11 kV Air Insulated Substation at Dumkibas

Locations of the projects covered under EGMP (Loan No. 4014-NEP) and EGMP-AF (Loan No. 4109-NEP) are shown in **Annexure #1**. Locations of the projects covered under Category-1 (Direct Supervision by PSC) and Category-2 (No Direct Supervision by PSC) are shown in **Annexure #2**

2.3. Project Output

The project has three outputs. The details of each output are:

Output 1: electricity transmission system capacity strengthened and modernized.

The project will finance (i) construction of Dadakhet to Rahughat 25 km long 132 kV transmission line and associated substations of 220/132 kV in rahughat and 132/33 kV in Dadakhet of myagdi district, gandaki province; (ii) construction of Ghorahi to Madichaur 40 km long 132 kV transmission line in Rolpa, Pyuthan and dang districts in province 5 and associated substation of 132/33 kv in madichaur in province 5; (iii) construction of Ratamate in Nuwakot district to Lapang in Dhading district 25 km long 220 kV and Lapang to borang in dhading district 23 km long 132 kV and associated substations of 220/132/33 at lapang and 132/33 kV at Borang in Bagmati province; (iv) automation of 34 grid substations outside Kathmandu valley; and (v) upgradation of existing 120 km 132 kv from Pathlaiya to Dhalkebar in province 2, 30 km 132 kV Duhabi to Kusaha in province 1, and 35 km 66 kv inside Kathmandu valley in Bagmati province transmission lines with more efficient high-temperature-low-sag conductors. (vi) Construction of 5 km, 132 kV Underground Transmission Line from Chobhar to Lagankhel and upgradation of existing Lagankhel Substation with 2x45 MVA 132/11 kV transformers for Kathmandu Valley Transmission reinforcement in Bagmati province. (vii) construction of 17 km transmission line between Kohalpur and Nepalgunj and associated 132/11 kV substation at Nepalgunj in Lumbini Province. (viii) construction of 2x45 kV 132/11 kV GIS Substation at Mulpani in Bagmati province.

Output 2: electricity distribution system modernized.

This will include (i) construction of distribution control and command center in Kathmandu; (ii) installation of 350,000 smart meters in kathmandu valley; (iii) construction of 132/33/11 kv substations in Keraun of Morang district, province 1, Pantang of Sindhupalchowk district, Bagmati province and Birendranagar of Surkhet district, province 5 and construction of 30 km of 33 kv distribution lines around Keraun substation in Morang district and upgrading of Barabise substation.

Output 3: capacity of NEA and electricity users strengthened which includes

(i) at least 40 eligible NEA staff (including 30% eligible women) on automation of grid substations; (ii) at least 30 eligible NEA staff (including 30% women) on NEA's organizational development; (iii) at least 20 eligible NEA staff (including 30% women) on putting in place improved billing and collection measures; and (iv) at least 2,000 electricity consumers in project areas (40% women and disadvantaged group on safe and efficient use at distribution centres); and (v) the project will also support implementation of key actions from NEA's Gender Equality and Social Inclusion (GESI) strategy and operational guidelines in its regional offices, to complement corporate level activities covered under a forthcoming project.

The project will be implemented under Project Management Directorate under which the Director through the Social Safeguards and Environment Management Department (SSEMD) oversees the Environmental Management Division that is teamed by Manager, Assistant Manager and Environmentalist. Likewise there are Administration and Account Section and Social Safeguards Section administering Gender Equality and Social Inclusion (GESI) Unit. Total strength of SSEMD is Director plus 11 experts. Institutional Chart of SSEMD is available in **Annexure #3**.

2.4. Project Safeguards Team

From the side of Executing agency, Project Management Directorate (PMD), NEA, there is a department named as Social Safeguard and Environment Management Department (SSEMD) to monitor the environmental activities in the project. The director leads the department with Environmentalist and sociologist. SSEMD hired individual consultants as mentioned in the following table to monitor the project activities under this department. Project supervision Consultant (PSC) directly monitor the overall project activities of Category-1 Projects and environmental and social parts of all projects. Beside that the Field Based Environment and Social Management Unit also provisioned to look at field-based activities.

Institutional organisation structures of EGMP, SSEMD and PSC are available in the following Annexures: -

Annexure #3: Institutional Organisation Flow Chart of EGMP

Annexure #4: Institutional Chart of SSEMD

Annexure #5: Project Organization Chart of Project Supervision Consultant

The above organisation is common for the projects under EGMP and EGMP-AF.

Details of Safeguard team mobilised till the end of reporting period is provided in the below table. Experts, marked with “*” have been mobilised in the present reporting period.

TABLE 2.3: ENVIRONMENT SAFEGUARD TEAM AT DIFFERENT LEVEL FOR IMPLEMENTATION OF EGMP & EGMP-AF

SN	Institution/Team	Name of Environmental focal person/expert	Remarks
1.	SSEMD(NEA)	Rajan Rishi Kandel	Director SSEMD
2.	SSEMD(NEA)	Anirudra Paudel	Manager SSEMD
3.	SSEMD(NEA)	Meeta Acharya	Assistant Manager NEA
4.	SSEMD (NEA)	Navaraj Pokharel	Environmental Specialist (Consultant)
5.	SSEMD (NEA) *	Kalpna Pradhan	GESI Expert (Consultant)
6.	SSEMD (NEA) *	Puspa Raj Wagle	Social Safeguard Expert (Consultant)
7.	PSC (Tractebel) *	Mayank Kumar	Environmental Safeguard Specialist
8.	PSC (Tractebel) *	Pandey Ajay Kumar Sinha	Social Safeguard Specialist
9.	PSC (Tractebel) *	Dr. Bhriuprasad Saikia	Biodiversity Expert
10.	PSC (TMS) *	Dr. Binod Baniya	Health & Safety Safeguard Specialist
11.	Field Based ESMU under SSEMD	Is in Process of hiring (Tender is in Process)	
12.	Contractor (L&T for DRTLSS Project) *	Mr. Sumanta Adhikary	EHS In-charge (DRTLSS Project)

SN	Institution/Team	Name of Environmental focal person/expert	Remarks
13.	Contractor (L&T for DRTLSS Project) *	Mohitosh Kumar Pal	EHS Supervisor (DRTLSS Project)
14.	Contractor (DCC Project)	Anjan Kumar KC	EHS Supervisor (DCC Project)

As per PAM following gaps to the requirements of staffing under SSEMP have been observed: -

- a) a full-time senior biodiversity officer
- b) 8 full-time junior EHS field officers who are to be based on-site during the construction period
- c) a full-time community engagement/GRM officer to assist with completion of meaningful consultation and operationalizing the GRM

Contractor of DRTLSS project is yet to mobilise Biodiversity expert.

Other details/gaps will be reported in next report.

2.5. Progress till End of Reporting Period (June 2022)

In EGMP (Loan No. 4014-NEP), there are nine (9) packages to be procured with an estimated amount of USD 166.6 million. Till date, five (5) contracts i.e. package have been awarded. During this reporting period no unanticipated impacts in relation to change in the project scope, locations or alignments of components, construction methods, and/or implementation schedule of the awarded projects have been reported.

Details of five packages for which contract have been awarded are provided below: -

A-2: Construction of Dadakhet-Rahughat 132 kV Transmission Line and associated substations at Dadakhet and Rahughat (DRTLSS), Final route map is provided in **Attachment #7**.

B-2: Construction of 132/33 kV AIS at Keraun, Morang with 33 kV sub-transmission lines (KRON). There is some change in 33kV line route. The details will be reported in next report.

C-2: Construction of Distribution Command and Control Centre (DCC)

D-1: 132kV Transmission Line Conductor Upgrading (TLUP)

B1: Construction of 132/33/11 kV Pangtan Substation (PSSP)

Other packages are in different stages of tendering.

EMP applicable for DRTLSS Project has been made part of the contract through separate MOM. Copy of the MOM is available at **Attachment #1**. For other EGMP projects, EMP have been included in bidding documents and or the contracts details will be included in next report.

Physical progress (design, engineering and construction works at site) for two (2) packages (A2 & C2) are ongoing. Construction work of Package B2 is yet to be stated.

In EGMP: Additional Financing (Loan No. 4109-NEP), there are six (6) packages to be procured with an estimated amount of USD 69 million. All of the packages are in different stages of procurement.

Correct EMP applicable for EGMP-AF projects have been included in bidding documents.

Summary of Project Procurement status and physical progresses of projects under Loan 4014 & 4109 are provided in **Annexure #6 & Annexure #7** respectively.

3. SCHEDULE ACTIVITIES OF SOCIAL SAFEGUARD

As indicated in the previous SMR a detailed schedule has not set up due to the work progress of technical of project pre-construction phase the overall activities depend on the technical schedule of the Trunkey contractors. The Transmission Line Land Acquisition Resettlement and Compensation (LARC) activities have been provided as shown in the Draft RIPP. Although this schedule is self-explanatory, the status of the three project phases can be summarized as follows:

3.1. Phase – 1: Pre-construction

The activities in this phase include the finalization of bidding documents, the bidding and selection of Contractors for major construction of civil work of the subprojects in packages. During this Phase, the review and planning of the land acquisition and compensation of assets of the substations which will be completed for the substations and access roads areas.

3.2. Phase 2: Construction

This includes construction works of the major component of the Transmission line and the associated substations. This phase also includes the implementation of the environmental and social safeguards activities and mitigation measures of the skill development, educational training, CSR activities, construction related impacts mitigations, The transmission line and tower footing land acquisition and compensation will be performed after the check survey (final design) from the Trunkey contractor, restriction of RoW land leasing of land for contractors facilities and updated the planning documents as per the actual.

3.3. Phase 3: Operation

It covers the operation of the operation of transmission line and charging substations power plant and related project facilities including the training and orientation to the operating engineers. This will include of environmental and social M&E and implementation of corrective measures as per required

4. STATUS OF LAND ACQUISITION

Project can acquire land for the project permanently and temporally as per the Land acquisition Act 1977 AD for the subprojects' civil works.

4.1. Permanent Land Acquisition

Permanently Land acquisition are required for substations and tower footing to the subprojects for the civil works under EGMP and EGMP-AF.

4.1.1. Substations

The following progress has been achieved. The progress 100% of 6 substations Dandakhet, Rahughat, Kohalpur, Madichaur Kereun and Pantang. For Lapang and Borang substations land acquisition are yet to be completed. Total affected plots are 231 and acquire plots are 225. Details of Land Acquisition & List of Individual Landowners for EGMP Projects & EGMP-AF projects are available in **Attachment #8** and **Attachment #9** respectively.

Land acquisition for transmission line will be done in subsequent course of project progress.

Overall land acquisition progress is presented in table below.

TABLE 4.1: SUMMARY OF LAND ACQUISITION FOR SUBSTATIONS OF EGMP

Project Component	Substation s	Ahs	Land (ha) & Progress %			Plots Nos and Progress%			Loss of Structures		Remarks
			Require	Acquire	%	Impact	Acquire	%	Major	Minor	
Construction of Dadakhet-Rahughat 132 kV Transmission Line and associated substations at Dadakhet and Rahughat	Dadakhet	21	2.6	2.6	100	38	38	100	1	1	Check survey of TL section is in progress.
	Rahughat	13	4.06	4.06	100	15	15	100	0	0	
Construction of Ghorahi – Madichaur 132 kV Transmission	Madichaur	10	2.44	2.44	100	12	12	100	0	0	Contract yet to be awarded

Project Component	Substation s	Ahs	Land (ha) & Progress %			Plots Nos and Progress%			Loss of Structures		Remarks
			Require	Acquire	%	Impact	Acquire	%	Major	Minor	
Line and associated substation											
Construction of Borang – Lapang – Ratmate (132/220kV) Transmission Line and associated substations	Lapang	23	4.67	4.57	97.86	50	48	96	17	22	
	Borang	55	4.39	4.25	96.81	77	73	94.81	0	0	
Construction of 132/33/11 kV Substation at Pantang	Pantang	16	2.61	2.61	100	16	16	100	0	0	Contract awarded
Total		138	20.77	20.53		208	202		18	23	

TABLE 4.2: SUMMARY OF LAND ACQUISITION FOR SUBSTATIONS OF EGMP-AF

Project Component	Substations	Ahs	Land (ha) & Progress %			Plots Nos and Progress%			Loss of Structures		Remarks
			Require	Acquire	%	Impact	Acquire	%	Major	Minor	
Construction of 132 kV Kohalpur – Nepalgunj Transmission Line and associated substation at Nepalgunj	Nepalgunj	15	2.959	2.959	100	23	23	100	0	0	Contract yet to be awarded
Total		15	2.959	2.959	100	23	23	100	0	0	

4.1.2. Towers footing

Land acquisition for tower footing component of transmission line alignment of the subprojects can be taken up when location of each tower footing is identified after detail & check survey by the Contractor is completed.

Detail & check survey by the Contractor of Dadakhet Rahughat 132 kV Transmission line is in progress. Contract of other transmission line projects are yet to be awarded.

4.2. Temporary Land Acquisition

The project can acquire the land temporarily for project proposes taken by the lease as per the LA Act 1977 AD. Mainly project acquire such land for the contractors' facilities and camps propose as per the project need. There is no progress to acquire the temporary land.

4.3. Land for Restriction of RoW

The land for restriction of RoW is not progressed till this reporting period. Dadakhet – Rahughat 132 kV TL Detailed & check survey are in progress. Contract of other transmission line projects are yet to be awarded

4.4. Resettlement

One household identified for physical displacement in Dadakhet substation has already made the decision from the CDC Myagdi district. All TL alignment resettlement impact yet to be identified.

Similarly, 17 houses together with about 22 minor structures and one primary school are affected in Lapang substation of Dhading district. The CDC is yet to be finalized and make decision. Resettlement cases EGMP till this reporting period is presented in table below.

TABLE 4.3: SUMMARY OF LOSS OF STRUCTURES FOR EGMP

Sl. No.	Substations	AHs	Loss of Structures		Remarks
			Major	Minor	
1	Dandakhet	1	1	1	
2	Rahughat	0	0	0	
3	Madichaur	0	0	0	
4	Lapang	17	17	22	1 Primary school
5	Borang	0	0	0	
6	Pantan	0	0	0	
7	Keraun	0	0	0	
Total		18	18	23	

For Nepalgunj Substation under EGMP-AF no household or any minor structure is identified.

TABLE 4.4: SUMMARY OF LOSS OF STRUCTURES FOR EGMP-AF

Sl. No.	Substations	AHs	Loss of Structures		Remarks
			Major	Minor	
1	Nepalgunj	0	0	0	
Total	0	0	0		

4.5. Payment of Compensation.

The project has been paid the compensation for the substations land acquired by the project. The CDC has formed the subcommittee to determine the compensation rate. The subcommittee has performed the proper assessment of the impact and the analysis the different land rate in consultation with the proper stakeholders and recommended the rate to the CDC. Then the CDC has confirmed and determined land value based on recommendation of subcommittee. After the CDC decision, the payment of NRs 354,186,436.80 has made for 26.899 ha land of seven substations to 173 HHs landowners. The compensation yet to be paid for 6 HHs due to the absentee of landowners. Substation wise payment is shown in tables below. Details of Land Acquisition & List of Individual Landowners for EGMP Projects & EGMP-AF projects are available in **Attachment #8** and **Attachment #9** respectively.

TABLE 4.5: SUMMARY OF COMPENSATION PAYMENT FOR EGMP-AF

Sl. No.	Substations	AHs	Loss of Structures			Compensation Payment	Remarks
			Require	Acquire	%		
1	DadaKhet	24	2.6	2.6	100	21,733,105.47	
2	Rahughat	13	4.06	4.06	100	35,616,796.88	
3	Madichaur	11	2.44	2.44	100	32,144,700	
4	Lapang	29	4.67	4.57	98.07	49,852,343.75	2 HHs absentee
5	Borang	51	4.39	4.25	96.81	41,746,093.75	4 HHs absentee
6	Pantan	16	2.61	2.61	100	23,470,312.5	
7	Keraun	14	3.41	3.41	100	27,182,953.65	
Total		158	26.18	23.94		231,764,306.00	

TABLE 4.6: SUMMARY OF COMPENSATION PAYMENT FOR EGMP-AF

Sl. No.	Substations	AHs	Loss of Structures			Compensation Payment	Remarks
			Require	Acquire	%		
1	Nepalgunj	15	2.959	2.959	100	122,440,130.8	
Total		15	2.959	2.959	100	122,440,130.8	

Currently segregation of PAPs in Vulnerable categories is not identified, it will be separately prepared after socio economic survey.

4.6. Compliance to Entitlement Matrix

RIPP ensured that all affected households and persons who are identified in the project-impacted areas before the cut-off date will be entitled to compensation for their affected assets and to rehabilitation measures sufficient to assist them to improve or at least maintain their pre-project living standards, income-earning capacity, and production levels. Compliance status of Entitlement Matrix is given in Table below.

TABLE 4.7: COMPLIANCE TO ENTITLEMENT MATRIX

Type of Loss	Affected persons	Entitlement	Details	Status	Remarks
Land	1295	All title and non-titleholders are eligible for compensation	- Total 20.65 ha land will be permanently acquired for tower pad and substation construction and 119.14 ha of land will be required RoW.	23.489 ha land permanently acquire from 7 substations being comply.	
Structures	32	Owners of structures having legal title; Encroachers (defined as who has a legal title holding to land but illegally extended structured; also applies to those occupying structures on government land)	32 Residential and non-residential structures affected fully	After complete assessment and the CDC decision of Affected structures will be paid compensation and assistance.	
Standing crops Fruits and timber tress	1295	Asset owners (including eligible tenant farmers, forest users, and encroachers who depend on crop, fruit and timber for their livelihoods)	<p>- All affected trees and fruit trees will be compensated based on yearly production, age, cost of seeding/ harvesting and in case of timber trees cost will follow the rate of concern forest office.</p> <p>- Tenant and leaseholders will receive 50% of compensation for affected fruit trees and crops.</p>	Not started. Will commence after details engineering design	

Type of Loss	Affected persons	Entitlement	Details	Status	Remarks
Loss of livelihoods	All affected people, household s, including	- For affected HHs, will be provided 60 days agricultural labor wage. agricultural workers, business owners, employees, mobile venders, wage laborers	Not commenced yet	After the complete impact assessment from the final design	
Household loosing 10% or more than their productive assets or source of income and HHs displaced due to loss of residential land and house,	129	- All severely affected person will be eligible for receiving cash assistance and other benefit to be provided by project	<p>- Severely affected households are entitled to cash assistance equivalent to 90 days of average national minimal wage rate to offset loss of income. Assistance will be paid prior to the start of civil works.</p> <p>Additional one-time cash assistance of Nrs.100,000.00 will be provided to for each severely affected household including capacity enhancement training, employment priority</p>	After final design and socio economic survey will be distribute to the affected households.	
Vulnerable households	658	Households headed by women; disabilities; elderly people; households falling under poverty; indigenous households; landless, Dalits and without legal title to land.	<p>- All vulnerable households will receive cash assistance equivalent to 90 days national minimum wage rate.</p> <p>- Additional onetime cash assistance of 60,000 NRs per household</p> <p>- No-cost enrolment of at least one family member in energy-based livelihood income generation or skill enhancement training.</p> <p>- Priority in construction works based on their skill and capacity.</p>	After the final design and socio economic survey will be distribute to the affected households.	

5. LIVELIHOOD ENCHANTMENT AND CSR PROGRAMME.

This is construction phase activities during project processing, the interested participants for income generating and skill development trainings will be identified suited to local resources and opportunities, and the project has estimated around interested beneficiaries. The skill development, educational training and CSR activities yet to be progress due to the civil works is not started till this reporting period. The CSR activities will be organized as per the community base need in subprojects areas.

6. INSTITUTIONAL ARRANGEMENT

NEA will serve as an executing agency and will implement all ADB-funded project components through its Project Management Directorate (PMD), which is responsible for planning, designing, implementing, monitoring, and supervising all NEA projects funded by ADB. In dated 28th Dec 2021 PMD hired its own project-specific Supervision Consultants to supervise and monitor both the technical as well as environmental and social safeguard aspects of projects. To implement more effectively the environmental and social safeguard activities, NEA has established its own dedicated Social Safeguard and Environmental Management Department (SSEMD) under the PMD (approval dated 23rd Feb. 2021, by NEA board of directors) headed by a director and supported by dedicated total 12 environmental and social safeguards officers, civil engineer, administrative and accounting and other support staff. SSEMD will be responsible for implementing and updating the environmental preliminary studies and monitoring, mitigation and supervising the environmental and social safeguard related activities as per its job descriptions. The approved organizational structures of SSEMD are below. The center level Environment, social and GESI expert has been hired to monitor, supervision and reporting of implement IEE and RIPP of EGMP, EGMP-AF and other PMD projects.

7. CONSULTATION, INFORMATION AND DISCLOSER.

The COVID – 19 risk is still remain even though the impact are being in retarding caused by massaging vaccination in public but also the cases of COVID-19 risk is not completely eradicated a kind of fear of pandemic still remain so project could not freely conduct consultation meetings at community level as well as with other stakeholders in the field. However, project ensure and start the public consultation with affected persons in field level.

Information disseminated through the national newspaper of the substations land acquisition notice with together in the office notice board, public relation places in the project districts. The project related information will be spread through local media, newspaper and media.

The information of the project documents (mainly E&S related documents) disclose in the in NEA and ADB website, NEA has publish GESI guidelines for the NEA projects. Each IEE and combine RP/RIPP displace in the contract awarded subprojects office.

8. GRIEVANCE REDRESS MECHANISMS

Process to establish and operationalize single environmental and social grievance redress mechanism (GRM) for affected persons (construction workers and local community members) in line with the provisions of the IEE and RIPP are in progress.

Three level GRM are being established. Site Level, Central Level GRM and District Level GRC are being established.

8.1. Formation of Local Level GRC

RIPP ensured that there will be a project-specific Grievance Redress Mechanism (GRM) to receive and manage any grievances (complaints) that may arise from the project and facilitate prompt resolution of affected persons' issues, concerns, problems, or claims. GRM will address both environmental and social safeguard and other related eligible grievances/complaints raised by affected persons, in a timely and culturally appropriate manner.

Commonly everyone can put on the project related complaints in the project office by written, verbal and other means in the local level. The project is responsible to hear such complaints by the local level GRC. The Draft RIPP has insured the first level GRC. GRC is required in the subproject construction phase to hear project related public complaints which is yet to be progressed in the contract award subprojects. The project site level ESMU is required to meet the social and environment compliances.

For the central level GRM, NEA's existing GRM mechanism will be used to receive the complaints of affected persons and district level GRC is also functioning which can receive all project level grievances. Construction of Substation at Keraun (Morang) at Province 1 has formed local level GRC for managing the workers grievance formation letter is attached in **Attachment #10**. For Distribution Command and Control Centre and Dandakhet – Rahughat 132 TL subproject, local GRM will be formed by the contractor, which expected in next monitoring period. Details will be provided in next report.

The CDC in Dhading district has already formed as per the Land acquisition Act – 1977 AD the committee was activated after the project request to acquire the land, compensation determination, compensation distribution and redress of PAPs grievances of each subprojects district chair by Chief District Officer (CDO). The Minutes of Meeting is available in the **Attachment #11**.

Details regarding other projects will be reported in next report.

9. COMPLIANCE STATUS WITH ENVIRONMENTAL & SOCIAL COVENANTS

The Covenants of the Loan Agreement generally covered under Schedule 4 of the Loan Agreement are either complied or in the process of compliance within the given time frame. The Government of Nepal has been complying with policy loan covenants such as project management and administration, social, environment, financial and technical as stipulated in the agreement.

There are 26 covenants in Loan Agreement of EGMP and 24 covenants in Loan Agreement of EGMP: Additional Financing. Out of the above covenants 15 and 14 covenants of EGMP and EGMP-AF respectively are related to Environmental & Social safeguard. Most of the covenants are being complied, while remaining will be complied as project packages' procurement and implementation progresses.

Environmental and Social safeguard related project activities are in compliance with covenants as regular follow up actions are being taken according to approved contract documents.

The project is in early stage of implementation and now currently focusing on selection of contractors. Environment covenants as stipulated in the ADB's loan agreement are being complied. However, activities that required field level engagement have been delayed but NEA will continue to focus on enhancing environmental compliance requirements including the environment management plan of the project.

Detail Compliance with Loan/Grant Covenants is presented in **Annexure #8**

Detail Compliance to Social Safeguards & Environment Safeguard Covenants from the ADB Loan Agreement is presented in **Annexure #9**.

10. COMPLIANCE TO NATIONAL REGULATIONS AND INTERNATIONAL AGREEMENTS

The project in its initial stages has been screened through national regulatory measures and approval through national environmental and social experts. National regulatory requirements for environment according to the Environmental Protection Act and Rules are being complied. As per international regulatory

requirements activities internationally banned and also prohibited by ADB are followed.

Relevant national and international Policy, Acts and Regulations were reviewed during the project processing. However, in Nepal there is no separate Safeguard Policy for the affected persons but the Constitution of Republic of Nepal (2015) guarantees fundamental rights and duties of citizens. Article 30(1) establishes the right to property for every citizen of Nepal, whereby every citizen is entitled to earn, use, sell and exercise their right to property under existing laws. Article 30 (4) of Construction requisition of private land for public interest according to sub-article (3), it shall be done based on compensation and procedural law.

Land Acquisition Act, 1997 and its subsequent amendment in different period is the key legal framework for land acquisition in Nepal. The Act provisioned the process and procedures to be followed for acquiring land and associated assets for public purposes. There is a provision of Compensation Determination Committee (CDC) chaired by Chief District Officer to determine compensation rates for affected properties. The Act also includes a provision for acquisition of land through negotiations. It states in Clause 27 "notwithstanding anything contained elsewhere in this Act, the Government may acquire any land for any purpose through negotiations with the concerned landowner. It shall not be necessary to comply with the procedure laid down in this act when acquiring land through negotiations. Till this reporting period, NEA initiated land acquisition process for subprojects following the Land Acquisition Act, 1977 and other Acts will also be applicable if the issues related to land measurement, land ownership and compensation. All national and international applicable Acts and Regulations including compliance requirement are presented in Table 9 below.

TABLE 10.1: COMPLIANCES OF NATIONAL REGULATIONS ON ENVIRONMENTAL SAFEGUARD

National Regulation or International Agreement	Compliance Requirements under the Regulation or Agreement including any Environmental Clearances Required	Compliance Status	Remarks
Nepal Environmental Policy and Action Plan (NEPAP), 2050 (1993) and 2055 (1998)	Environment conservation, incorporation into development projects.	Environmental conservation through incorporation of National IEE, EIA through EPA and EPR have been followed	
National Park and Wildlife Conservation Act, 2029 (1973) Amended 2073 (2016), Government of Nepal	Compliance if the project falls within the national park area it need to take clearance from National Park and Wildlife Reserve	The consultation have been done with the Ntaional Park and Wildlife Reserve and consent have been taken while preparing Environmental Assessment Report.	
Environment Protection Act (EPA), 2053 (1997) Re-enacted in 2076 (2019) and Environment Protection Rules, 2078 (2021)	Approval from MoWERI and MoFE	Necessary approval through national IEE/EIA received.	

TABLE 10.2: COMPLIANCES OF NATIONAL REGULATIONS ON SOCIAL SAFEGUARD

National Regulation or International Agreement	Compliance Requirements under the Regulation or Agreement	Compliance Status	Remarks
Land Acquisition Acts 1997 and subsequent amendment	<ul style="list-style-type: none"> - All provisions of Acts applied and follow. - Must be followed all Clause of Acts during land acquisition. - CDC meeting. <p>Land acquisition notice,</p> <ul style="list-style-type: none"> - Grievances affected persons, - Public notice etc 	<ul style="list-style-type: none"> - Complied processing of land acquisition. 	<ul style="list-style-type: none"> - Meeting of Compensation Determination Committee (CDC) held in Dhanding districts and for other districts it will be held as soon as the project becomes ready. - Same process for other subproject - Land acquisition notice published in Borang and Lapang SS. - Grievances of affected persons not received till now
Land Reform Act 1964	<ul style="list-style-type: none"> - A landowner may not be compensated for more land than s/he is entitled to under the law. - This Act also establishes the tiller's right on the land which s/he is tilling. 	<ul style="list-style-type: none"> - Not required till now 	<ul style="list-style-type: none"> - The provision will be followed when and where required during land acquisition.
The Land Revenue Act (1977)	<ul style="list-style-type: none"> - Land registration, changes in ownership and termination of ownership are done as per act. - Yearly Revenue Collection 	<ul style="list-style-type: none"> - Not required till now 	<ul style="list-style-type: none"> - The provision will be followed when and where required during land acquisition.
Electricity Act 2049 (1992) and The Electricity Regulation, 2050 (1993)	<ul style="list-style-type: none"> - Section 33 of Electricity Act 1992 and Rule 66 of Electricity Regulation 1993 specifies resettlement and rehabilitation measures, compensation as determined by committee formed as per Rule 88 of Electricity Regulation 1993. 	<ul style="list-style-type: none"> - Not required till now 	<ul style="list-style-type: none"> - Compensation of Row and will be determined once the contractor submit final design and approved by EA.
National Foundation for Development of Indigenous Nationalities (NFDIN) Act-2002.	<ul style="list-style-type: none"> - The act defines indigenous groups or Adivasi Janajati in Nepal. 	<ul style="list-style-type: none"> - Not required till now 	<ul style="list-style-type: none"> - Not started construction works in the subproject locations.
ILO Convention 169 (ratified by Nepal in 2007).	<ul style="list-style-type: none"> - Ensures the individual and collective rights of Indigenous Peoples, as well as their rights to culture, identity, language, employment, health, education, and other issues while implementing any development activities in the traditional territory of the Indigenous People. 	<ul style="list-style-type: none"> - Complied during project processing period and will be followed during the implementation period too. 	<ul style="list-style-type: none"> - During Project processing period- complied.

Detail Compliance Status with National Regulation and International Agreement is presented in **Annexure #10**.

11. COMPLIANCES WITH THE PROJECT ADMINISTRATION MANUAL (PAM)

All requirement of Project Administrative Manual (PAM) are being complied. Compliances shall continue during preconstruction and construction stages of the projects. Implementations will be closely monitored.

Detail Compliance Project Administration Manual (PAM) is presented **Annexure #11**

12. COMPLIANCE STATUS WITH THE ENVIRONMENTAL MANAGEMENT PLAN

The environment safeguard covenants in loan agreement as well as the EMP implementation during preconstruction and construction stage are being complied. At PMD, environment and social safeguard department has been established. The environment safeguard specialist, social safeguard specialist and GESI specialist have been recruited and mobilized. Safeguard specialists of PSC have also been mobilised.

Details of environment safeguard status and compliance for loan 4014 & 4109 has been attached as **Annexure #12 & Annexure #13** respectively.

13. COMPLIANCE TO THE EMP IMPLEMENTATION DURING PRECONSTRUCTION & CONSTRUCTION STAGE

Out of nine projects in EGMP (Loan 4014) and four projects in EGMP:AF (Loan 4109), contract on five projects have been awarded and construction at site for only 2 projects (A-2: Dadakhet-Rahughat 132 kV Transmission Line and C-2: Distribution Command and Control Centre) have been started. For B-2: 132/33 kV AIS at Keraun substation is in preconstruction stage.

Detailed status of compliance to EMP implementation during preconstruction, Construction stages are available in **Annexure #6**.

Other observations are provided below.

13.1. Observations regarding Environmental & Social Condition at site

Number of clearances are required before the start of construction. The forest clearance, consent from the Archaeological Department and preconstruction baseline collection is required to be done before the construction starts. Some clearance will be done after the mobilisation of the contractor.

Currently contractor have mobilised only for two projects.

1. A-2 (EGMP) Dadakhet – Rahughat 132 kV Transmission Line and associated Substations at Rahughat and Dadakhet Project. For this project, the Contractor has provided access to Dadakhet & Rahughat Substation sites in February 28, 2022. The contractor has mobilized on site & preliminary work like site preparation (levelling & grading), Route survey for the transmission line etc. are in progress. Labour camp within Rahughat substation area is under construction. Civil construction such as construction of foundation of structures and buildings are yet to be started.

Sample photographs are provided below.



Site preparation (levelling & grading) at Dadakhet Substation in progress



Construction of Labour Camp & Toilet at Rahughat Substation under construction



Contractor has prepared and submitted Construction Environment & Social management Plan (CESMP) on April 08, 2022, which have been reviewed and comments provided by PSC on May 01, 2022. Contractor is yet to submit revised CEMP for approval. Approved document will be shared with ADB. Comments provided by PSC on CESMP of the Contractor are provided in **Attachment #12**.

The Contractor have submitted Construction Method Statements, which have been reviewed and approved by NEA & PSC.


2. C-2 (EGMP) Design, Supply, Installation and Commissioning of Distribution Command and Control Centre. For this project contractor has been provided access to the site. The Contractor has been mobilized at site & clearance from the regulatory bodies already taken. Civil construction of foundation of the building has been completed. Erection of pre-fabricated building is in progress. Detailed information regarding submission of CESMP and Construction Method Statement will be reported in next report

13.2. Environmental & Social Monitoring Results




Environmental monitoring on different physical environmental parameters like air, water and noise will be carried out during the preconstruction and construction stage. Also the Air Quality and Noise level monitoring at site will be done.

At present construction work is going on only in two project & the status of their environmental monitoring is indicated below.

TABLE 13.1: STATUS OF ENVIRONMENTAL MONITORING DURING PRECONSTRUCTION AND CONSTRUCTION STAGE.

Monitoring Criteria	Dadakhet – Rahughat 132 kV Transmission Line and associated Substations (Under EGMP)	Distribution Command and Control Centre (Under EGMP)
Air Quality	Air Quality has been measured. Result available In Attachment #4	Not done. Construction work is almost complete. Balance work will not have any effect in change air quality.
Water Quality	Sample of water collected. Test result awaited from Lab.	Not done. Construction work is almost complete. Balance work will not have any effect in change water quality.
Noise level	Noise level has been measured. Result available In Attachment #4	Not done. Construction work is almost complete. Balance work will generate noise.
Preparation of CEMP	Ongoing	Details will; be provided in next report.
Monthly EHS	Contractor is submitting Monthly EHS Report. EHS Report submitted by the Contractor for Construction of Dadakhet-Rahughat Project is available in Attachment #4	Details will; be provided in next report.
Clearance from local regulatory bodies	Clearances for land acquisition and forest clearance will be required. Clearances for acquisition of land of substations have already been finalized. For transmission line, obtaining clearances for acquisition of land from District Administration and forest clearance from forest department are in progress.	Approvals obtained.
Use of Asbestos Free Cements	Yes	Yes
Construction License and Insurance policies obtained by the Contractors.	Yes	Yes
EHS manpower deployed	Yes	Yes
Labor camps have been constructed with hygienic toilets	Yes	There was labor camp and workers was staying there during civil construction. In the 2 nd half of May 2022, the labor camp was demolished and no labor is residing within project site. 

Labor camp was demolished to facilitate movement of crane and erection work.

Monitoring Criteria	Dadakhet – Rahughat 132 kV Transmission Line and associated Substations (Under EGMP)	Distribution Command and Control Centre (Under EGMP)
separate washroom for male and female	Yes	Yes.
Adequate Safety Gear (PPE) used	<p>PPE is made compulsory while working at site</p> 	<p>PPE is made compulsory while working at site</p> 
Laboratory test reports for drinking water being used at site by employees and workers	Not tested. Site employees are drinking jar water available in local market.	Not tested. Site employees are drinking jar water available in local market.
Whether regular toolbox talk (orientation program) is being held at site	Yes, held on regular basis.	Yes, held on regular basis.
First aid box at site	yes	yes
Tree cutting and plantation plan.	<p>No tree in substation areas. For transmission line tree cutting will be done after obtaining clearance from appropriate authority.</p> <p>Plantation of trees in substation was inaugurated by CDO, Myagdi district.</p> 	The project site doesn't have trees. So no trees were cut and plantation was also not conducted.
Placement of grievance box.	Yes	Yes

13.3. Field visit

A team of Safeguard specialists of NEA and PSC along with respective Project Managers / team members of NEA undertook joint field visits from May 06, 2022 to May 11 2022 at site locations of following sub projects and obtained first-hand information on social, environmental and biodiversity aspects from the project sites. These sub projects are covered under Category-1 projects, where complete supervision is under the scope of PSC.

1. 132 kV Underground Transmission Line from Chobhar to Lagankhel and associated substations
2. Mulpani 132/11kV GIS Substation

3. Dadakhet – Rahughat 132 kV Transmission Line and associated substations.
4. 132 kV Kohalpur – Nepalgunj Transmission Line
5. Ghorahi - Madichaur 132 kV Transmission Line and associated substation.
6. Borang - Lapang - Ratmate (132/220kV) Transmission Line and associated substation.

In addition to the Project Managers / team members of respective projects, following persons from NEA/SSEMD and PSC were also participated in field visits.

TABLE 13.2: LIST OF PERSONS FROM NEA/SSEMD & PSC PARTICIPATED IN FIELD VISITS. .

Sl. No.	Issues	Corrective Actions / Way Forward	Status
1.	Mrs Meeta Acherye	Environmental officer	NEA/SSEMD
2.	Hara Prasad Biswas	Team Leader	PSC
3	Rabindra Raj Shrestha	Transmission Line Expert	PSC
4.	Dr. Bhrig Prasad Saikia	Biodiversity Expert	PSC
5.	Mr. Pandey Ajay Kumar Sinha	Social Safeguard Expert	PSC
6.	Mr. Mayank Kumar	Environmental Expert	PSC
7.	Mr. Nava Raj Pokheral	Environmental Expert	SSEMD/EGMP
8	Mr. Puspa Raj Wagle	Social Safeguard Expert	SSEMD/EGMP

Field visit report is attached as **Attachment #2**.

14. TRAINING, WORKSHOP, SEMINARS DURING THE REPORTING PERIOD

At present trainings & workshop program have not started, Experts of PSC is in the process of preparation of training materials. Preparation of training materials are planned to be completed in Q4, 2022. Actual training and Workshop will start from Q1, 2023.

15. SUMMARY OF ISSUES AND WAY FORWARD FOR WORK

15.1. Key Environmental Issues

COVID 19 pandemic Risk and Management issues

Two contractors that are on site of (DRTLSS Project & DCC Projects) are complying with these COVID requirements such as wearing masks, sanitization and maintaining safe distance as far as possible.

With the spreading of COVID 19 (Omicron and Delta) pandemic, risk in the construction projects has increased. Considering the situation and as per requirement/guidelines issued by Government of Nepal and/or other appropriate authorities following procedures shall be followed strictly by the contractors:

1. Working Safely during COVID-19 (Construction Stage)

The project shall assess COVID-19 risks in workplace and plan and implement preventative measures by keeping work place in safe and hygiene conditions. The workplace will consist of Contractors facilities including office, laboratory, plants, equipment yard, material stock yard, labour camps/dormitories, and construction sites.

i. Risk Assessment

The project shall carry out an appropriate COVID-19 risk assessment related to the execution of contract¹. This risk assessment shall be done in consultation with the Employer, PMC, and workers. The people who do the work are often the best people to understand the risks in the workplace and will have a view on how to work safely. In risk assessment the Contractor should have particular regard to whether the people doing the work are especially vulnerable to COVID-19.

ii. Prevention & Mitigation

The Project will have a duty to reduce workplace risk to the lowest reasonably practical level by taking appropriate preventive measures. The Contractor will decide which actions he would take, just as for other health safety and health related hazards and translate this into specific actions including how it is organized, operated, managed and regulated. When considering how to apply these actions, the Contractor shall take into account of Employer and Consultant's staff, sub-contractors, suppliers and other contractors and other people, as well as his employees so that

¹The following guidelines, among others provide guidance in the preparation of project level COVID 19 risk assessment:

- World Health Organization, 2020. Considerations for public health and social measures in the workplace in the context of COVID-19. Geneva. Available here: <https://www.who.int/publications-detail/considerations-for-public-healthand-social-measures-in-the-workplace-in-the-context-of-covid-19>;
- HM Government, 2020. Working safely during COVID-19 in construction and other outdoor work. Guidance for employers, employees and the self-employed.
- The Canadian Construction Association, 2020. COVID 19 Standard Protocols. Available here: <https://www.cca-acc.com/wp-content/uploads/2020/04/CCA-COVID-19-Standardized-Protocols-for-AllCanadian-Construction-Sites-04-16-20.pdf>

everybody's health and safety is protected. In the context of COVID-19 this means working through these steps in order:

- Creation of awareness on COVID-19 risk and prevention measures;
- Increasing frequency of hand washing and surface cleaning in every work place;
- Making every reasonable effort to comply with the social distancing guidelines set out by the government (keeping people 2m apart wherever possible. Social distancing applies to not just the place where people spend most of their time, but also entrances and exits, break rooms, canteens and similar settings;
- In situation where the social distancing guidelines cannot be followed in full, in relation to a particular activity, take all the mitigating actions possible to reduce the risk of transmission between the persons.

Further mitigating actions include, but not necessarily limited to:

- Staggering arrival and departure times at work to reduce crowding into and out of work place,
- Increasing the frequency of hand washing and surface cleaning (ensure hand washing upon arrival),
- Keeping the activity time involved as short as possible,
- Using screens or barriers to separate people from each other,

Using signage such as ground markings or being creative with other objects to mark out 2m to allow controlled flows of people moving throughout the site.

15.2. Additional Actions Recommended

Following table shows the main environmental issues and way forward for the effective implementation of environmental safeguard measures on the implemented sub-projects.

TABLE 15.1: CORRECTIVE ACTIONS AND WAY FORWARD

SN	Issues	Corrective Actions / Way Forward	Status	Remarks
1	Comply the Pre-Construction Compliances	Collection of clearance and conduct Vulture study as well as collect the consent from the Heritage desk of Department of Archeology	Planned	The TOR for the study is under finalization and will be completed during the next reporting period (December, 2022)
2	Air, Water, Noise Quality Monitoring and Management	Carry out baseline monitoring of Air, Water, Noise quality as per SEMP Regular/routine monitoring of water, air& noise quality test as per the EMP.	Planned	Done for Dadakheth – Rahughat project. Will be done for other projects.

SN	Issues	Corrective Actions / Way Forward	Status	Remarks
3	Established ESMU at Field	<ul style="list-style-type: none"> Established the ESMU at field site. Hire the required manpower at field site and establish the ESMU at Field before construction 	Planned	Process for establishment of ESMU at site is in progress.
4	Establish GRM and GRC at central and field	Central Level GRM and District Level GRC are in functional and due to COVID-19 project level GRM formation is being delayed.		GRM and GRC at central and field level for projects, where construction work will start, will be formed during the next reporting period (December 2022). Project wise details will be provided in next report.

16. CONCLUSION AND RECOMMENDATIONS

Social Safeguard and Environmental Management Department (SSEMD) has already been setup under the PMD and NEA management is prioritizing for its effective operationalization. Recruitment of individual safeguard experts and project supervision consultant has been done.

The overall implementation, supervision, and monitoring of the environmental and social safeguard aspects of the EGMP and EGMP-AP show that the construction activities have been started only for two projects. The two contractors are mobilised in the field and physical activities have started. During this period of Pre-Construction stage, the EMP has identified the clearance and preparatory activities as of the project activities. The proposed preconstruction activities are not properly addressed for all projects for which construction work has started at site also for those projects for which contract have been awarded.

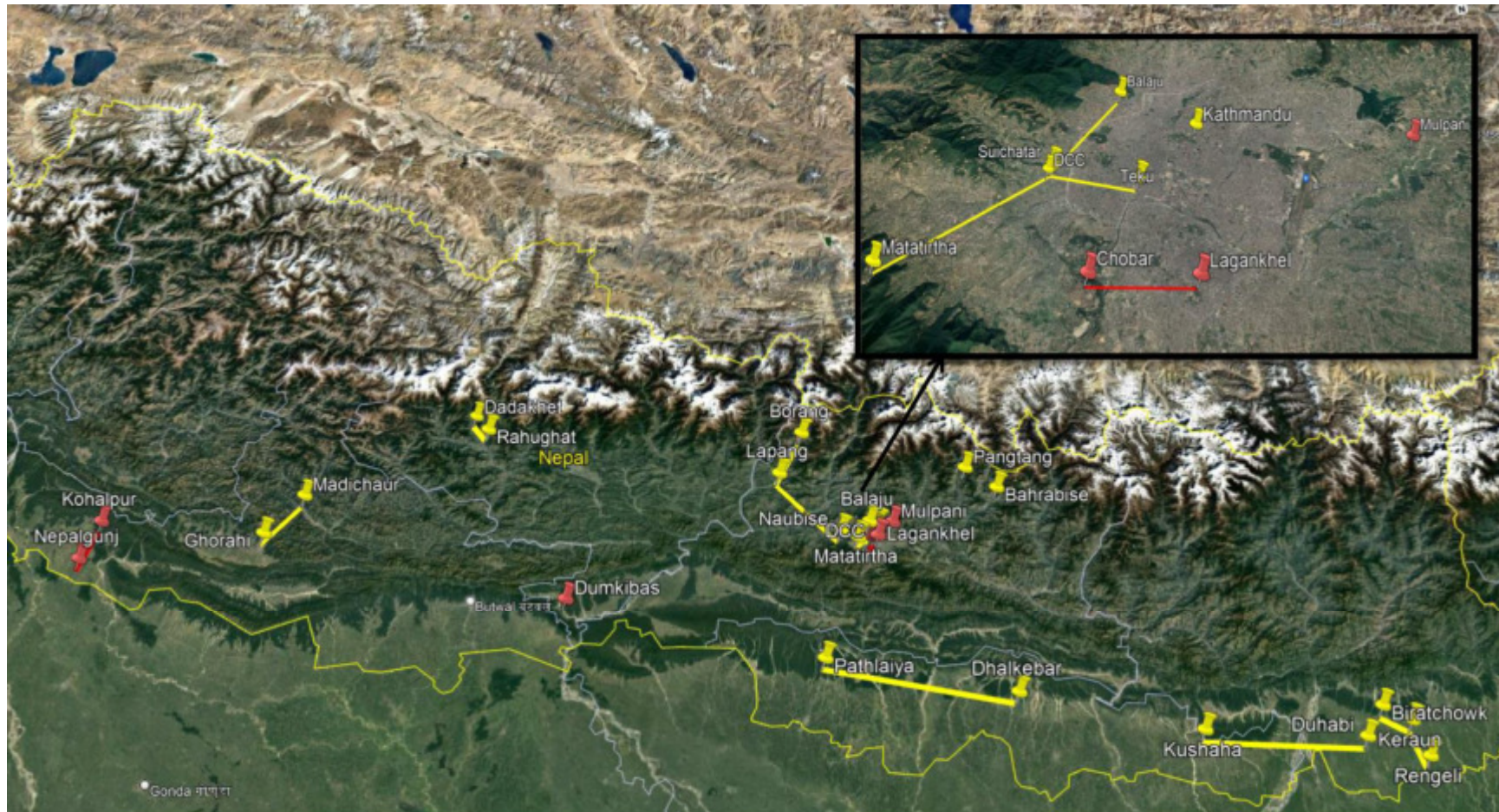
Some of the other recommendations which must be corrected to the next reporting period are:

- Implementation of EMP and carry out the planned activities effectively.
- With the continuation of COVID 19 risk at construction sites, all stakeholders need to work cautiously taking all required precautions at project sites.
- The study regarding the vulture management at Madichaur-Ghorahi needs to be done as early as possible.
- The Heritage issues of Swambhu should be addressed before the construction starts.
- All activities required for preconstruction compliance shall be done as soon as possible.
- The ESMU unit is required in each subproject to manage, operate and handle the grievances and other social and environmental activities.

The major issue for timely implementation of social safeguard activities is delayed. This is being prioritised.

ANNEXURES

Annexure #1: Locations of the projects covered under EGMP and EGMP-AF

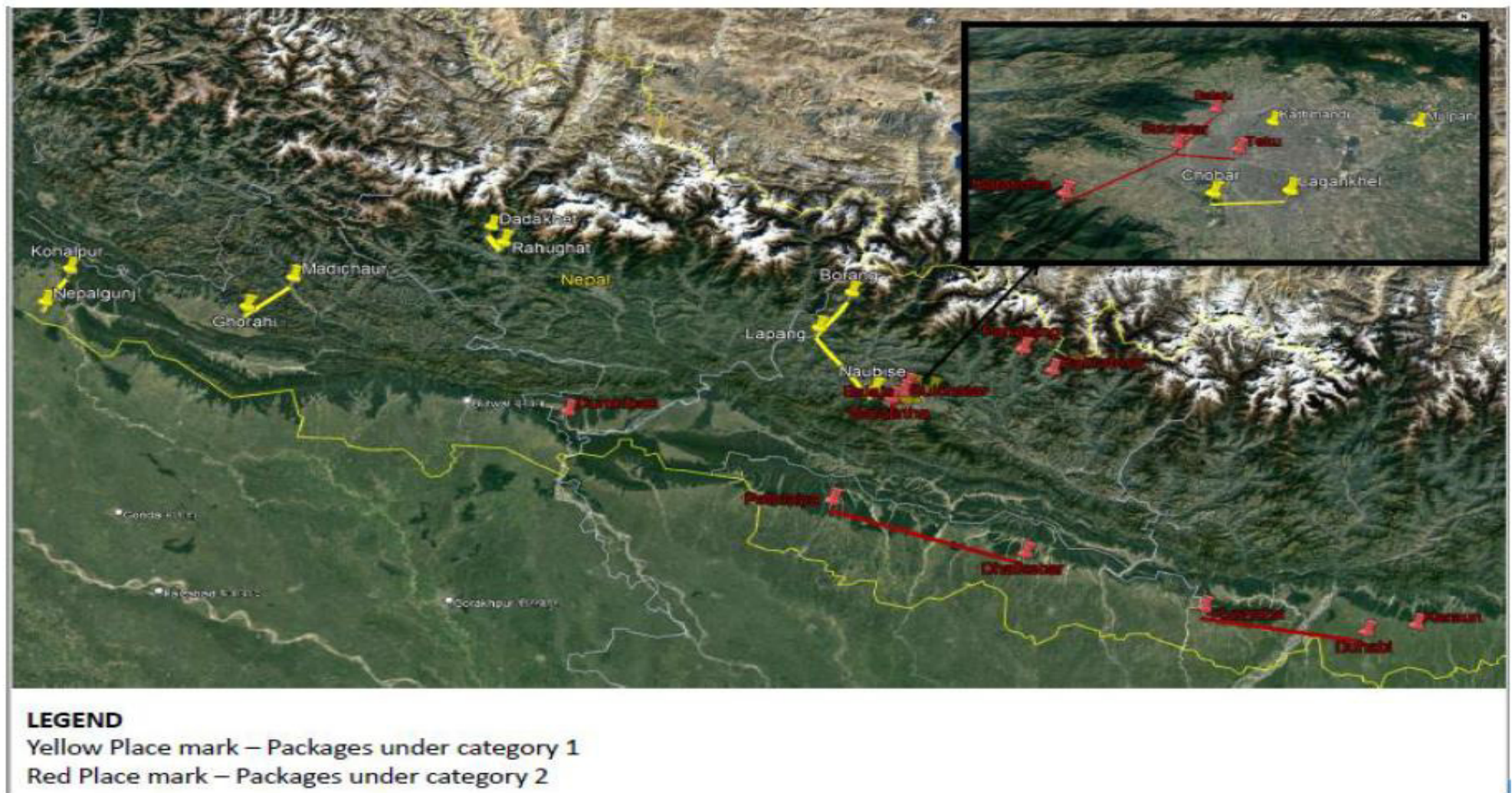


LEGEND

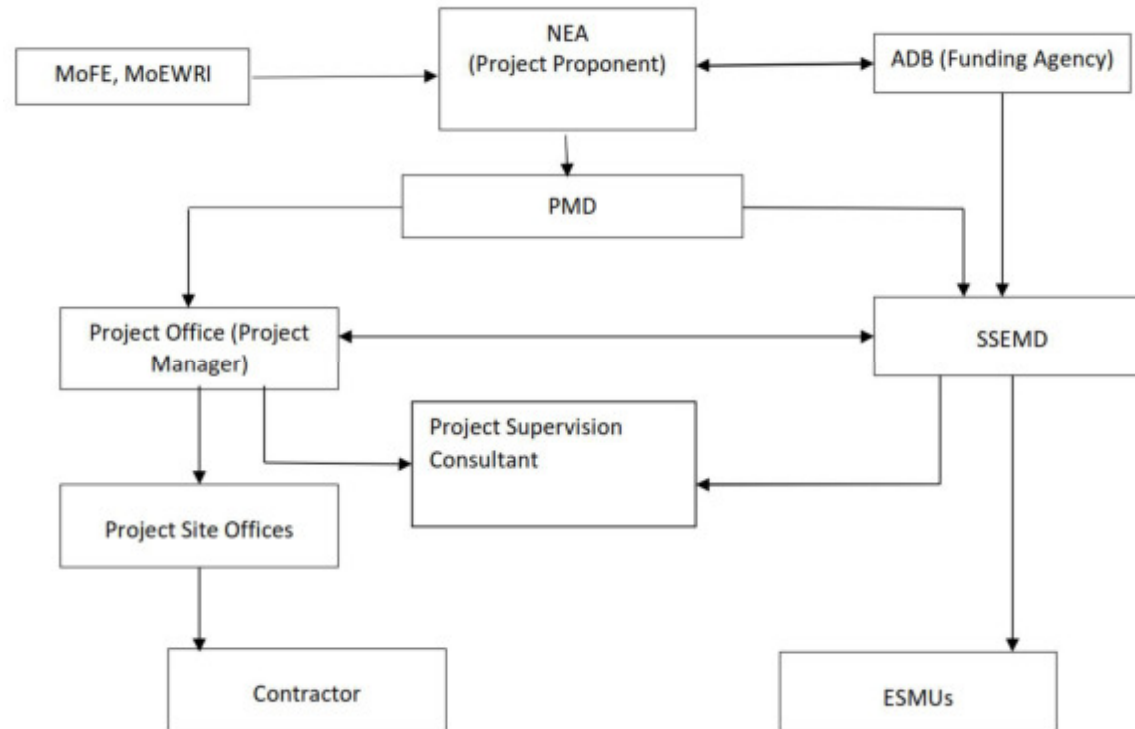
Yellow Place Mark - Packages under EGMP (Loan No. 4014-NEP)

Red Place Mark - Packages under EGMP-AF (Loan No. 4109-NEP)

Annexure #2: Locations of the projects covered under Category-1 and Category-2



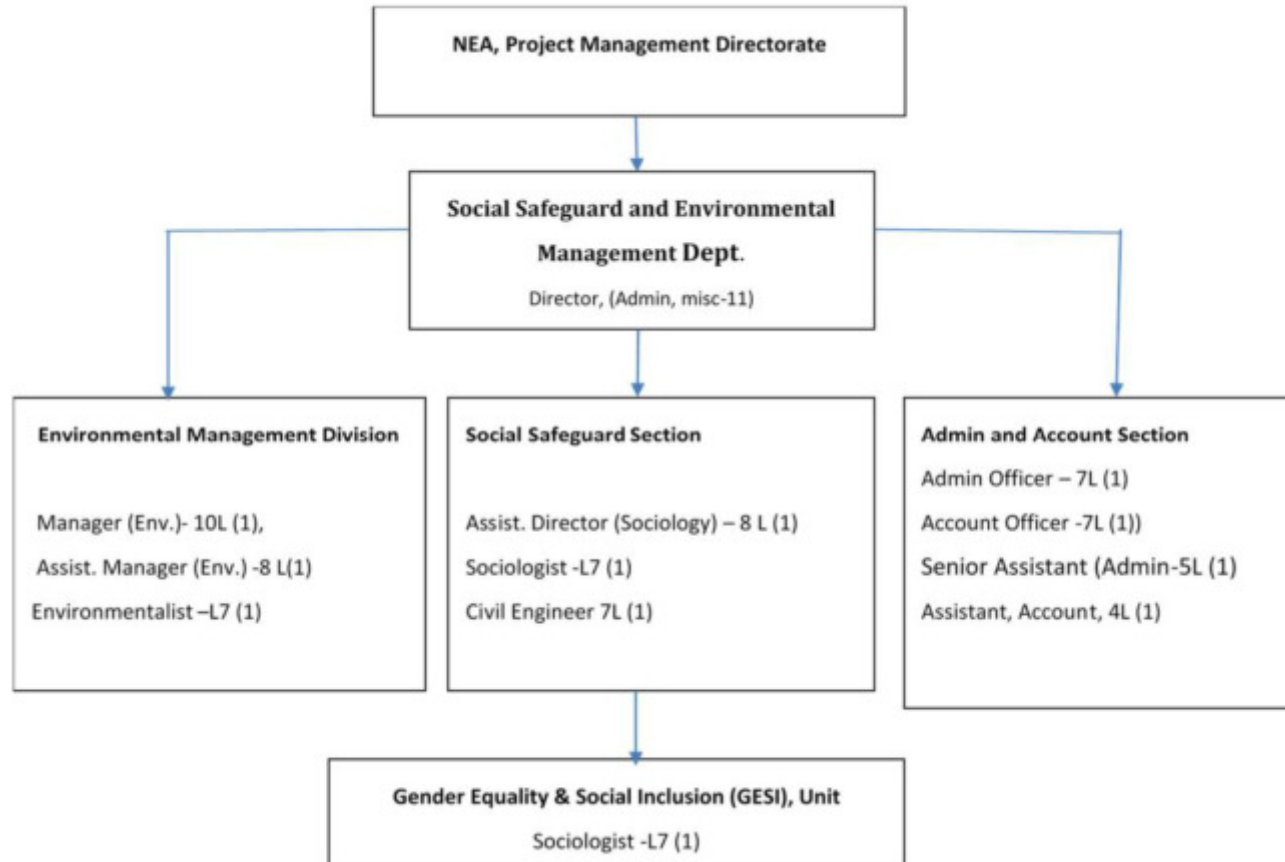
Annexure #3: Institutional Organisation Flow Chart of EGMP



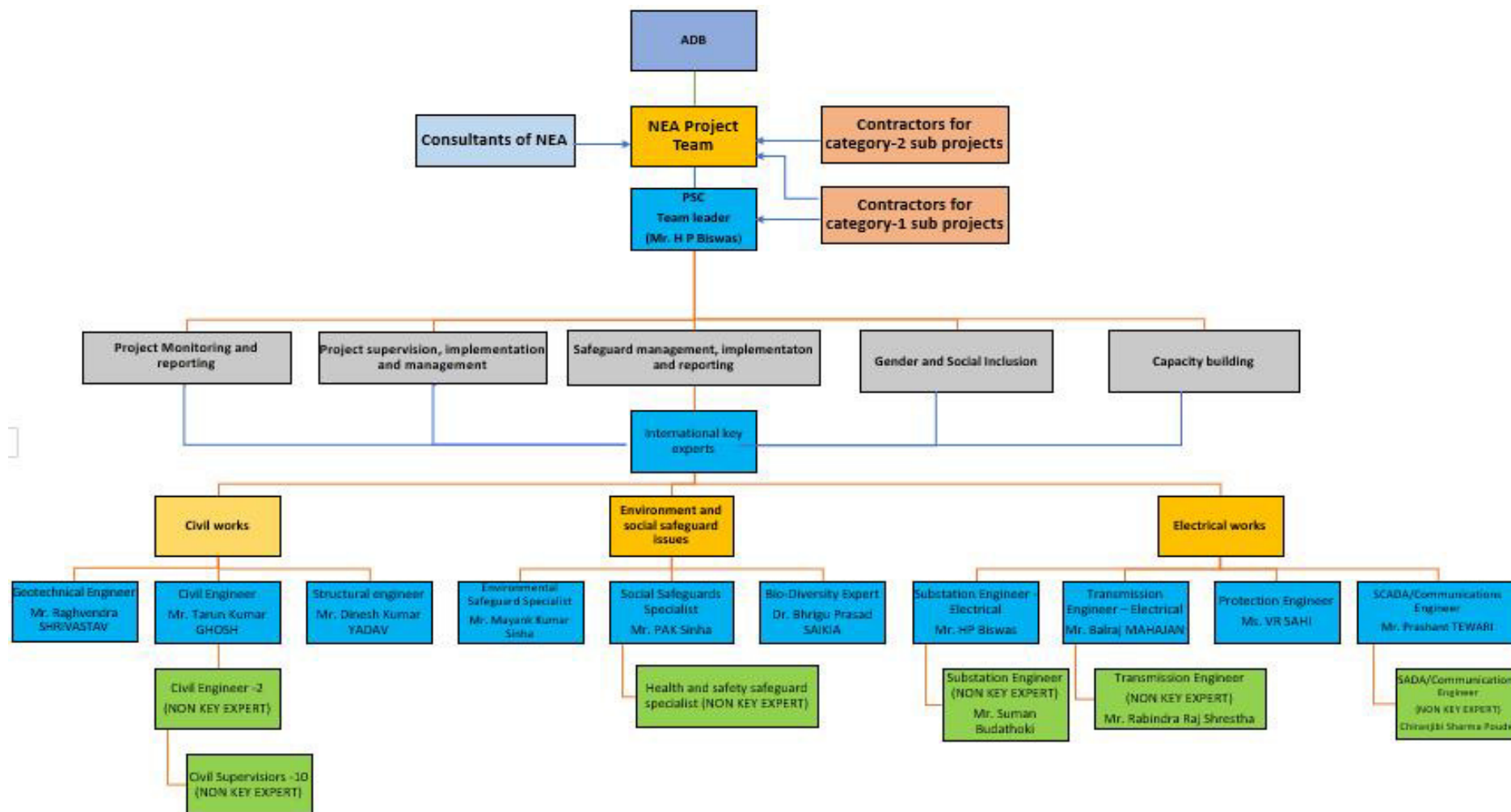
NEA; Nepal Electricity Authority
 MOFE: Ministry of Forest and Environment
 MOEWRI: Ministry of Energy, Water Resources and Irrigation
 ADB: Asian Development Bank
 PMD: Project Management Department
 SSEMD: Social Safeguard and Environment Management Department
 ESMU: Environment and Social Management Unit

(Additionally Three Individual Consultants ; Environment Safeguard , Social Safeguard, and GESI consultants are supporting SSEMD)

Annexure #4: Organisation Chart of SSEMP



Annexure #5: Project Organization Chart of Project Supervision Consultant



Annexure #6: Status of Procurement & Progress of Projects (Loan 4014)

Reporting Period 1st Half 2022

Sl. No.	Project Component	EPC Contractor	Date of Signing of Contract	Contract Amount	Project Completion Schedule	Progress from January to June 2022 (%)			Total Progress Achieved (%)		Change of Scope in Detail Design affecting IEE	EMP in Bid Document / Contract Document
						Targeted Physical Progress	Achieved Physical Progress	Achieved Financial Progress	Physical	Financial		
1.	Construction of Dadakhet – Rahughat 132 kV Transmission Line and associated Substations at Gandaki Province	M/s Larsen and Toubro Limited, India	December 31, 2021	USD 15,833,519.71 & NRs. 1,269,703,695.89	900 days from Effective Date of the Contract (August 16, 2024)	5%	5%	10%	5%	10%	No change Transmission Line Route	Included in Contract Document through MOM
2.	Construction of Ghorahi – Madichaur 132 kV Transmission Line and associated substation at Lumbini Province	Not Awarded	Tender Document for re-bidding is in progress									Will be reported in next Report December 2022.
3.	Construction of Borang – Lapang – Ratmate (132/220kV) Transmission Line and associated substations at Bagmati Province	Not Awarded	Technical evaluation has been completed, no objection on TBER received from ADB. ➤ LOA were issued to L1 Bidder Hengtong Optic – Electric Co., Ltd. and Xian Electric Engineering Co., Ltd. JV [HENGTONG-XEEC JV] ➤ L1 Bidder- [HENGTONG-XEEC JV] failed to submit the performance bond and forfeiture of bid security is in process. ➤ So, process of contract award to Second Lowest (L2) Bidder - SEPCO1-SICHUAN JV is underway.									Will be reported in next Report December 2022.
4.	Construction of 132/33/11 kV Substation at Pangtan at Bagmati Province	JV Chongqing New Century Electrical Co. Ltd. China and Nepal Hydro & Electric Ltd. Nepal (NEP)	June 22, 2022	US\$ 604,544.72 + INRs. 173,871,235.99 & NPR 294,966,565.65								Will be reported in next Report December 2022.

Sl. No.	Project Component	EPC Contractor	Date of Signing of Contract	Contract Amount	Project Completion Schedule	Progress from January to June 2022 (%)			Total Progress Achieved (%)		Change of Scope in Detail Design affecting IEE	EMP in Bid Document / Contract Document
						Targeted Physical Progress	Achieved Physical Progress	Achieved Financial Progress	Physical	Financial		
5.	Construction of 132/33/11 kV substation at Keraun (Morang) at Province 1	Energypac Engineering Ltd. – SR Associates Infrastructure Pvt. Ltd.	June 11, 2021	USD 4,466,963. & NRs. 219,914,799.00	29 October 2023	21.8%	20.3%	19.6%	20.3%	19.6%	Some change in 33 kV line route. Details will be reported in next report.	Will be reported in next Report December 2022.
6.	Grid Substation Automation (Outside Kathmandu Valley) throughout Nepal	Not awarded										
7.	Construction of Distribution Command and Control Centre at Bagmati Province	Yantai Dongfang Wisdom Electric Co. Ltd	July 09, 2021	USD 10,139,547.60 & NRs. 183,112,270.34								Will be reported in next Report December 2022.
8.	Smart Metering in Kathmandu Valley (2 nd Phase) in Bagmati Province	Not Awarded										
9.	132 kV/66 kV Transmission Line Conductor Upgradation in Provinces number 1 and 2	HG Power Transmission Sdn. Bhd., Malaysia	May 30, 2022	US\$ 14,565,730.37 & NRs. 115,583,160.00	900 days from Effective Date of the Contract.							Will be reported in next Report December 2022.

Annexure #7: Status of Procurement & Progress of Projects (Loan 4109)

Reporting Period 1st Half 2022

Sl. No.	Project Component	EPC Contractor	Date of Signing of Contract	Contract Amount	Project Completion Schedule	Progress from January to June 2022 (%)			Total Progress Achieved (%)		Change of Scope in Detail Design affecting IEE	EMP in Bod Document / Contract Document
						Targeted Physical Progress	Achieved Physical Progress	Achieved Financial Progress	Physical	Financial		
1.	Construction of 132 kV Underground Transmission Line from Chobhar to Lagankhel in Bagmati Province	Not Awarded	Bidding document under preparation									Will be reported in next Report December 2022.
2.	Construction of Mulpani 132/11kV GIS Substation in Bagmati Province	Not Awarded	Negotiation is ongoing with lowest evaluated bidder, M/s TBEA Co. Ltd, China.									Will be reported in next Report December 2022.
3.	Construction of 132 kV Kohalpur – Nepalgunj Transmission Line and associated substation at Nepalgunj in Lumbini Province	Not Awarded	Estimate approved; bidding document sent to ADB for concurrence.									Will be reported in next Report December 2022.
4.	Construction of of 132/ 33/ 11 kV Air Insulated Substation at Dumkibas, Binayi Triveni Rural Municipality, Nawalparasi (Bardaghat-Susta East) District in Lumbini Province	Not Awarded	Technical evaluation of bid is in progress.									Will be reported in next Report December 2022.

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Annexure #8: Compliance to Social Safeguards & Environment Safeguard Covenants from the ADB Loan Agreement

Reporting Period 1st Half 2022

Schedule #, Para. #	Covenant	Compliance Status	Remarks (Loan No. 4014: EGMP)	Remarks (Loan No. 4109: EGMP-AF)
Schedule 4, Para 1 (for EGMP & EGMP-AF)	<p>Implementation Arrangements</p> <p>The Borrower and NEA shall ensure that the Project is implemented in accordance with the detailed arrangements set forth in the PAM. Any subsequent change to the PAM shall become effective only after approval of such change by the Borrower and ADB. In the event of any discrepancy between the PAM and this Loan Agreement, the provisions of this Loan Agreement shall prevail.</p>	Will be complied	Any subsequent change to the PAM will be complied.	-
Schedule 4, Para 3 (for EGMP & EGMP-AF)	<p>Procurement</p> <p>The Borrower and NEA shall not award any Works contract which involves environmental impacts until:</p> <p>(a) the Borrower's MOEWRI has granted the final approval of the relevant IEE;</p> <p>(b) NEA has updated the relevant IEE and/or EMP, if required, and obtained ADB's clearance thereof; and</p> <p>(c) NEA has incorporated the relevant provisions from the EMP into the Works contract.</p>	Being Complied.	<p>Contract of Dadakhet – Rahughat project has been awarded after approval of IEE.</p> <p>EMP have been made part of the Contract for Dadakhet – Rahughat project.</p> <p>Compliance for other projects will be included in next report.</p>	None of the Contract has been awarded
Schedule 4, Para 4 (for EGMP & EGMP-AF)	<p>Environment</p> <p>The Borrower and NEA shall not award any Works contract involving involuntary resettlement impacts or impacts on indigenous peoples until the Borrower and/or NEA has prepared and submitted to ADB the final RIPP for such Works contract based on the Project's detailed design and obtained ADB's clearance of such RIPP.</p>	Being complied.	<p>DCC is being constructed in the Land of NEA.</p> <p>Contract of Keraun, Dadakhet, Rahughat, and Pangtan, Substations have been awarded after completion of acquisition of land and resettlement.</p> <p>Please refer Attachment #8</p>	None of the Contract has been awarded

Schedule #, Para. #	Covenant	Compliance Status	Remarks (Loan No. 4014: EGMP)	Remarks (Loan No. 4109: EGMP- AF)
Schedule 4, Para 12 (for EGMP) Schedule 4, Para 11 (for EGMP-AF)	Environment The Borrower shall ensure, and cause NEA to ensure, that the preparation, design, construction, implementation, operation and decommissioning of the Project and all Project facilities comply with: (a) all applicable laws and regulations of the Borrower relating to environment, health, and safety; (b) the Environmental Safeguards; and (c) all measures and requirements set forth in the IEE, the EMP, and any corrective or preventive actions set forth in a Safeguards Monitoring Report or otherwise.	Being complied	All requirement regarding applicable laws national regulations on environment, health & safety and measures & requirement set forth in IEE and EMP are being complied in design and construction.	Will be complied
Schedule 4 Para 13 (for EGMP only)	Environment The Borrower shall ensure, and cause NEA to ensure, that a) Any Works I. On the Ghaorai-Madichaur transmission line within Chure Conservation Area, II. On the Pathiaya-Dhlkeba transmission line within Parsa National Park and Chure Conservation Area, III. On the Duhabi-Kusaba transmission line within Koshi Tappu Wildlife Reserve Buffer Zone and IV. on the Syuchatar-Balaju transmission line within Kathmandu valley (Swayambhu) World Heritage Site are confined at proposed or existing right of way of these transmission lines: b) all such works are undertaken in accordance with detailed site-specific biodiversity or heritage management plans which is to be cleared by ADB before commencement of the related works, c) works on substation automation for Bharatpur, Bhurigaun, Ghorahi, Hetauda, Kamane, Kusum, Lakhanatri, Lamahi, Mahendranagar, Pokhara and Simara substations to be carried out within the confines of existing substation boundaries and	Will be complied.	At present construction works at DCC and Dadakhet projects are in progress, which are not falling under these requirements. Compliance for other projects will be reported in next report (December 2022).	NOT APPLICABLE

Schedule #, Para. #	Covenant	Compliance Status	Remarks (Loan No. 4014: EGMP)	Remarks (Loan No. 4109: EGMP- AF)
	d) no other works are carried out under the project within the boundaries or buffer zones of any existing or proposed World Heritage sites, Ramsar Sites, National Parks, Wildlife Reservers or Conservation areas.			
Schedule 4, Para 14 (for EGMP) Schedule 4, Para 12 (for EGMP-AF)	Land Acquisition and Involuntary Resettlement The Borrower shall ensure, and cause NEA to ensure, that all land and all rights of-way required for the Project are made available to the Works contractor in accordance with the schedule agreed under the related Works contract and all land acquisition and resettlement activities are implemented in compliance with: (a) all applicable laws and regulations of the Borrower relating to land acquisition and involuntary resettlement; (b) the Involuntary Resettlement Safeguards; and (c) all measures and requirements set forth in the respective RIPP, and any corrective or preventative actions set forth in a Safeguards Monitoring Report.	Being complied.	Land acquisition process of substations is ongoing and Process for transmission lines will be started once the contractor submit final design of TL route.	Land for Nepalgunj Substation has been done and resettlement done. Please refer Attachment #9
Schedule 4, Para 15 (for EGMP) Schedule 4, Para 13 (for EGMP-AF)	Without limiting the application of the Involuntary Resettlement Safeguards, the RIPP, the Borrower shall ensure, and cause NEA to ensure, that no physical or economic displacement takes place in connection with the Project until: (a) compensation and other entitlements have been provided to affected people in accordance with the RIPP; and (b) comprehensive income and livelihood restoration program has been established in accordance with the RIPP.			
Schedule 4, Para 16 (for EGMP) Schedule 4, Para 14 (for EGMP-AF)	Indigenous Peoples The Borrower shall ensure, or cause NEA to ensure, that the Project does not impact indigenous people within the meaning of SPS. If, due to unforeseen circumstances, the Project impacts indigenous peoples, the Borrower shall take all steps necessary or desirable to ensure that the Project complies with all applicable laws and regulations of the Borrower relating to indigenous peoples and with the SPS.	Being complied.	Construction works have started in DCC and Dadakhet-Rahughat Project. Details of compliance will be provided in next report.	Will be complied.

Schedule #, Para. #	Covenant	Compliance Status	Remarks (Loan No. 4014: EGMP)	Remarks (Loan No. 4109: EGMP- AF)
Schedule 4, Para 17 (for EGMP) Schedule 4, Para 15 (for EGMP-AF)	Human and Financial resources to Implement Safeguards Requirements The Borrower shall make available, and cause NEA to make available, necessary budgetary and human resources to fully implement the EMP and the RIPP. The Borrower shall cause NEA to establish an environment and social safeguards unit in NEA's Project Management Directorate and ensure it has adequate staff, resources and facilities necessary for its operation	Being complied.	NEA established a Social Safeguard and Environment Management Department under PMD and required human resources are being fulfilled.	Resources of SSEMD are common for EHMP and
Schedule 4, Para 18 (for EGMP) Schedule 4, Para 16 (for EGMP-AF)	Safeguards – Related Provisions in Bidding Documents and Works Contracts The Borrower shall ensure, and cause NEA to ensure, that all bidding documents and contracts for Works contain provisions that require contractors to: (a) comply with the measures and requirements relevant to the contractor set forth in the IEE, the EMP and the RIPP (to the extent they concern impacts on affected people during construction), and any corrective or preventative actions set out in a Safeguards Monitoring Report; (b) make available a budget for all such environmental and social measures; (c) provide NEA with a written notice of any unanticipated environmental, resettlement or indigenous peoples risks or impacts that arise during construction, implementation or operation of the Project that were not considered in the IEE, the EMP or the RIPP; (d) adequately record the condition of roads, agricultural land and other infrastructure prior to starting to transport materials and construction; and (e) fully reinstate pathways, other local infrastructure, and agricultural land to at least their pre-project condition upon the completion of construction.	Being Complied	These clauses are being complied and mentioned in IEE Report and implemented during the project implementation stage. It is ensured that the EMP will be included in the Bidding Document as well as in contract document of all future project. Details will be included in next report. Comment on budget, unanticipated impacts and pre-construction surveys will be reported in the next report.	Will be complied.
Schedule 4, Para 19 (for EGMP) Schedule 4, Para 17 (for EGMP-AF)	Safeguards Monitoring and Reporting The Borrower shall cause NEA to do the following:	Being Complied	Quarterly report and Semi-annual Environmental safeguard monitoring reports are being prepared and submitted to ADB.	

Schedule #, Para. #	Covenant	Compliance Status	Remarks (Loan No. 4014: EGMP)	Remarks (Loan No. 4109: EGMP- AF)
	<p>(a) submit semiannual Safeguards Monitoring Reports to ADB and disclose relevant information from such reports to affected persons promptly upon submission;</p> <p>(b) if any unanticipated environmental and/or social risks and impacts arise during construction, implementation or operation of the Project that were not considered in the IEE, the EMP, and the RIPP, promptly inform ADB of the occurrence of such risks or impacts, with detailed description of the event and proposed corrective action plan;</p> <p>(c) report any actual or potential breach of compliance with the measures and requirements set forth in the EMP or the RIPP promptly after becoming aware of the breach; and</p> <p>(d) publicly disclose safeguards assessments including the IEE, the EMP the RIPP, and monitoring reports on the NEA website and through other channels in a manner consistent with ADB's Access to Information Policy (2018)</p>		<p>Comments on unanticipated impact, this includes any changes in alignments are also being reported.</p> <p>ADB IEE and RIPP is now on ADB website in the following links.</p> <p>https://www.adb.org/projects/documents/nep-54107-001-iee</p> <p>https://www.adb.org/projects/documents/nep-54107-001-remdp</p> <p>Details other disclosures will be reported in next report.</p>	
<p>Schedule 4, Para 20 (for EGMP)</p> <p>Schedule 4, Para 18 (for EGMP-AF)</p>	<p>Prohibited List of Investments</p> <p>The Borrower shall ensure, and cause NEA to ensure, that no proceeds of the Loan are used to finance any activity included in the list of prohibited investment activities provided in Appendix 5 of the SPS</p>	Complied		
<p>Schedule 4 Para 21 and 22 (for EGMP)</p> <p>Schedule 4, Para 19 and 20 (for EGMP-AF)</p>	<p>Labor Standards, Health and Safety</p> <p>The borrower shall ensure that the core labor standards and the borrowers applicable laws and regulations are complied with during project implementation. The borrower shall include specific provisioned in the bidding documents and contract financed by ADB under the project requiring that the contractors among other things;</p> <p>a) Comply with the borrowers applicable labour laws and regulations incorporated applicable workplace occupational safety norms</p> <p>b) do not use child labour</p> <p>c) do not discriminate workers in respect of employment and occupation</p> <p>d) do not use forced labor</p>	Being Complied	<p>Construction works at DCC, Dadakhet & Rahughat Substations have been started.</p> <p>Compliance with labor standards will be reported in next report (December 2022).</p>	

Schedule #, Para. #	Covenant	Compliance Status	Remarks (Loan No. 4014: EGMP)	Remarks (Loan No. 4109: EGMP- AF)
	<p>e) disseminate , or engage appropriate service providers to discriminate, information on the risks of sexually transmitted diseases, including HIV/AIDS , to the employees of contractors engaged under the project and to members of the local communities surrounding the project area, particularly women</p> <p>The Borrower shall strictly monitor compliance with the requirements set forth in paragraph 21 above and provide ADB with regular reports.</p>			
<p>Schedule 4 Para 23 (for EGMP)</p> <p>Schedule 4, Para 21 (for EGMP-AF)</p>	<p>Gender and Development</p> <p>The Borrower shall ensure, and cause NEA to ensure, that (a) the GAP is implemented in accordance with its terms in an effective and timely manner; (b) the bidding documents and contracts include relevant provisions for contractors to comply with the measures set forth in the GAP; (c) adequate resources are allocated for implementation of the GAP; and (d) the Project Monitoring System shall integrate GESI targets and indicators in a disaggregated form and (e) data and information on progress on implementation of the GAP, including progress toward achieving key gender outcome and output targets, collected regularly and reported to ADB semi-annually in accordance with the project performance and monitoring system developed for the Project</p>	Being complied		

Annexure #9: Compliance Status with National Regulation and International Agreement

Reporting Period 1st Half 2022

National Regulation or International Agreement	Compliance Requirements under the Regulation or Agreement	Compliance Status	Remarks
Land Acquisition Acts 1997 and subsequent amendment	<ul style="list-style-type: none"> - All provisions of Acts applied and follow. - Must be followed all Clause of Acts during land acquisition. - CDC meeting. - Land acquisition notice, - Grievances affected persons, - Public notice etc 	- Complied processing of land acquisition.	<ul style="list-style-type: none"> - Meeting of Compensation Determination Committee (CDC) held in Dhanding districts for Borang and Lapang Substations (Sl. No. 3 of table 2.1) – Ratmate Project and for other districts it will be held as soon as the project become ready. - Same process for other subproject - Land acquisition notice published in Borang and Lapang SS (Sl. No. 3 of table 2.1). - Grievances of affected persons not received till now
Land Reform Act 1964	<ul style="list-style-type: none"> - A landowner may not be compensated for more land than s/he is entitled to under the law. - This Act also establishes the tiller's right on the land which s/he is tilling. 	- Not required till now	- The provision will be followed when and where required during land acquisition.
The Land Revenue Act (1977)	<ul style="list-style-type: none"> - Land registration, changes in ownership and termination of ownership are done as per act. - Yearly Revenue Collection 	- Not required till now	- The provision will be followed when and where required during land acquisition.
Electricity Act 2049 (1992) and The Electricity Regulation, 2050 (1993)	- Section 33 of Electricity Act 1992 and Rule 66 of Electricity Regulation 1993 specifies resettlement and rehabilitation measures, compensation as determined by committee formed as per Rule 88 of Electricity Regulation 1993.	Being Complied	<ul style="list-style-type: none"> - Compensation of substation lands have been paid. - Compensation of Row and will be determined once the contractor submit land parcel data for transmission line and approved by NEA.
National Foundation for Development of Indigenous Nationalities (NFDIN) Act-2002.	- The act defines indigenous groups or Adivasi Janajati in Nepal.	- Not required till now	- Not started construction works in the subproject locations.

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National Regulation or International Agreement	Compliance Requirements under the Regulation or Agreement	Compliance Status	Remarks
ILO Convention 169 (ratified by Nepal in 2007).	- Ensures the individual and collective rights of Indigenous Peoples, as well as their rights to culture, identity, language, employment, health, education, and other issues while implementing any development activities in the traditional territory of the Indigenous People.	- Complied during project processing period and will be followed during the implementation period too. Details will be updated in next report.	- During Project processing period- complied.

Annexure #10: Compliance to Project Administration Manual (PAM)

Reporting Period 1st Half 2022

Tasks	Compliance Status	Remarks
Establishing before the commencement of works, including any pre-construction enabling works, a formal, fully functional environment and social safeguards unit in PMD and providing requisite facilities and equipment to enable its operation	Complied	With establishment of dedicated department within PMD, recruitment of indicted expert will commence.
Upon loan effectiveness, appointing suitably qualified and experienced environmental and social safeguards staff dedicated to the project, under the direction of the safeguards unit, as follows: (i) a full-time senior environment officer, (ii) a full-time senior health and safety officer, (iii) a full-time senior biodiversity officer, (iv) 8 full-time junior EHS field officers who are to be based on-site during the construction period, (v) a full-time community engagement/GRM officer to assist with completion of meaningful consultation and operationalizing the GRM, and (vi) a full-time social office	Partly complied.	Following experts are yet to recruited under SSEMP: - (iii) a full-time senior biodiversity officer, (iv) 8 full-time junior EHS field officers who are to be based on-site during the construction period, (v) a full-time community engagement/GRM officer to assist with completion of meaningful consultation and operationalizing the GRM,
Securing ecological and archaeological third-party services in relation to undertaking further biodiversity and heritage assessment and management planning and ensuring the full-time supervision and monitoring of works in protected areas.	Being complied	With establishment of dedicated department within PMD, recruitment of indicted expert will commence soon. Construction of Rahughat and Dadakhet have been stated, These substations are not located in sensitive areas.
Incorporation of EMP in accordance to responsibilities in contract document Implementing and supervising and monitoring implementation by the contractor of the EMP during detailed design, pre-construction, construction, operation and maintenance phases and incorporating the final EMP into the bidding and contract documents for each package before contract awards, including for associated facilities.	Being complied	Appropriate EMP are made part of contract documents. Contractor of Dadakhet – Rahughat project has been instructed to depute Biodiversity Expert at site.
Finalizing the IEE/EMP prior to contract award, to ensure it reflects required confirmations from the protected area management, additional meaningful consultations, additional baseline data collection, and further biodiversity and heritage assessment and management for project components affecting environmentally sensitive areas, and obtaining ADB's clearance prior to incorporation of the final EMP in the contract documentation	Being complied	Appropriate EMP provisions are being included in the contract documents. Details of other actions will be included in next report.

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Tasks	Compliance Status	Remarks
Ensuring that the relevant provisions of the final EMP included in bidding and contract documents. The contract will explicitly exclude the use of PCBs and any asbestos containing materials, require the contractor to undertake health and safety (H&S) risk assessment and develop a H&S plan including COVID-19 response, and to provide counterpart safeguards staff, as applicable to the project components under their contract.	Being complied	Information on PCB included in the Bidding Document, but Asbestos is missing in the documents. It is already wrote to include this asbestos issue. Likewise, no H&S plan including COVID-19 response in any tender document noted.
Updating the IEE/EMP to ensure they reflect the detailed design for all project components and obtaining ADB's clearance prior to the commencement of any work, including any pre-construction enabling works. Once cleared, ADB will disclose the updated IEE online.	Being complied	
Implementing the corrective action incorporated into the EMP before any works at existing facilities (substations) commence.	Being complied	NEA will ensure corrective action will be taken before any works at existing facilities and report to ADB.(substations) commence.
Ensuring works affecting Parsa National Park, Koshi Tappu Wildlife Reserve buffer zone, Chure Conservation Area, and, Kathmandu Valley (Swayambu) World Heritage Site as reflected in the IEE/EMP are confined solely to the new or existing rights of way of these lines and substation boundaries and supervised full-time by a third-party ecologist/archaeologist under the direction of the environment safeguards team. Site-specific measures for project components in these locations as set out in the EMP are to be implemented, with detailed designs and site-specific construction biodiversity/heritage management plans cleared by ADB before any works in these areas take place. For works within the biodiversity protected areas actions to promote and enhance their conservation aims as agreed with the protected area management are to be implemented. No other works will take place in the boundaries or buffer zones of internationally important biodiversity or heritage areas	Not yet due	Construction of Rahughat and Dadakhet have been stated, These substations are not located in sensitive areas Will be complied when work will be commenced in these sensitive areas.
Implementing the RIPP and completing all land acquisition prior to physical and economic displacement, including informing all displaced persons of their entitlements and resettlement options.	Being Complied	Construction of Rahughat and Dadakhet have been stated in compliance with this requirement.

Tasks	Compliance Status	Remarks
Establishing and operationalizing a single environmental and social grievance redress mechanism (GRM) for affected persons (construction workers and local community members) in line with the provisions of the IEE, including establishing a grievance redress committee headed by the NEA project manager for affected persons before loan effectiveness, and promptly addressing any grievances received throughout the project. Contact details for the GRM will be prominently displayed on notice boards at the project sites and widely communicated to the local affected communities within the project areas. Further details on the GRM are provided in the Grievance Redress Mechanism section of this PAM	Partly complied	Local Level GRC have been established for Keraun Substation Project. Please refer to Attachment #7 . Details regarding establishment of GRC for other projects will be included in next report.
Continuing to undertake meaningful consultation (community liaison) for environment and social safeguards during implementation, including prior to finalization of detailed designs, once line routings and substation locations are confirmed, giving particular attention to consultations with women, indigenous peoples and other vulnerable groups. All ongoing consultation and grievance related information, such as minutes of the meetings and decisions will be documented and summarized in the environmental and social monitoring reports submitted to ADB.	Partly complied	Details regarding undertaking meaningful consultation with stakeholder will be reported in next report.
Locally disclosing the IEE and RIPP and other environmental and social safeguards documentation. This will include NEA web disclosure, but also ensuring that full copies of both the IEE and its executive summary, translated into Nepali, and, RIPP and summary, all translated into Nepali, are available at all local NEA offices, project substations, and on request at the project sites; notices should also be placed on noticeboards at the project sites and local NEA offices and pamphlets should be distributed in the project areas in Nepali, informing of the availability of the IEE, RIPP and other reports, with notice given that help with translation to Nepali and affected persons' dialects will be extended free of charge on request.	Not yet due	NEA will ensure disclosing the IEE and other environment safeguard documents at appropriate timing.
Updating the IEE, EMP as necessary if unanticipated impacts (including project scope or design changes) occur during implementation, and disclosing any updates to them, both locally and on NEA website; any such updates should also be submitted to ADB for clearance and disclosure on the ADB website before any works commence.	Being complied	NEA is committed of taking all requisite corrective action in case of any non-compliance with the EMP during implementation including repair of any property damage, financial compensation (insurance) for any health and safety incidents.
Ensuring adequate budget, institutional support, and staff resources are allocated to implement, supervise and monitor the EMP including per bullet (ii) sufficient number of suitably qualified and experienced environmental, health and safety officers to cover supervision of all the concurrently ongoing contract packages. Costs for the implementation of the EMP and RIPP will be the responsibility of NEA.	Being complied	
Ensuring that all NEA project staff support and attend all capacity development and training activities provided, and facilitate the provision of the training venues etc	Being complied	

Tasks	Compliance Status	Remarks
<p>Preparing combined environmental and social monitoring reports semi-annually during project implementation up until the project is closed, or for a longer period if this is specified in the project completion report, and disclosing them locally and on NEA website and submitting to ADB for disclosure on the ADB website.</p> <p>As per disclosure requirements set out in the Stakeholder Communication Strategy section of this PAM. PMD is responsible for providing monitoring reports to ADB, though it is expected that the activities of the PSC are also included in these reports. NEA will also report quarterly on safeguards within the progress reports.</p>	Being complied	
<p>Developing and taking all requisite corrective action in case of any non-compliance with the EMP during implementation including repair of any property damage, financial compensation (insurance) for any health and safety incidents.</p>	Will be complied	

Annexure #11: Status of Environmental Safeguards During Planning Stage (EGMP-4014)

Reporting Period 1st Half 2022

S N	Name of Project or Subproject (Covered under EGMP)	Environmental screening is carried out? (Yes or No)	Environment category of the project / subproject (A/B/C/FI)	IEE with EMP is prepared (Yes/No)	ADB approved IEE with EMP (Yes / No)	Government approved IEE (Yes / No)	Safeguard monitoring and coordination mechanism established (Yes/No)	GRC is established (Yes/No) *	EMP cost in is included in Contractor's Scope (Yes/No)	Remarks
1	Construction of 25km long 132 kV overhead transmission line from Dandhakhet - Rahughat	Y	B	Y	Y	Y	Y		Y	
2	Construction of new 220/132 kV substation at Rahughat	Y	B	Y	Y	NA	Y		Y	
3	Construction of new 132/33 kV substation at Dadakhet	Y	B	Y	Y	NA	Y		Y	
4	Construction of 40 km long 132 kV overhead transmission line from Ghorahi to Madichaur	Y	B	Y	Y	Y	Y		Y	
5	Construction of new 132/33 kV substation at Madichaur	Y	B	Y	Y	NA	Y		Y	
6	Extension of Ghorahi substation	Y	B	Y	Y	NA	Y		Y	
7	Construction of 25 km long 220 kV overhead transmission line from Ratmate to Lapang	Y	B	Y	Y	Y	Y		Y	
8	Construction of 23 km long 132 kV overhead transmission line from Lapang to Borang	Y	B	Y	Y	Y	Y		Y	
9	Construction of new 220/132/33 kV substation at Lapang	Y	B	Y	Y	NA	Y		Y	
10	Construction of new 132/33 kV substation at Borang	Y	B	Y	Y	NA	Y		Y	

S N	Name of Project or Subproject (Covered under EGMP)	Environmental screening is carried out? (Yes or No)	Environment category of the project / subproject (A/B/C/FI)	IEE with EMP is prepared (Yes/No)	ADB approved IEE with EMP (Yes / No)	Government approved IEE (Yes / No)	Safeguard monitoring and coordination mechanism established (Yes/No)	GRC is established (Yes/No) *	EMP cost in is included in Contractor's Scope (Yes/No)	Remarks
11	Construction of new 132/33 kV substation at Pangtan and extension of Barhabise Substation	Y	B	Y	Y	Y	Y		Y	
12	Construction of new 132/33 kV substation at Keraun	Y	B	Y	Y	Y	Y		Y	
13	Construction of 30 km associated 33 kV distribution lines.	Y	B	Y	Y	NA	Y		Y	
14	Installation of substation automation system at 34 nos. of 400/220/132/66/33/11 kV existing substations outside of the Kathmandu Valley	Y	B	Y	Y	NA	Y		Y	
15	Construction of Distribution Command and Control Centre Building and associated infrastructure, hardware, and software	Y	B	Y	Y	NA	Y		Y	
16	Installation of 350,000 smart meters and associated facilities in 9 distribution centers of NEA.	Y	B	Y	Y	NA	Y		Y	
17	Upgrading conductor (DC) on 102km 132kV Pathlaiya- Dhalkebar transmission line	Y	B	Y	Y	NA	Y		Y	
18	Upgrading conductor (DC) on 28 km 132kV SC Duhabi-Kusaha transmission line	Y	B	Y	Y	NA	Y		Y	
19	Upgrading conductors (DC) on 14 km 66kV transmission lines inside Kathmandu valley	Y	B	Y	Y	NA	Y		Y	
20	Project Supervision Consultant									

- Detail information on GRC will be included in next Report.

Annexure #12: Status of Environmental Safeguards During Planning Stage (EGMP:AF - 4109)

Reporting Period 1st Half 2022

S N	Name of Project or Subproject (Covered under EGMP-AF)	Environmental screening is carried out? (Yes or No)	Environment category of the project / subproject (A/B/C/FI)	IEE with EMP is prepared (Yes/No)	ADB approved IEE with EMP (Yes / No)	Government approved IEE (Yes / No)	Safeguard monitoring and coordination mechanism established (Yes/No)	GRC is established (Yes/No) *	EMP cost in is included in Contractor's Scope (Yes/No))	Remarks
1	Construction of 132 kV underground transmission line from Chobar to Lagankhel.	Y	B	N	Y	N	N		N	
2	Construction of 132/11 kV Mulpani Substation	Y	B	N	Y	N	N		N	
3	Construction of 132 kV Kohalpur Nepalgunj Transmission Line	Y	B	N	Y	N	N		N	
4	Construction of new 132/33 kV Substations at Nepalgunj	Y	B	N	Y	N	N		N	
5	Construction of 132/33/11 kV Substations at Dumkibas, Nawalparasi	Y	B	N	Y	N	N		N	
6	Supply and Installation of ERP.	Y	B	-	-	-	-		N	
7	Supply and Installation of RMS.	Y	B	-	-	-	-		N	
8	Project Supervision Consultant	Y	-	-		-	-	-		

- Detail information on GRC will be included in next Report.

Annexure #13: Status of compliance to the EMP implementation during preconstruction, construction stage (EGMP – 4014)

Reporting Period 1st Half 2022

Project Component or Activity	Impact or Risk to be mitigated	Mitigation Measures	Compliance Status	Remarks
Project Wide EMP				
Detailed design and pre-construction preparations				
General				
Compliance with national regulations and international good practice guidelines.	Environment, health, and safety impacts and risks of the project in general	NEA and Contractor to ensure compliance with national and international regulatory framework as set out in Section II of the IEE, including ADB Safeguard Policy Statement (2009), IFC EHS General Guidelines (April 2007), and IFC EHS Guidelines for Electric Power Transmission and Distribution (April 2007) plus other applicable environment, health and safety laws and regulations in force during project implementation, in addition to any further mitigation measurement set out in this EMP.	Being complied	
Grievance Redress Mechanism (GRM).	Environment, health, and safety impacts and risks of the project on affected persons; including construction workers and affected local communities	<p>NEA with support of Contractor to establish multi-level GRM as per Section VII of IEE, including identification of GRM Officers at all GRM levels and Grievance Redress Committee members.</p> <p>NEA and Contractor to carry out community awareness raising during community meetings and one-to-one discussions about the GRM with directly affected persons before the commencement of works including details of how to submit a grievance to either NEA and /or the Contractor, consultations are to be documented.</p>	GRM is in the process of establishment.	NEA will ensure linkage between GRM and contractors will be strengthen once the field level activities will be initiated. Project wise details will be included in next report.

Project Component or Activity	Impact or Risk to be mitigated	Mitigation Measures	Compliance Status	Remarks
		NEA and Contractor to disseminate GRM contact details verbally and by SMS as well as through distribution of leaflets, and prominently posting GRM arrangements on noticeboards located at the project sites and at local NEA offices, project substations, community centers etc		
		Contractor to carry out awareness raising amongst workers about the GRM at the start of their employment on-site, including details of how to submit a grievance to either NEA and/or the Contractor. Disseminate GRM contact details verbally and by SMS as well as through noticeboards located at temporary construction workers camps and construction site offices		
		Contractor to ensure that throughout construction, signage is prominently visible detailing site and office contacts in case of grievance.		
		NEA and Contractor to encourage affected persons to make use of the GRM yet clarify that this does not prevent them from pursuing any legal action, if they feel that it is needed.		
		NEA and Contractor to inform communities about the ADB Accountability Mechanism and their possibility to resort to it if any of their grievances is not resolved by the project's GRM.		
		NEA and Contractor to keep record of grievances received and their resolution as report on these, as per Section VII of the IEE.		
Environment safeguards staffing – see also site specific measures for additional staffing requirements	Environment, health, and safety impacts and risks of the project in general	<p><u>PMD</u></p> <p>NEA to establish a formal, fully functional environment and social safeguard unit within PMD and provide requisite facilities and equipment to enable its operation.</p>	Being complied	<p>Social safeguard and environment monitoring department (SSEMD) within PMD has been established.</p> <p>At present the environmental safeguards team does not have a full-time Senior Biodiversity officer, 8 full-time Junior EHS Field Officers, who are to be based on-site during the construction period, and a full-time Community Engagement/GRM Officer.</p>

Project Component or Activity	Impact or Risk to be mitigated	Mitigation Measures	Compliance Status	Remarks
		NEA to assign/start appointing suitably qualified and experienced environmental safeguards team, under the direction of the safeguards unit, to support EMP implementation and be responsible for undertaking regular on-site supervision and monitoring of the project. The environmental safeguards team for the project will comprise: (i) a full time Senior Environment Officer, (ii) a full-time Senior Health and Safety Officer, (iii) a full-time Senior Biodiversity Officer, (iv) a full-time Junior EHS Field Officers, who are to be based on-site during the construction period, and (v) a full-time Community Engagement/GRM Officer.	Being complied	Appointing suitably qualified and experienced environmental safeguards team is in progress.
		PMD and environment safeguards team to oversee EMP implementation, providing guidance on corrective action as required, and recording construction activities and environment, health, and safety conditions on-site through photos and notes.	Being complied	
		PMD officers to undertake at least monthly supervision visits as well as periodic "spot check" site visits by senior officers to all contract packages/lots whilst directing their supervision efforts towards the most environmentally sensitive components of the project.	Being complied	
		<u>PSC:</u> NEA to recruit PSC, including international environment safeguard specialist, international health and safety specialist international biodiversity specialist, international heritage specialist, as well as national equivalents in accordance with TOR agreed with ADB.	Complied	PSC, including international environment safeguard specialist, international social safeguard specialist international biodiversity specialist and national health and safety specialist has been recruited. There is no international heritage specialist with PSC. PSC also does not have national equivalents of all international specialists.
		PSC to assist PMD to oversee EMP implementation, providing NEA and Contractor with guidance on corrective action as required, and recording construction activities and	Being complied	

Project Component or Activity	Impact or Risk to be mitigated	Mitigation Measures	Compliance Status	Remarks
		environment, health, and safety conditions on-site through photos and notes.		
		PSC to visit all contract packages/lots at least semi-annually during on-going construction works whilst directing their supervision efforts towards the most environmentally sensitive components.	Being complied	PSC have done field visit of 6 nos. sub-projects sites in May 2022. Please refer Attachment #2 .
		Contractor: Contractor to employ as part of the team delivering each package/lot at least one suitably qualified and experienced, dedicated, environment officer and at least one suitably qualified and experienced, dedicated, health and safety officer responsible to be based on-site and monitor and supervise safeguards implementation on a day to day basis for the duration of the works.	Being complied	Contractors of DRTLSS & DCC Projects have mobilised EHS teams. Suitably qualified and experienced, dedicated, environment officer is yet to be mobilized. Details will be provided in next report.
		Contractor to nominate a community engagement/GRM officer as part of the team delivering each package/lot to be based on-site and keep affected persons informed of the status of works and be available to receive and deal with any grievances at the project site level, for all new transmission lines this will be a dedicated officer.		
		Contractor's environment safeguard team to oversee EMP implementation, providing guidance on corrective action as required, and recording construction activities and environment, health, and safety conditions on-site through photos and notes.		
		Contractor's environment safeguard team will be based on-site, but for packages/lots with multiple components the contractor's environment safeguard team should ensure adequate time (at least two visits per month) is spent at all on-going construction sites.		
		Contractor to ensure each active construction site or team has a project manager based on-site full-time who is nominated to the role of EHS Supervisor with responsibility for ensuring EMP implementation by their site/team, acting on the advice of, and reporting to the environment safeguards team on compliance.		

Project Component or Activity	Impact or Risk to be mitigated	Mitigation Measures	Compliance Status	Remarks
Environment safeguards for existing facilities	Environment, health, and safety impacts and risks related to existing facilities, 36 no. substations	Project manager will be supported by full time OHS steward(s) for each construction site/team who will supervise all works.		
		NEA and Contractor should not discriminate and should proactively encourage the employment of suitably skilled women on the project.		
		NEA to ensure that prior to start of work by contractor at existing substation sites all existing facilities meet national laws and regulations and are consistent with the SPS requirements.	Will be complied	Work in existing substation yet to start.
		NEA to implement the project-level Corrective Action Plan (CAP) set out in Appendix 3 of the IEE for all existing facilities.	Will be complied	
		PSC to visit existing substations and verify the gaps identified by desk-based audit (Appendix 3) and thus detailed substation-specific corrective actions NEA need to implement at each of the 35 no. substations.	Will be complied	Change in number of substations will be included in next report.
		For existing substations which are already located in protected area, protected area buffer zones or IBA, PSC to assess the electrocution risk to birds from any lower voltage wires and/or jumpers at incoming and outgoing connections and where risk is deemed to be high then they will be retrofitted by NEA with "bird sensitive" design measures where technically feasible.	Will be complied	
		PSC to submit a report, including photos, confirming the gaps and substation-specific corrective actions to be implemented at each of the 35 no. substations to ADB for clearance.	Will be complied	Details will be included in next report.
		If asbestos is identified but does not need to be disrupted and appears in good condition, consider leaving it where it is, as main health risks occur when asbestos is moved.	Will be complied	

Project Component or Activity	Impact or Risk to be mitigated	Mitigation Measures	Compliance Status	Remarks
		If any asbestos was found to be present and it will be disturbed by construction works, it must be removed following national requirements and international good practice per EHS General Guidelines on OHS and disposed of as hazardous waste material.	Will be complied	Will be considered when physical works will commence.
		On completion of corrective actions by NEA, PSC to revisit substation to confirm the status.	Not yet due	Will be considered when physical works will commence
		PSC to submit a report, including photos, on the status of corrective actions, compliance with national laws and regulations, and consistency with SPS requirements to ADB for clearance, NEA must receive ADB clearance of this report before contractor given access to a substation.	Will be complied	Will be incorporated in future reporting after commencement of physical works.
Environment safeguards for associated facilities	Environment, health, and safety impacts and risks related to associated facilities of new substation Balefi Corridor 132 kV DC Transmission Line, especially impacts on protected areas, natural and critical habitat supported by Kohalpur - Surkhet 132 kV DC Transmission Line.	Project components having associated facilities unable to avoid significant irreversible impacts post-mitigation on protected areas, natural and critical habitat do not qualify for financing under this project.	Will be complied	
		NEA will ensure all associated facilities of the project comply with national laws and regulations, and are consistent with SPS requirements by requiring them to comply with this EMP.	Will be complied	
		NEA will engage in policy dialogue with Government of Nepal on conducting SEA of the full Transmission System Master Plan 2020-2040 (July 2018) as well as SEA of hydropower related master plans in relation to the induced environmental impacts of improving the country-wide transmission system.	Being complied	Discussion ongoing with GON and stakeholder on the need for SEA.
		<u>Balefi Corridor 132 kV DC Transmission Line:</u> NEA will not commence any works for the Balefi Corridor 132 kV DC Transmission Line until the final EMP for the ADB project has been retrospectively incorporated into the contract documentation.	Being complied	Work in Balefi Corridor 132 kV Transmission Line is yet to be started.
		The contractor will be required to comply with the same requirements as for new transmission lines under the project/Component 1, supervised and monitored by NEA.	Being complied	

Project Component or Activity	Impact or Risk to be mitigated	Mitigation Measures	Compliance Status	Remarks
		PMD and environment safeguards team to oversee EMP implementation on the Balefi Corridor 132 kV DC Transmission Line, providing guidance on corrective action as required, and recording construction activities and environment, health, and safety conditions on-site through photos and notes.	To be complied.	
Protected area management consultation and biodiversity management – see also site-specific EMP for components 1-3, 9a and 9b	Impacts on biodiversity supported by Parsa National Park, Koshi Tappu Wildlife Reserve buffer zone, Chure Hill Conservation Area, and designated forest land from transmission line construction and upgrading	NEA will ensure that except for components 3, 9a and 9b, and existing substations to be automated at Kusum, Ghorahi, Mahendranagar, Bhurlguan, Lamahi, Pokhara, Lakhanatri, Simra, Godak, Bharatpur, Hetauda, and Kamane, all other project components will be situated outside the boundaries and buffer zones of current or proposed protected areas and/or key biodiversity areas.	Being complied	Project is planning to hire an expert to prepare the Vulture and avian protection plan. Once the expert will be recruited.
		NEA will not award any contract for any project components listed above until ADB SPS (2009) protected area management requirements have been confirmed as met by ADB.	Being complied	The project ensure to comply this statement and the PSC is mobilised and SSEM and PSC team have started to work on the preconstruction compliances and construction compliances. Details will be included in next report (December 2022)
		NEA to continue to consult with protected area management of projected areas/buffer zones in which existing substations are located to secure written confirmation they have no concerns about the proposed works given that these are all internal to the existing substations.	Being complied	
		NEA to continue to consult with and secure written confirmation from the protected area management of Parsa National Park, Koshi Tappu Wildlife Reserve buffer zone, and Chure Conservation Area as to (i) actions required to ensure works are in accordance with their management plans and (ii) measures NEA can support to promote and enhance their conservation aims.	Will be complied	Work in Parsa National Park, Koshi Tappu Wildlife Reserve buffer zone, and Chure Conservation Area is yet to be started.
		NEA to ensure the final IEE/EMP for clearance by ADB reflects the mitigation measures required by and support for	This is in planning phase	Details will be included in next report (December 2022).

Project Component or Activity	Impact or Risk to be mitigated	Mitigation Measures	Compliance Status	Remarks
		promotion/enhancement measures agreed with the protected area management.	of Avian Protection Plan with the external Subjective expert.	
		NEA will not issue any bidding documentation involving Components 1-3, 9a and 9b until an Avian Protection Plan cleared by ADB has been incorporated into the final IEE/EMP.	The Avian Protection Plan will be prepared during the next reporting stage.	Details will be included in next report (December 2022).
		NEA to review the technical and economic feasibility and the environmental and social cost-benefits of adopting horizontal versus vertical tower arrangement, which have conductor cables arranged at one height (single level arrangement) and the neutral cable only slightly higher, in order to reduce collision risk.	Being complied as far as possible.	For double circuit line horizontal conductors will be difficult. PSC will discuss with NEA.
		NEA to prepare an Avian Protection Plan setting out technical details of how the detailed designs for new and upgraded transmission and distribution line components will incorporate or retrofit "bird-sensitive" design in accordance with the critical habitat assessment and international good practice (e.g., APLIC, 2006 and 2012) and how monitoring of any electrocutions and collisions during operation & maintenance will be undertaken.	Will be complied	
		To minimize electrocution risk, "bird sensitive" design measures will include insulators/isolators between live and earthed components of infrastructure, and between phase conductors,	Will be complied	For DRTLSS project tower have been designed in compliance with this requirement.

Project Component or Activity	Impact or Risk to be mitigated	Mitigation Measures	Compliance Status	Remarks
		being over 2.7 m horizontally and over 1.8 m vertically, bird guards to prevent perching or nesting by birds, and considering insulating any lower voltage wires and/or jumpers at substation connections.		
		To minimize collision risk bird divertors, at most 10 m apart, as large as possible, of contrasting colors, and visible at night, will be installed as specified for each transmission line plus 500m either side of all ridge/valley crossings and waste dumps, or waste dumps will be relocated by NEA in consultation with local communities before the start of any works. The spacing between them will not be more than 5 to 10m (5 m within protected areas).	Will be complied	
		NEA will include in the Avian Protection Plan installation of bird flight diverters on an additional 90 km of existing transmission lines located within vulture safe zone and suitable vulture habitat, to offset potential collision risk impacts on vultures.	Will be complied	
		NEA to ensure the final IEE/EMP for clearance by ADB includes the Avian Protection Plan.	Will be complied	
		Required cost for purchase of the bird divertors will be included in the contractor's cost, the contractor will also be required to install them.	Will be complied	
		Contractor will comply with the measures set out in the Avian Protection Plan for "bird sensitive" design in developing their detailed designs.	Will be complied	
		Contractor's detailed designs will be reviewed by the PSC International Biodiversity Specialist to confirm that all the measures required by the Avian Protection Plan and international	Being complied	

Project Component or Activity	Impact or Risk to be mitigated	Mitigation Measures	Compliance Status	Remarks
		good practice (APLIC, 2006 and 2012) have been adequately incorporated before approval of detailed designs and that the detailed designs have responded to any concerns raised by Bird Conservation Nepal.		
		<p>Contractor will employ field ecologists under supervision of their biodiversity officers during detailed route surveys of components 1-3, 9a and 9b to:</p> <ul style="list-style-type: none"> – Perform a habitat survey in order to confirm area and type of modified and natural habitat situated beneath the towers and right of ways. – Perform a detailed survey of the number and species of trees and the quality of forest cover lost, to calculate the compensatory reforestation required for the detailed design. – Specific attention will be paid to identifying tall trees of value to vultures for which the project area is critical habitat and are to be retained where possible. - Confirm areas (ridge/valley crossings and waste dumps) for marking of transmission lines in accordance with the critical habitat assessment. - During the detailed route surveys the ecologist will also record any fauna observed in the project area. 	Will be complied	
		If tall trees of value to vultures, high quality forest habitat (>200 trees/ha) or other natural habitat is identified as impacted during the detailed route surveys, Contractor to identify means by which tree and habitat loss can be minimized through detailed design e.g. realignment, and/or construction methods.	Will be complied	
		Contractor to minimize the need to cut trees within the RoW including by placing towers on hilltops and ridges as far as possible to avoid the felling trees in the gullies and valleys, increasing conductor height etc.	Will be complied	

Project Component or Activity	Impact or Risk to be mitigated	Mitigation Measures	Compliance Status	Remarks
		Cutting trees in ROW outside tower footprints will be kept to an absolute minimum and only be permitted when it is required for laying and stringing of conductors, to meet safety clearance requirements under the Electricity Rules and manage risk of forest fire.	Will be complied	
		In preference to being cut, trees in ROW that can survive it will be pruned in preference to being cut, such that they might re-establish quicker following works.	Will be complied	
		Trees to be selectively felled are to be identified, species and location confirmed, counted, marked, and harvested manually (i.e. with hand-held equipment) using appropriate forestry techniques to minimize impacts on adjacent vegetation and limit habitat fragmentation with involvement of local District Forest Office (DFO) and Community Forest Groups. Details to be reported in periodic monitoring reports.	Being complied	
		Important tree species to retain as identified by DFO will be marked separately and protected during the construction.	Being complied	
		Contractor to ensure detailed design of transmission lines incorporates lightening protection to minimize forest fire risks.	Being complied	
		Detailed design will need to include firefighting provision at substations with development of emergency response plan with basic fire training and training drills undertaken for substation staff in event of forest fire.	Being complied	
		Detailed design will have minimum height from ground level 6.1 m sufficient for safe passage fauna (i.e., the lowest point of a conductor between two adjacent towers to be above 6.1m from the ground).	Will be complied	

Project Component or Activity	Impact or Risk to be mitigated	Mitigation Measures	Compliance Status	Remarks
		Detailed design to include fitting of transmission towers in forest areas and within 500m radius of them with anti-climbing devices for primates (langur).	Will be complied	
		Contractor's detailed designs will be reviewed by the PSC International Biodiversity Specialist to confirm biodiversity impacts have been minimized before approval of detailed designs	Will be complied	
		NEA and Contractor to develop reforestation plan using ratio as per national regulation but at least 1:25 trees and acquisition and reforestation of land equivalent to forest land lost beneath the project footprint to enable the project components to demonstrate "no net loss of biodiversity" – reforestation plan to be included in the site-specific biodiversity management plan, and will inform tree nursery establishment and reforestation implementation.	Will be complied	
		Tree nursery establishment will need to be upon loan effectiveness allowing time for seedling growth, planting, and management for a period of 5-years (unless it is determined seedlings can be purchased from the existing nurseries for the entire project).	Being complied	
		If it is decided to establish a nursery, then nursery sites will be selected in consultation with the respective Division Forest Offices and affected Community Forest Groups.	Being complied	
		NEA to train Community Forest Groups for micro-nursery establishment, procure improved tree seeds and provide required technical support for nursery set-up and operation.	Being complied	

Project Component or Activity	Impact or Risk to be mitigated	Mitigation Measures	Compliance Status	Remarks
		NEA will determine the number and species of seedlings to be produced by the micro-nurseries for the project, plan to grow at least 120% of seedlings required under the project so as to replace any trees that do not survive transplantation.	Being complied	
Protected area management consultation and physical cultural resources management –see also site-specific EMP for component 9c	Impacts on physical cultural resources of Kathmandu Valley World Heritage Site (Swayambhu) and Janaki temple at ward no 1, Kalimati, Dang district from transmission line construction and upgrading	NEA will ensure that all project components are sited and designed to avoid significant damage to physical cultural resources.	Being complied	
		NEA will not award any contract for Component 9c protected area management and physical cultural resources requirements have been confirmed as met by ADB for the Kathmandu Valley World Heritage Site (Swayambhu).	Will be complied	Details will be included in next report (December 2022)
		NEA will take the services of a suitably qualified and experienced archaeologist (either external or DOA expert) to undertake, to a TOR agreed with ADB, a heritage assessment for works in the current and proposed boundaries of the Kathmandu Valley World Heritage Site (Swayambhu) including consideration of accident scenario.	Will be complied	
		NEA to consult with communities who utilize the two WHS monuments located beneath the transmission line and incorporate their views into the heritage assessment.	Will be complied	
		NEA to consult with and secure written confirmation from the Department of Archaeology as to actions required to ensure 150m upgrade of the Suichatar-Balaju 66kV transmission line is in accordance with the integrated management plan.		
		NEA to ensure the final IEE/EMP reflects the mitigation measures agreed with the protected area management and recommended by the heritage assessment.	Will be complied	

Project Component or Activity	Impact or Risk to be mitigated	Mitigation Measures	Compliance Status	Remarks
		Contractor will confirm during detailed route surveys that except for component 9c, (i) all other project components are situated outside the boundaries or buffer zones of current or proposed World Heritage Sites or any other area of national or local archeological or cultural significance, (ii) other than the Janaki temple under component 3 no other physical cultural resources of local importance fall within the right of way of transmission lines.	Will be complied	
Meaningful consultations with affected people and other concerned stakeholders.	Environment, health, and safety impacts and risks of the project in general, community could be disrupted and disturbed by works hence they need to be consulted and kept well informed about the project and its progress	NEA with the support of the PSC to prepare detailed communication/consultation plan upon loan effectiveness	Will be complied	Communication / consultation plan is under preparation. Details will be included in next report (December 2022)
		NEA will not award any contract for project components until meaningful consultation requirements are confirmed as met by ADB.		
		NEA to undertake additional meaningful consultations covering all project components with affected people and other concerned stakeholders such as Rural Municipalities, Community Forest Organizations and Government Forest Authority as detailed in Section VI prior to the issue of bidding documents utilizing the agreed questionnaires. In particular, ensure all local affected communities within 500m of substations, transmission and distribution lines have been informed of the project through NEA local offices and contact with village heads, have had the opportunity to be actively involved in the design process and that any concerns raised have been duly addressed. For Kathmandu Valley component (9c) assistance through the Kathmandu Valley Development Authority may be sought.	The consultation will be done in Q1 2023.	
		For all new substations requiring permanent water supply etc. NEA to consult with and seek the agreement of local communities to use any community resources to identify any potential conflict. If additional demand may place stress on community resources plan for alternative sourcing for these resources for project needs.	Will be complied	

Project Component or Activity	Impact or Risk to be mitigated	Mitigation Measures	Compliance Status	Remarks
		NEA to ensure the final IEE/EMP documents the consultations undertaken and demonstrates how concerns raised have been responded to.	Being Complied	
		During detailed route surveys, Contractor to consult one-on-one with all affected persons within ROW of transmission and distribution lines as well as all persons occupying properties in close proximity to the substations up to 500m and within the ROW up to 50m of the transmission line alignment, to seek their views and respond to individual environment, health, and safety concerns about alignment.	Will be complied	
		Contractor to coordinate with Community Forest Organizations and Government Forest Authority when ROW of transmission or distribution lines falls under such areas.	Will be complied	
		Obtain no objection from private landowners, Community Forest Organizations, Government Forest Authority, and protected area management.	Will be complied	
		Contractor to consult with and seek the agreement of local communities on their proposed locations for any temporary construction workers camps, site offices, storage areas, and areas for waste management, etc.	Will be complied	Labour camps has been constructed with the substation areas at Dadakhet & Rahughat, which is located within the boundary wall.
		Contractor to consult with and seek the agreement of local communities to temporarily use any community resources (e.g. water supplies) during construction to identify any potential conflict, if additional demand may place stress on community resources plan for alternative sourcing for these resources for project needs.	The contractor shall work to comply this clause.	

Project Component or Activity	Impact or Risk to be mitigated	Mitigation Measures	Compliance Status	Remarks
		Contractor to communicate at least four weeks (one month) prior to the commencement of works, advance notice to local communities within 500 m of substations, transmission, and distribution lines verbally through NEA local offices and contact with village heads and through notices, pamphlets or similar in Nepali about the agreed schedule of and details of planned construction works in their area to help manage any disruption and disturbance and potential conflicts with local communities.	Will be complied	
		Contractor to continue to undertake one-on-one consultation with affected persons, especially those within ROW of transmission and distribution lines and within at least 20m of new substations who will be most impacted to keep them fully informed of the nature of works and latest schedule, notifying them at least four weeks (one month) prior to the commencement of works of intended start date and schedule.	Only five Contracts awarded. The remaining work will be done on upcoming months.	
		NEA and Contractor to ensure, in the context of the COVID-19 pandemic, that all consultations are carried out following latest national COVID-19 requirements and WHO social distancing and hygiene guidelines as detailed in Appendix 8 of the IEE.	Will be complied	
		Consultations undertaken during project implementation will be documented as reported in either final/updated IEE or attached to periodic monitoring reports.		
Obtain national EIA/IEE approvals, Forest Clearance, and other EHS permits and licenses	Environment, health, and safety impacts and risks of the project in general	NEA to ensure all national EIA/IEE required are approved by the responsible authority prior to the start of any bidding process.	Being complied	
		Contractor to comply with the conditions of the national EIA/IEE, if there is any conflict between the measures set out in this EMP and the national EIA/IEE conditions most stringent provision will take precedence.	Being complied	

Project Component or Activity	Impact or Risk to be mitigated	Mitigation Measures	Compliance Status	Remarks
		NEA to ensure required national Forest Clearance is obtained prior to the start of any works where forest areas cannot be avoided.	Being complied	Since as per the Contract provision with contractor they will initiate the forest clearance process after the survey by contractor is completed.
		Contractor to acquire all other national EHS permits and licenses required by national laws and regulations, ensuring that these are all obtained before start of related works, including enabling works.	Being complied	
Update and disclose IEE prior to contract award, update as required to reflect detailed designs.	Environment, health, and safety impacts and risks of the project in general	NEA to update the IEE to reflect additional meaningful consultation, baseline data collection, assessment, and management plans for ADB clearance and disclosure <u>prior to contract award</u> .	Being complied	IEE will be updated and disclosed when required.
		NEA to review the final IEE following the completion of the detailed designs and update it, as required, to reflect the detailed design for all project components, and obtain ADB's clearance before the commencement of any works, including enabling works.	Being complied	
		If a change in project scope or design occurs during project implementation or if unanticipated impacts are identified at any point during project implementation NEA to inform ADB and, if deemed appropriate, NEA will update the IEE for clearance and disclosure by ADB.		
		NEA to locally disclose in a timely manner the final IEE, any subsequent updates to it, and other environmental safeguards documentation by posting them on the NEA website and ensuring full copies of the latest IEE and its executive summary translated into Nepali are available at all local NEA offices and project substations. Notices will also be placed on noticeboards at the project sites and local NEA offices and pamphlets should be distributed in the project areas in Nepali, informing of the main	Being complied	IEE have already disclosed at each of the affected local government offices. the EMAP Nepali IEE summary will be disclosed at each of the project affected municipalities before before the construction activities will be started and other documents will be uploaded after the mobilisation of contractor. Details will be provided in next report (December 2022)

Project Component or Activity	Impact or Risk to be mitigated	Mitigation Measures	Compliance Status	Remarks
		findings of the IEE and the availability of the IEE and reports with notice given that help with their translation into Nepali and affected persons' dialects will be extended free of charge on request.		
Bidding and contract documentation, contractor, and subcontractor management	Environment, health, and safety impacts and risks of the project in general	NEA to ensure the final EMP cleared by ADB is included prior to the issue of bidding documents and contract award	Being complied	Appropriate provision as per the requirement of subprojects are included. Those which could not be included in the BD will be implemented separately by NEA.. It is ensured to include the EMP on each of the project Bid Document.
		NEA will ensure the requirement to comply with the final EMP forms an integral and binding part of the contract, including appropriate incentives and/or penalties for (non-)compliance related to their environment, health, and safety management.		
		Contractor will preferably have in place corporate environment, health and safety policies and corporate environment, health, and safety management system certifications, such as, ISO 14001 for environment, ISO 45001 for health and safety, or equivalents.		
		Contractor will comply with all relevant provisions of the final EMP and any updates to it following detailed designs or in response to any unanticipated impacts, they will be responsible for implementing and budgeting for all the measures required.		
		Contractor will comply with any corrective action plan required and cover the costs where corrective action is required due to non-compliance on behalf of the contractor, its subcontractors or third parties.		
		Contractor will ensure all its subcontractors and third parties, irrespective of being formally or informally employed, also comply with the final EMP and any updates to it, as well as their own CEMP and H&S Plan, and that this responsibility is cascaded down any chain involved.		

Project Component or Activity	Impact or Risk to be mitigated	Mitigation Measures	Compliance Status	Remarks
		<p>Contractor will not engage in any activities described on the ADB Prohibited Investment Activities List in Appendix 5 of ADB's SPS (2009).</p> <p>Contractor to ensure no persons under 18 are employed on the project.</p> <p>Contractor will put in place appropriate incentives and/or penalties for (non-)compliance by workers related to PPE, prohibition on firewood and NTFPs collection and fishing, hunting, or poaching by workers.</p>		
Trainings and awareness raising activities.	Environment, health, and safety impacts and risks of the project in general	<p>NEA with the support of the PSC to prepare detailed training plan upon loan effectiveness elaborating how training and awareness raising activities required by the final EMP will be conducted.</p> <p><u>EHS management:</u> NEA with support of the PSC to conduct training sessions on EMP implementation for all those with management responsibilities under it to clarify national and ADB SPS (2009) requirements, requirements at each stage of the project, roles and responsibilities, and, record keeping and reporting requirements.</p>	<p>PSC is preparing the required Training materials.</p> <p>Training will start in Q4 2022.</p>	
		<p>NEA with support PSC to conduct training sessions on GRM operationalization for all those with responsibilities under it, including the nominated PMD Community Engagement/GRM Officer, and all members of the grievance redress committee.</p>	<p>Training will start in Q1 2022.</p>	

Project Component or Activity	Impact or Risk to be mitigated	Mitigation Measures	Compliance Status	Remarks
		Contractor to ensure all members of its project management team, environment safeguards team, design team, construction management team, and community engagement/GRM officers attend NEA trainings.	Will be complied	
		Training of all PMD and O&M staff on the climate change impact of SF6, alternatives, H&S risks during O&M due to presence of toxic byproducts, leakage minimization, and environmentally sound and safe disposal of old RMUs with SF6.	Will be complied	
		<u>Construction workers:</u> Contractor to conduct training for construction management and provide all workers and visitors on-site, irrespective of them being formally or informally employed by contractor, subcontractor or third-party with an environmental, health and safety induction before being allowed on-site including do's and don'ts in relation to construction site, temporary workers camps, local communities, forests, protected areas, etc.	Being complied.	Under planning to provide selected trainings
		Contractor to ensure topics covered by training and induction will include but not be limited to: good housekeeping at all times; environmentally sound waste management practices; hygiene and communicable disease prevention including COVID-19 and HIV/AIDS; snake and rodent bites and precautionary measures for avoidance i.e. avoid work after rain, flood, and in the crop ripening seasons, caution while putting hands in holes; sexual exploitation, abuse and harassment prevention; culturally acceptable practices; biodiversity conservation awareness; fire safety prevention; prohibition on firewood and NTFPs collection by workers; prohibition on fishing, hunting, or poaching by workers; heritage conservation awareness; chance find procedures; OHS, including use of PPE; etc.	Being complied	
		Contractor to conduct training for construction management and regular drills involving workers irrespective of them being formally or informally employed by contractor, subcontractor or third-party on emergency preparedness and response procedures in case of an environmental or health and safety incident including spillage,	Being Complied	

Project Component or Activity	Impact or Risk to be mitigated	Mitigation Measures	Compliance Status	Remarks
		fire, natural disaster, disease outbreak etc. Training for construction management will include modules on first aid and fire safety including include training on how to use first aid and firefighting equipment provided on-site and the scenario of potential or confirmed COVID-19 infection on-site.		
		Contractor to continue to deliver short environmental, health and safety refresher sessions to construction management and all workers on a monthly basis throughout construction period, and cover pertinent environmental, health and safety topics on daily basis in toolbox talks.	Will be complied	
		Contractor to ensure workers with a specific role have attended specialized health and safety trainings related that role e.g. first aiders, fire safety officers, as well as ensuring workers have task-specific trainings for working at height, working with electricity, etc.	Will be complied	
		<u>Community awareness:</u> Contractor to undertake construction safety community awareness raising activities in local affected communities within 500m of substations, transmission, and distribution lines prior to construction.	Will be complied	
		NEA to undertake electrical safety community awareness raising activities in local affected communities within 500m of substations, transmission and distribution lines prior to construction, awareness raising activities to be repeated on completion of construction; to include electrocution risks, EMF, corona noise, etc.	Will be complied	

Project Component or Activity	Impact or Risk to be mitigated	Mitigation Measures	Compliance Status	Remarks
Detailed design.	Environment, health, and safety impacts and risks of the project in general	NEA and Contractor to address all site-specific measures detailed in this EMP with regards biodiversity and physical cultural resources as well as other sensitive receptors during the detailed design, as well as ensuring the detailed designs reflect international engineering best practice/ good EHS practices.	Compliance process is in preogess	
		Contractor's detailed designs will be reviewed by the PSC to confirm that all measures required by the final EMP have been adequately incorporated and that they reflect international engineering best practice/good EHS practice before they are approved by NEA.	Compliance process is in preogess	Contractor's detailed designs of DRTLSS project are being reviewed by the PSC. Review of Contractors detail design of DCC are not in the scope of PSC. Design is being reviewed by NEA.
		<u>Disaster risk management:</u> During detailed route survey identify presence of any unstable land, steep slopes, or floodplain.	Being Complied	It is being taken care during routr survey of Dadakhet – Rahughat Transmission Line.
		Detailed design will avoid locating any project components on unstable land and/or steep slopes.	Being Complied	
		For project components that are fully or partially located on slopes or in hilly terrain, detailed design to incorporate slope stability measures e.g. bioengineering such as planting grass and trees combined with retaining walls and adequate drainage, designs to be checked by an independent expert to confirm international good practice for slope stability design is followed.	Being Complied	This is being implemented in Dadakhet & Rahughat Substation.
		Select an appropriate foundation design for substations and towers considering climatic factors such as wind, and geological factors such as seismic risk in the project component locations.	Will be Complied	This is being implemented in Dadakhet & Rahughat Substation.
		Given high seismic risk across the project area, design of all substation and tower foundations and any structural components (e.g. buildings) to consider seismic zone, main frontal thrust, main boundary thrust etc. and be checked for seismic safety by the design team as well as by an independent expert, separate to the	Will be Complied	For DRTLSS project design of all substation and tower foundations and structural components (e.g. buildings) is being done consideridering applicable seismic zone,

Project Component or Activity	Impact or Risk to be mitigated	Mitigation Measures	Compliance Status	Remarks
		design team, to confirm that international good practice seismic design standards are met.		
		Buildings, poles, towers and conductors to incorporate climate adaptation measures as per the CVRA, including to withstand extreme temperatures and gale force wind speeds, at minimum equal to upper end of gale conditions on Beaufort scale (40 knots) given 30 knots experienced during the 31 March 2019 tornado event in Nepal.	Being Complied	For DRTLSS project, buildings, poles, towers and conductors are being designed to withstand wind speeds, at minimum equal to upper end of gale conditions on Beaufort scale (40 knots).
		Substation and tower foundations to be located above maximum flood level (allowing for climate change) and incorporate adequate drainage design to avoid waterlogging during the wet season.	Being Complied	This requirement is being complied for DRTLSS project.
		Consider placement of equipment within substations to avoid water logging in operation & maintenance.	Being Complied	This requirement is being complied for DRTLSS project.
		Drainage will be designed so that discharge from substation site is no more than greenfield runoff rates; so as not to exacerbate flooding on land which is outside of the substation/downstream.	Being Complied	This requirement is being complied for DRTLSS project.
		Consider use of gabion wall and embankments (dykes) including bioengineering options at substations may be at risk of flooding.	Being Complied	This requirement is being complied for DRTLSS project.
		Detailed design to avoid locating any towers in riverbed using special span arrangement and tower design at crossing locations to keep tower footing away from the riverbanks	Being Complied	No tower of DRTLSS project is located in riverbed.
		If towers must be located in floodplain foundation must be 2m about the maximum flood level of the river crossing and detailed design to incorporate appropriate measures to avoid foundation or tower itself being washed away during peak flow events (allowing for climate change and considering massive sediment load in flood flows) -- designs to be checked by an independent expert to confirm that international good practice is being followed.	Being Complied	Not applicable for DRTLSS project.

Project Component or Activity	Impact or Risk to be mitigated	Mitigation Measures	Compliance Status	Remarks
		Consider use of gabion wall and embankments (dykes) including bioengineering options at locations where transmission lines cross or run parallel to rivers to protect riverbanks.	Being Complied	
		<u>Pollution risk management:</u>		
		Use of PCBs will be prohibited in all new transformers and any other project facilities or equipment provided by the project.	Will be complied	
		Equipment purchased by NEA or Contractor for use on the project is to be accompanied by letter from the manufacturer stating that it is guaranteed PCB free and to be labelled as PCB free before its installation.	Will be complied	
		Contractor to provide NEA with material data sheets for insulating oil meeting technical specifications for use in new transformers.	Will be complied	
		During detailed route survey identify presence of any surface waterbodies including rivers/ponds and groundwater sources including springs/wells/pumps and confirm if any are used by local communities for drinking water.	Will be Complied	
		Contractor to coordinate with Department of Water Resources and Irrigation where ROW crosses rivers and water channels to obtain their no objection	Will be complied	
		Detailed design of substations to locate new transformers; storage areas; and septic tanks/soakaways ideally 500m from any surface waterbodies and groundwater sources but at least 100m to reduce pollution risk. If closer placement is required due to	Will be complied	

Project Component or Activity	Impact or Risk to be mitigated	Mitigation Measures	Compliance Status	Remarks
		substation's proximity to surface waterbodies and groundwater sources, further assessment to be carried out by Contractor to demonstrate using source-pathway-receptor model that there will be no adverse impact on aquatic ecology or human health.		
		Detailed design of transformers and fuel oil, chemical, and waste storage areas to incorporate impermeable concrete surface bunded to 110% volume which is not connected to the drainage system to collect spills and leaks; ideally storage areas to be 500m to water sources (surface water and groundwater wells, springs etc.) but if this is not possible minimum distance is to be 100m.	Will be complied	
		Detailed design of fuel oil, chemical and waste storage areas to provide for a covered storage area of sufficient size to accommodate all anticipated storage requirements, ensures storage areas have the ability to be locked, are well-ventilated and will not reach extreme temperatures.	Will be complied	
		Substation detailed design to incorporate adequate drainage; no drainage water will be permitted to discharge direct to surface water, oil interceptors are to be fitted on all drainage to catch oil spill.	Being complied	
		Detailed design of substations to minimize cut and fill in order to reduce the extent of earthworks and thus dust generation during construction.	Being complied	Cutting & filling is being done, where it is unavoidable. Balancing of cut & fill areas will be done as far as practical.
		Detailed design to balance cut and fill in areas where leveling required to minimize generation of spoil requiring disposal.	Being complied	

Project Component or Activity	Impact or Risk to be mitigated	Mitigation Measures	Compliance Status	Remarks
		Detailed design of substations to ensure operation noise will be limited to the following as 1 hour LAeq: (i) 70 dB(A) at the site boundary; (ii) at residential properties, 55 (day) and 45 (night) dB(A) in urban areas and 45 (day) and 40 (night) dB(A) in rural areas as defined by Nepal regulations; and (iii) at “peace areas” such as schools as defined by Nepal regulations, 50 (day) and 40 (night) dB(A) – if these levels are already exceeded by the background, the Contractor will ensure that the noise standards are met by the project design alone and that substation operation will not result in an increase of 3dB(A) above background levels.	Will be complied	
		Detailed design of transformers and other noise sources to locate them as far as practical from the substation site boundary since noise diminishes with distance, at minimum given transformer noise is generally in the range 60-80 dBA they are to be located at least 10m from substation site boundary – if this is not possible Contractor must carry out noise calculations (modelling) to demonstrate that site boundary levels can be met.	Being Complied	
		If any properties are within 100m of the substation site boundary then baseline measurements must be carried out during detailed design and noise calculations (modelling) considering low frequencies associated with transformer hum undertaken by the Contractor to demonstrate that these noise levels will be met.	Being complied	
		If noise levels cannot be met through siting alone detailed design to incorporate acoustic barrier designed to international good practice around either the noise source and/or substation site boundary to attenuate noise to level such that noise levels will be met.	Will be complied if required.	

Project Component or Activity	Impact or Risk to be mitigated	Mitigation Measures	Compliance Status	Remarks
		<p><u>Health and safety:</u></p> <p>Use of any asbestos containing materials is prohibited.</p>	Being complied	Contractor of DRTLSS project have submitted letter from the manufacturer of Cement confirming that cement is asbestos free. Please refer Attachment #4
		Include in the design of all substations and transformers within the substation a secure wall or fence with lockable entry featuring written and visual warning signs to include the ISO 7010 "Hazard Type: Electrical Symbol" warning of the risk of electrocution.	Being complied	The same is being implemented for DRTLSS project.
		Include in the design of all poles and towers anti-climb features together with posting of written and visual warning signs to include the ISO 7010 "Hazard Type: Electrical Symbol" warning of the risk of electrocution.	Being complied	The same is being implemented for DRTLSS project.
		Contractor to ensure detailed design of transmission lines incorporates lightening protection to minimize forest fire risks.	Being complied	The same is being implemented for DRTLSS project.
		Detailed design of substations to include fire safety measures including detector, alarm, and fire fighting equipment in accordance national regulations and IFC EHS Guidelines on OHS.	Being complied	The same is being implemented for DRTLSS project.
		Indoor work areas at substations to be well ventilated and well-lit in accordance national regulations and IFC EHS Guidelines on OHS.	Being complied	The same is being implemented for DRTLSS project.
		Detailed design of substations to ensure EMF levels within the substation boundary are within international good practice levels as per International Commission on Non-Ionizing Radiation Protection (ICNIRP	Being complied	

Project Component or Activity	Impact or Risk to be mitigated	Mitigation Measures	Compliance Status	Remarks
		https://www.icnirp.org/cms/upload/publications/ICNIRPemfgdl.pdf (reference and peak values) for the occupational exposure; in areas where EMF levels could be exceeded posting of written and visual warning signs.		
		Detailed design of substations, transmission, and distribution lines to ensure EMF levels at all regularly occupied properties is within international good practice levels as per International Commission on Non-Ionizing Radiation Protection (ICNIRP) (reference and peak values) applicable to the public exposure.	Being complied	
		Use of shielding equipment/materials to decrease electromagnetic field exposure.	Being complied	The same is being implemented for DRTLSS project.
		Establish applicable right of way and safety clearance corridor in accordance with the Electricity Rule. During detailed route survey identify the presence and use of any structures found in the (i) right of way and (ii) safety clearance corridor. Consider re-siting of angle point towers such that any structures are outside the ROW or if not possible outside the safety clearance corridor. If it is not possible to avoid regularly occupied structures in the safety clearance corridor these are to be relocated with adequate compensation in accordance with the Resettlement Plan. Such properties must be relocated, and applicable compensation provided by NEA prior to the start of any works. Consider grounding roofs and other metallic surfaces on any properties remaining within ROW to avoid induced current and electricity related accidents.	Being complied	The same is being implemented for DRTLSS project.
		During detailed route survey identify presence of any existing utilities such as power lines, communications, streetlights, as well	Being complied	Complied for DRTLSS project.

Project Component or Activity	Impact or Risk to be mitigated	Mitigation Measures	Compliance Status	Remarks
		as through consultation with service providers (electric, water, gas, telecoms etc.)		
		In cases where excavation works may be needed underground utility scans using a Cable Avoidance Tool (CAT) or equivalent must be undertaken by the Contractor to identify any services.	Being complied	
		Contractor to coordinate with operators where ROW crosses existing utilities to obtain no objection.	Being complied	
		Detailed design to consider the risk of damage to utilities and allow for sufficient vertical and horizontal safety clearances to minimize health and safety risks as per the Electricity Rules, and crossings for communications as per Electricity Regulation 1993.	Being complied	
		Pit latrines and disposal of untreated sanitary wastewater to surface or groundwater is prohibited. Detailed design of substations to include adequate sanitation and welfare facilities for all NEA workers to be posted at or visiting the substations including indoor kitchen, eating and sleeping facilities (if applicable) and adequate number of indoor toilets/washrooms with a hot and cold running water supply which are connected to either existing sewerage system or to septic tank with soak away	Being complied	
		Disposal of worker generated waste (e.g. plastic bottles) on-site is prohibited and adequate waste storage areas to be incorporated into the detailed design. Composting of food waste may be permitted on-site if detailed design incorporates enclosed composting facilities (enclosed to avoid attraction of vermin etc.) located away from accommodation and any properties outside the site boundary. Incineration may be permitted on-site if detailed	Being complied	

Project Component or Activity	Impact or Risk to be mitigated	Mitigation Measures	Compliance Status	Remarks
		design incorporates an enclosed, small volume solid waste incinerator with stack and pollution control that is designed for residence time and temperatures that minimize incomplete combustion for waste disposal at substation, to reduce the volume of solid waste to be removed off-site given lack of suitably engineered and licensed sanitary waste facilities in rural municipalities.		
		Source of drinking water that meets drinking water standards to be provided to substations. If substation is in district which suffers from arsenic contamination of drinking water, groundwater must not be used, and alternative source must be identified. If any surface or groundwater sources are proposed for use in substations, Contractor is to undertake a baseline water quality sampling per EMoP (Table 10.B) to confirm its suitability for use. If drinking water standards are not met, detailed design to consider alternative source or include water treatment facilities at the substation to facilitate safe drinking water supply.	Being complied	
		Provide a dedicated shelter to security guards, shielding them from rain, wind, and extreme (hot and cold) temperatures.	Being complied	
		<u>Greenhouse gas emissions:</u> Use of chlorofluorocarbons (CFCs) including halon is prohibited.	Will be complied	
		Detailed design of GIS substations will comply with international norms and standards for handling, storage, and management of SF6	Will be complied	

Project Component or Activity	Impact or Risk to be mitigated	Mitigation Measures	Compliance Status	Remarks
Planning for on-site environment, health, and safety management.		SF6 insulated equipment will be tested and guaranteed by the supplier at less than 0.1% leakage rate.	Will be complied	
		SF6 emergency response plan to be prepared by contractor for construction, in relation to operation to deal with event of an accidental leak.	Will be complied	
	Environment, health, and safety impacts and risks of the project during construction in general	NEA and Contractor to address all site-specific measures detailed in this EMP with regards biodiversity and physical cultural resources as well as other sensitive receptors before commencing construction works, including any enabling works, ensuring that all pre-construction preparations reflect international engineering best practice/good EHS practices.	The compliance process is on progress.	The command Centre and DRTLSS have submitted CEMP and finalization of CEMP and monitoring is going simultaneously
		Contractor's pre-construction documentation will be reviewed by the PSC to confirm that all measures required by the final EMP have been adequately incorporated and that they reflect international engineering best practice/good EHS practice before they are approved by NEA.		
		Contractor to prepare and submit a Construction Environmental Management Plan (CEMP) to NEA for approval, for each work package/lot. CEMP to include details on how the Contractor plans to implement the construction mitigation measures specified in the final EMP, and the relevant parts of the IFC EHS General Guidelines including the Construction and Demolition section, and IFC EHS Electric Power Transmission and Distribution Guidelines. The CEMP will also identify the temporary construction facilities needed and their location e.g. laydown and storage areas, workers facilities, etc		

Project Component or Activity	Impact or Risk to be mitigated	Mitigation Measures	Compliance Status	Remarks
		Contractor to keep CEMP as a living document, to be updated as required and re-approved by NEA if any changes in construction methods, site conditions etc.		
		<p><u>Land take:</u></p> <p>Ensure relocation and compensation of any affected persons within the ROW has been paid and ensure effective relocation of any households living within the safety clearance corridor (Electricity Rules) has taken place prior to any construction work.</p>	The compliance process is on progress.	
		<p><u>Biodiversity management:</u></p> <p>Contractor to strictly locate all temporary construction facilities outside of forest areas as well as outside of boundaries and buffer zones of current or proposed protected areas and/or key biodiversity areas, all temporary workers camps are to be located at least 500m for protected, key biodiversity or forest areas. Location of related project facilities is to be identified by contractor, PSC international biodiversity expert to review if locations are suitable prior to NEA approval.</p>	The compliance process is on progress.	
		Include in CEMP or site-specific BMP emergency fauna rescue and handling procedure, including contacts of protected area management, nearest veterinary etc.		
		<p><u>Physical cultural resources management (chance finds):</u></p> <p>Contractor to strictly locate all temporary construction facilities outside of proposed and current World Heritage Site boundary and at least 100m from any identified physical cultural resource e.g. temple.</p>	The compliance process is on progress.	
		NEA to develop a Chance Find Procedure (CFP) to be followed by contractor as part of their CEMP prior to commencement of any works, including enabling works, to address the event any physical cultural resources (including fossils) are found during works. CFP is to include the following procedures:		

Project Component or Activity	Impact or Risk to be mitigated	Mitigation Measures	Compliance Status	Remarks
		<ul style="list-style-type: none"> ○ If suspected physical cultural resources are encountered, halt all works at the find site immediately. ○ The find should be assessed by a competent DOA Official, and procedures to avoid, minimize or mitigate impacts to such physical cultural resources to be agreed in writing with them. ○ Work will not resume until the procedures to avoid, minimize, or mitigate impacts to the physical cultural resources have been agreed with DOA and confirmed by them in writing to have been implemented in full. ○ If avoidance is not feasible, and no alternatives to removal of the physical cultural resources exist, thorough cost-benefit assessment need to be carried out to assess whether the project works should continue or stop at site. If the project benefits outweigh the anticipated cultural heritage loss from removal from site, following clearance of ADB the physical cultural resources are to be removed and preserved using the best available technique in accordance with relevant national heritage protection laws and regulations as well as international best archeological practice. ○ Records to be maintained of all finds, including chain of custody instructions for movable finds. ○ Construction workers must be made aware of the chance-find procedure and the types of finds (including fossils) to be reported through training and induction before the commencement of any works. 		
		<p><u>Pollution risk management:</u></p> <p>The Contractor will prepare for NEA approval a construction pollution prevention plan (CPPP) as part of the CEMP covering dust and emissions to air management, noise management, the protection of water resources and environmentally sound and safe storage, use, and disposal of all fuels, chemicals and oils used on site and an emergency preparedness and response plan in the event of any leaks or spills in accordance with national laws and regulations and the EHS General Guidelines prior to commencement of any works.</p>	The compliance process is on progress.	
		The Contractor will prepare for NEA approval a Construction Waste Management Plan (CWMP) as part of		

Project Component or Activity	Impact or Risk to be mitigated	Mitigation Measures	Compliance Status	Remarks
		the CEMP for dealing with all solid and hazardous waste generated in an environmentally sound and safe manner in accordance with national laws and regulations and the EHS General Guidelines section on Waste Management prior to the start of any works.		
		Contractor to undertake air quality monitoring per the EMoP (Appendix 10, Table 10.B) to confirm current background levels in the project area at least one week prior to the commencement of any actively on-site.		
		Plan construction works in the vicinity of waterbodies, considering erosion issues and surface water pollution risk.		
		If any surface waterbodies or groundwater sources within 100m, Contractor is to undertake a baseline water quality sampling per EMoP (Table 10.B) to confirm their current water quality status at least one week prior to the commencement of any actively on-site.		
		Contractor to schedule, as far as practical, earthworks at substation sites and installation of towers during the dry season to minimize exposed areas subject to erosion by surface water runoff.		
		To inform development of the CPPP in relation to noise management, the Contractor will be required to measure and confirm the distance from their construction works to sensitive receptors during the detailed design, to confirm if the noise standards can be met based on their construction methods or temporary acoustic barriers are required.		
		Contractor to undertake noise monitoring per EMoP (Table 10.B) to confirm current background noise levels in the project area at least one week prior to the commencement of any actively on-site.		
		Construction methods to ensure construction noise will be limited to the following as 1 hour LA eq: (i) 70 dB(A) at the site boundary;		

Project Component or Activity	Impact or Risk to be mitigated	Mitigation Measures	Compliance Status	Remarks
		(ii) at residential properties, 55 (day) and 45 (night) dB(A) in urban areas and 45 (day) and 40 (night) dB(A) in rural areas as defined by Nepal regulations; and (iii) at “peace areas” such as schools as defined by Nepal regulations, 50 (day) and 40 (night) dB(A).		
		If noise levels may be exceeded, Contractor to erect temporary acoustic barrier around either the noise source and/or site boundary to attenuate noise to level such that noise levels will be met.		
		For any sites where blasting may be necessary for substation or tower foundations, Contractor to identify properties at risk of vibration damage, undertake a through structural survey, supported by photographic evidence of any properties at risk, and determine whether such buildings may require the installation of vibration monitors during construction to monitor movement.		
		<u>Health and safety:</u> For each package/lot, the Contractor is to undertake a H&S risk assessment through a facilitated workshop to be attended by PMD, PSC and the Contractor during the detailed route survey so that it can inform both the detailed design and pre-construction preparations. H&S risk assessment to consider both occupational and community H&S risks resulting from the construction and operation & maintenance stages of the project.	The compliance process is on progress.	
		Informed by the H&S risk assessment, Contractor to prepare a Construction Health and Safety Management Plan (CHSMP) for each package/lot including site-specific measures as needed for each construction site. CHSMP will address both occupational and community H&S risks and adherence to national health, safety labor laws and regulations. Measures reflected in the CHSMP will be in accordance with the EHS General Guidelines sections on Occupational and Community Health and Safety and the Electric Power Transmission and Distribution Guidelines.		
		Contractor to keep CHSMP as a living document, to be updated as required and re-approved by NEA if any changes in		

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		<p>construction methods, site conditions, in response to accident, near miss etc.</p> <p>In the absence of NEA records to confirm transformers are PCB free (ones installed post-1990 should have records, NEA to facilitate access to data archive) all existing transformers already in-situ must be assumed by the Contractor for health and safety purposes to contain PCBs and if needing to be disturbed by them the oil must be sampled and analyzed following UNEP Guidelines for the Identification of PCB and Materials Containing PCB and a health and safety risk assessment and plan prepared referring to the measures in UNEP (2002) PCB Transformers and Capacitors: From Management to Reclassification and Disposal. Provide workers with training on PCBs and their safe handling and disposal.</p> <p>Label any equipment or container containing PCBs found in existing transformers and other project equipment and unless being retained in-situ replace it with new PCB free equipment under the project.</p> <p>NEA must ensure appropriate transport, storage, decontamination, and disposal of redundant contaminated units; disposal should involve facilities capable of safely transporting and disposing of hazardous waste containing PCBs. A hazardous waste management plan to be prepared for handling PCBs.</p> <p>Assess surrounding soil exposed to PCB leakage from equipment removed or retained in-situ and implement appropriate removal and / or remediation.</p> <p>CHSMP to include a Construction Emergency Preparedness and Response Plan (CEPRP) including communication systems and protocols to report an emergency situation (health emergency, work-related accident, traffic accident, accident involving the community, natural disaster, fire especially forest fire, virus outbreak etc.).</p> <p>Contractor to coordinate with DFO or community forest groups for definition of additional measures in CEPRP where works are</p>		

Project Component or Activity	Impact or Risk to be mitigated	Mitigation Measures	Compliance Status	Remarks
		to be carried out in proximity to forested areas and there is risk of forest fire to plan for.		
		Contractor to set up an accident reporting system for any health and safety incidents (near miss, minor, lost time, fatal) involving workers or community to be reported to PMD within 24 hours of occurrence with a response plan detailing the incident and how its reoccurrence will be avoided. NEA to then report any lost time or fatal incidents to ADB within 48 hours. Record of all incidents and response taken should include date, time, details of incident, treatment given and outcome, and lessons learnt for the future.		
		CHSMP and its CEPRP are to be submitted for approval of NEA prior to commencement of any works, including enabling works.		
		In undertaking H&S risk assessment and preparing CHSMP and CEPRP adequate attention will be given to the risks associated with COVID-19 pandemic and other communicable viral diseases. National restrictions for containing the spread of COVID-19 must be complied with and Government of Nepal (https://covid19.mohp.gov.np/) and ADB guidance (https://www.adb.org/publications/safety-well-being-workers-communities-covid-19) is to be followed, as well as further guidance detailed in Appendix 8. Contractor will provide adequate sanitation and welfare facilities including hand washing and clean PPE in sufficient quantity are provided on-site and at accommodation; Contractor will also consider the ability of communities to comply with protective measures such as regular handwashing and the local health care facilities' capacity to deal with any infections agreeing with the with nearest Health Center and/or Hospital for emergency cares of workers. Particular attention must be paid to accommodation of workforce given the transient nature of work on transmission and distribution lines, to avoid spreading any virus between communities. CEPRP must include response flow chart and contact details to deal with any construction worker or community member being diagnosed with COVID-19 during the course of the works. To limit contacts and hence contamination risk, the same workers should be grouped in accommodation, transport, and work teams. Medical insurance will be provided by Contractor for all workers with sick leave allowance to ensure symptomatic workers do not attend		

Project Component or Activity	Impact or Risk to be mitigated	Mitigation Measures	Compliance Status	Remarks
		<p>site; Contractor will avoid no-work-no-pay policies, whereby by fear of not getting paid workers would be tempted to report to work and hide any symptoms, creating more risk for the wider workforce and community. Given the unprecedented nature of responding to COVID-19, public health officials/experts must be consulted in undertaking the risk assessment and management planning for COVID-19.</p>		
		<p><u>Traffic management:</u></p> <p>For all works on or adjacent to public roads, the Contractor will prepare for NEA approval a Construction Traffic Management Plan (CTMP) appropriate to the pedestrian and vehicular traffic flows on the road as part of the CEMP in consultation with relevant local authorities/traffic police to ensure proper execution of traffic controls including where temporary blockage of the road during installation is required for health and safety purposes and ensure that highly visible guides, advance warning signs or flag persons are in place to direct pedestrian and vehicular traffic.</p>	The compliance process is on progress.	
		<p><u>Damage to crops, structures, and utilities:</u></p> <p>Contractor to schedule works affecting agricultural land outside the cropping season.</p>	The compliance process is on progress.	
		Contractor to maximize use of existing substation compounds for temporary construction facilities (e.g. laydown and storage areas, workers facilities etc.)		
		Contractor to locate temporary construction facilities as much as possible on uncultivated land (not natural habitat) to minimize disturbance to cultivated lands.		
		Contractor to locate temporary construction facilities (e.g. laydown and storage areas, workers facilities etc.) at least 500m away from residential areas/villages, at least 500m from surface waterbodies, groundwater wells, and 100m from other sensitive receptors (e.g. individual houses, schools, clinics, temples, etc.) avoiding land which is steeply sloping or waterlogged.		

Project Component or Activity	Impact or Risk to be mitigated	Mitigation Measures	Compliance Status	Remarks
		Construction methods to be selected to minimize risk of damage to roads, utilities, structures, drains etc.		
		Contractor to plan for using appropriate scaffolding or overhead bamboo frames during stringing works crossing roads, utilities, structures, or drains to minimize traffic disruption, accident risk, and property damage.		
		For existing roads, utilities, structures, drains etc. photographic and/or structural pre-condition surveys are to be completed by the Contractor and agreed with NEA and property owners prior to any works, including enabling works. These must be documented in a pre-project condition report submitted to NEA, which will serve as baseline in case any damage to property occurs.		
		Contractor will be required to restore any property damage that is caused by their works to at least pre-project condition at their own cost.		
		Contractor to avoid blasting and other vibration inducing activities as much as possible; in locations where this is unavoidable Contractor to identify properties within the zone of influence and undertake pre-construction structural surveys to identify level of risk. Risk may be high if structures previously damaged during earthquake and not repaired. If risk of structural damage to properties identified due to current condition, consider alternative construction method or temporary relocation of occupants during works if at risk. Consider need to install monitors during construction to monitor structural movement. Structural or cosmetic damage to be repaired by Contractor to at least pre-project condition at their own cost.		
Employment of staff for construction	Temporary employment opportunities, both	Contractor to abide by the Nepal Labor Code and labor regulations	Will be complied	Project wise details will be provided in next report.

Project Component or Activity	Impact or Risk to be mitigated	Mitigation Measures	Compliance Status	Remarks
	skilled and non-skilled labourers will be required	<p>Contractor must prohibit child labor (under 18 years old).</p> <p>Contractor should not discriminate in employment</p> <p>Contractor should proactively encourage employment from local communities where appropriately skilled.</p> <p>Contractor should proactively encourage employment of women on the project where appropriately skilled.</p> <p>GRM will be available to workers for receiving and handling complaints about unfair treatment or unsafe living or working conditions, ensuring no coercion nor reprisal</p> <p>Provide health/accident insurance for all workers (formal and informal) for the duration of their contracts.</p> <p>Contractor to allow a minimum number of sick leave as per Nepal law or 10 days per year, whichever is the higher.</p>		
<u>On-site enabling works, construction works, testing and commissioning of project components</u>				
<u>Biological Environment</u>				
On-site pre-construction and construction activities	Impacts on biodiversity supported by Parsa National Park, Koshi Tappu Wildlife Reserve buffer zone, Chure Hill Conservation Area, and designated forest land from transmission line	Comply with CEMP and site-specific BMPs during construction works.	Is being complied	Contractor of DRTLSS Project have submitted site specific CEMP which are under review. Details will be provided in next repoer (December 2022)
		NEA will implement the promotion/enhancement measures agreed with the protected area management in parallel with construction works.	Is being complied	

Project Component or Activity	Impact or Risk to be mitigated	Mitigation Measures	Compliance Status	Remarks
	construction and upgrading	NEA and the Contractor will continuously liaise with the protected area management to keep them informed of progress on construction.	Is being complied	
		In forest and protected areas, the Contractor will act in accordance with the agreed site-specific BMP as well as in manner consistent with the protected area management plan.	Will be complied	
		Contractor's environment safeguard team to oversee all activities in protected, key biodiversity and forest areas with Contractor engaging security to ensure workers do not engage in prohibited activities.	Will be complied	
		Ensure clear demarcation of the working area and avoid encroachment outside the agreed corridor of impact. For existing transmission line components, Contractor will strictly restrict all works to the existing RoW in protected and forest areas.	Will be complied	
		For new transmission line components, Contractor will strictly restrict all works to the proposed RoW within protected and forest areas.	Will be complied	
		Unnecessary use of machinery to be avoided in protected, key biodiversity and forest areas to minimize disturbance to fauna.	Will be complied	
		In protected, key biodiversity and forest areas and within 500m of their respective boundaries.	Will be complied	
		Contractor will not allow any works to be undertaken from 1 hour before sunset to 1 hour after sunrise to avoid disturbance to the fauna.	Will be complied	

Project Component or Activity	Impact or Risk to be mitigated	Mitigation Measures	Compliance Status	Remarks
		No lighting is to be used in protected areas or forest areas.	Will be complied	
		Trees are to be cleared during non-breeding season - vultures breeding season (Jan-March), if this not possible due to weather restrictions on access, trees cleared during breeding season to be checked by ecologist for nests prior to clearance, if present harvesting to be postponed until the young have fledged. Felled trees and any NTFPs recovered during works will be handed over for use by the community forest groups according to the national laws and regulations.	Will be complied	
		NEA to follow working directives of government and purchase land or deposit money in district forest office account for reforestation implementation.	Will be complied	
		Plantation designs for each specific reforestation site identified will be developed after consultation with the respective Division Forest Offices and affected Community Forest Groups.	Will be complied	
		Reforestation implementation to be undertaken in accordance with agreed reforestation plan at standard ratio of 1,600 seedlings per ha, unless otherwise indicated by DFOs and Community Forest Groups due to local site conditions or species requirements.	Will be complied	
		Reforestation sites will be selected in consultation with the respective Division Forest Offices and affected Community Forest Groups, to be in similar climate range and soil type as deforested section as much as possible; proximity to existing protected or forest areas will be preferred to extend species habitat range.	Will be complied	
		Species composition will be locally native and follow the composition of corresponding forest section deforested under the project; Community Forest Groups' preferences will also be considered in selection of species as well as species which contribute to habitat for fauna, especially tree providing suitable vulture habitat.	Will be complied	

Project Component or Activity	Impact or Risk to be mitigated	Mitigation Measures	Compliance Status	Remarks
		NEA will purchase the seedlings raised from the micro-nurseries for the project's reforestation program.	Will be complied	
		Revegetate any disturbed areas beyond footprint of substation and tower foundations to at least original condition through revegetation using native species etc.	Will be complied	
		Except for substations mentioned as requiring new access track in the IEE, construction of new access track is not allowed, especially forest land. Use will be made of existing access roads and tracks for transporting tower materials and machinery, in locations where access is restricted use of manual labor to transport, install and string the towers and lines traversing uncultivated land (not natural habitat) as much as possible to avoid damage to crops.	Will be complied	
		Prior to excavation for tower foundation, area will be checked by ecologist for any signs of burrows etc. If determined to be occupied, only manual digging under the supervision of ecologist will be permitted.	Will be complied	
		Excavated pits will be robustly fenced or covered so as to prevent fauna accidentally falling in, further an escape ramp will be provided to allow their escape – particularly in protected and forest areas.	Will be complied	
		Keep written records, supported by photographs, of any animal casualties, including a cause of death if known.	Will be complied	
		In wet conditions, minimize use of heavy machinery and consider temporary installation of removable steel plates to protect soil and its vegetation cover.	Will be complied	
		Strict prohibition on construction workers to enter protected or forest areas outside of their working hours unless an existing resident within a buffer zone.	Will be complied	

Project Component or Activity	Impact or Risk to be mitigated	Mitigation Measures	Compliance Status	Remarks
		Strict prohibition on purchase, sale, and use of firewood, timber and NTFPs, hunting and poaching of fauna by workers.	Will be complied	
		Contractor to undertake regular, compulsory awareness raising activities for all workers related to prohibitions including tool box talks, and posting of information and warning signs at site offices, worker camps, and at all work sites in forest land, patrols by security guards employed by the Contractor, regular inspections of the worker camps, and, disciplinary procedures for any contravention by the workers.	Will be complied	
		Contractor to provide good standard of worker accommodation with heating and all meals to help discourage breaches of prohibition by the workers.	Will be complied	
		Strict prohibition of fuelwood or timber being cut by the construction workers.	Will be complied	
		Contractor and construction workers will be prevented from the use of firewood for cooking their food and heating etc.	Will be complied	
		Contractor to provide alternative fuel source (e.g. kerosene/LPG, which will be stored in safe conditions) to communal kitchen and for heating of worker accommodation.	Will be complied	
		Fuel will be stored outside of and refueling will take place outside of forest areas to minimize the risk of fire.	Will be complied	
		Contractor to provide fire-fighting equipment at work site with compulsory basic fire training for all workers and training drills undertaken in preparation for forest fire.	Will be complied	
		In case of forest fire, Contractor to act swiftly so as to minimize impacts on the environment and human life.	Will be complied	

Project Component or Activity	Impact or Risk to be mitigated	Mitigation Measures	Compliance Status	Remarks
		Remove and dispose of any identified invasive plant species in an ecologically sound manner.	Will be complied	
<u>Physical Environment</u>				
On-site pre-construction and construction activities	Changes in topography/ terrain as a result of earthworks, primarily at substations	Comply with CEMP during construction works.	Will be complied	
		Contractor to examine stability of tower locations before excavation.		
		Minimize natural slope disturbances, as much as possible, during construction of tower foundations and in the excavations done to open the track of access roads to new substations across agricultural land.		
		Balance cut and fill in the areas where leveling of sites is required.		
		Carry out landscaping at each tower location, including bioengineering and slope protection work.		
On-site pre-construction and construction activities	Changes in ambient air quality - dust and suspended particulate matter from earthworks, and other pollutants	On completion of works re-vegetate disturbed areas to avoid soil erosion. Restore temporarily used sites to at least their pre-project condition following works.	Will be complied	
		Comply with CEMP, CPPP, and the IFC EHS General Guidelines in relation to air quality and avoid the occurrence of pollution incidents as far as practicable Require construction equipment and vehicles to meet national emissions standards, see Appendix 2 of IEE.		

Project Component or Activity	Impact or Risk to be mitigated	Mitigation Measures	Compliance Status	Remarks
	from vehicular emissions, may affect ambient air quality with impacts on the health of workers and community.	<p>Perform regular checks, upkeep, and maintenance of construction equipment and vehicles to keep them in good working order as per the manufacturer's specifications to meet emission standards. Keep log of maintenance undertaken.</p> <p>Sprinkle water during earthworks to avoid dust being dispersed by wind, cover with materials like gravel to minimize re-suspension of dust.</p> <p>Stockpiles of spoil and other dust generating materials to be kept to a minimum necessary to undertake works for the day.</p> <p>Cover stockpiles with tarpaulin. Locate stockpiles at least 500m from residential property to avoid inconvenience to avoid inconvenience from fugitive dust and ensure they are enclosed by a fence or similar to minimize windblown dust. Minimize double handling and drop loads.</p> <p>Trucks transporting any loose spoil being removed from substation sites to local approved disposal sites will be covered to reduce dust.</p> <p>Trucks importing fill material must be covered, all trucks used to be serviced and meet Nepal emission standards, belching of black smoke to be prohibited.</p> <p>Position any stationary emission sources (e.g. diesel generators, compressors, etc.) as far as practical from sensitive receptors (houses, schools, clinics, temples, etc.)</p> <p>Impose speed limits on construction vehicles to minimize exhaust and dust emissions along areas where sensitive receptors are located (houses, schools, clinics, temples, etc.).</p> <p>Trucks transporting loose material will be covered.</p>		

Project Component or Activity	Impact or Risk to be mitigated	Mitigation Measures	Compliance Status	Remarks
		Limit engine idling to maximum 5 minutes.		
		Sprinkle excavations, earthen access road, and material stockpiles with water during the construction period to mitigate dust related issues due to frequent movement of construction vehicles as necessary i.e. 2-3 times per day but more often if needed during excavations, dry and windy conditions that enable dust to be easily mobilized and the dust to be visible. Clean dust from the access road after construction work is completed.		
		Strictly prohibit the burning of wastes generated by project-related activities.		
		Ensure workers working in close proximity to or having long exposure to vehicle exhausts and earthworks are provided with clean N95 dust masks to avoid inhalation or particulate matter and other pollutants.		
On-site pre-construction and construction activities	Changes in ambient noise and vibration levels - mobilization of heavy equipment and machinery, use of construction vehicles, and construction activities may increase ambient noise level. Exposure to high levels of ambient noise may affect hearing of workers or cause anxiety and disturbance to community.	Comply with CEMP, CPPP, and the IFC EHS General Guidelines in relation to noise and avoid the occurrence of pollution incidents as far as practicable.	Will be complied	
		Schedule construction activities so as to minimize nuisance to sensitive receptors (houses, schools, clinics, temples, etc.) i.e. avoid works at night, on weekend, during holidays, school exam periods, etc.		
		Select construction techniques and low noise generating machinery and equipment e.g. less than 55dBA sound pressure level at 1m, and stage noisy works to limit their duration to minimize noise and vibration.		
		Construction noise must be noise limited to the following as 1 hour LAeq: (i) 70 dB(A) at the site boundary; (ii) at residential properties, 55 (day) and 45 (night) dB(A) in urban areas and 45 (day) and 40 (night) dB(A) in rural areas as defined by Nepal		

Project Component or Activity	Impact or Risk to be mitigated	Mitigation Measures	Compliance Status	Remarks
		<p>regulations; and (iii) at “peace areas” such as schools as defined by Nepal regulations, 50 (day) and 40 (night) dB(A) – if these levels are exceeded the Contractor will be required to implement additional noise mitigation such as placing temporary acoustic barriers around the works site to ensure that the noise standards are met and/or the construction works do not result in an increase of 3dB(A) above background levels.</p> <p>Use of blasting and other vibration inducing activities are to be avoided.</p> <p>Structural or cosmetic damage caused by vibration to be repaired by Contractor to at least pre-project condition at their own cost.</p> <p>Require construction equipment and vehicles to meet national standards, see Appendix 2 of IEE– all trucks should carry fitness certificates issued by the Nepal Road Traffic Authority and renewed annually under the applicable regulations of Nepal.</p> <p>Fit all vehicles, machinery and equipment used in construction with exhaust silencers where the manufacturer’s design allows this.</p> <p>Perform regular checks and maintenance of construction equipment and vehicles to keep them in good working order as per the manufacturer’s specifications to meet emission standards. Keep log of maintenance undertaken.</p> <p>Position any stationary emission sources (e.g. diesel generators, compressors, etc.) as far as practical from sensitive receptors (houses, schools, clinics, temples, etc.)</p> <p>Prohibit use of horn by construction vehicles.</p>		

Project Component or Activity	Impact or Risk to be mitigated	Mitigation Measures	Compliance Status	Remarks
		Limit vehicle movement and offloading of construction materials to daytime in areas where sensitive receptors are located (houses, schools, clinics, temples, etc.) transport of materials and spoil by truck will be limited to the daytime without hooting.		
		Noisy construction activity (especially piling works) will take place between 6 am to 6 pm. Residents will be informed will in advance of the construction schedule for noisy activities.		
		Impose speed limits on construction vehicles to minimize noise emissions along areas where sensitive receptors are located (houses, schools, clinics, temples, etc.).		
		Limit engine idling to maximum 5 minutes.		
		Provide appropriate PPE (acoustic ear plugs or earphones capable of reducing noise levels to 80dB(A) for hearing protection) to any workers subjected to noise levels of 80dBA for more than 8hours per day and ensure they wear it e.g. if using breakers.		
		No unprotected ear should be exposed to a peak sound pressure level (instantaneous) of more than 140 dB(C) or average maximum sound levels of 110dB(A).		
		Periodic medical hearing checks to be performed on workers exposed to high noise levels.		
On-site pre-construction and construction activities	Changes in quality of surface and groundwater – due to sediment laden runoff or spills/leaks of fuel, oil	Comply with CEMP, CPPP, and the IFC EHS General Guidelines in relation to water quality and avoid the occurrence of pollution incidents as far as practicable.	Will be complied	
		Follow General EHS Guidelines in relation to water quality for the use and storage of fuel, oil, and chemical including prevention and		

Project Component or Activity	Impact or Risk to be mitigated	Mitigation Measures	Compliance Status	Remarks
	and chemicals used in construction works.	control of hazards associated with spill prevention, emergency response, spill clean-up and remediation		
		Establish dedicated fuel, oil, and chemicals stores on impermeable bunded area of 110% volume to avoid spills and leaks contaminating soil and affecting water quality		
		Avoid storage of fuel, oil, and chemicals in areas within 500m to water sources (surface water and groundwater wells, springs etc.) to avoid direct contamination or contamination through run off, if this is not possible minimum distance is to be 100m.		
		Place all equipment that may leak fuel or oil on drip trays it not sited on impermeable surface with 110% bunded capacity.		
		Undertake refueling only on areas of hard protected soil, preferably bunded, at least 500m from surface water, but if this is not possible minimum distance to be 100m, with all drainage directed through oil interceptors.		
		Provide spill response kit with sufficient absorbent materials (e.g. sorbents, dry sand, sandbags) on-site for soaking up any fuel, oil, or chemical leaks/spills.		
		For transformers, follow the Spill Prevention Control and Countermeasures (SPCC) plan as recommended by United States Institute of Electrical and Electronics Engineer Inc. (IEEE) standard 908.		
		Undertake construction during the dry season as much as possible to minimize exposed areas subject to erosion by surface water runoff.		
		Undertake all construction 100m either side of river crossings and in floodplain during the dry season to avoid flood risk, leading to accidents and/or water contamination.		

Project Component or Activity	Impact or Risk to be mitigated	Mitigation Measures	Compliance Status	Remarks
		Works over or near watercourses will adopt protection measures to guard against loss of soil that would result in the turbidity of water.		
		Implement measures to prevent landslides to avoid contamination of rivers by soil.		
		Minimize soil erosion and surface water runoff by reducing the extent of earthworks, revegetating earthworks on completion, and covering stores of sand and spoil with tarpaulin.		
		Ensure sediment laden runoff shall not discharge directly to surface water but shall be discharged through sedimentation basin and oil interceptor.		
		If water from excavations is pumped it must either be disposed of to an adjacent defined area of ground for percolation, or to waiting tanker trucks for proper disposal, it must not be disposed of to surface water.		
		Do not allow washing of equipment or vehicles in surface water and ensure all washing water is discharged to sedimentation basin and oil interceptor instead of directly to surface water.		
		Cement will be stored in rented private storage facilities; enclosed and not exposed to the elements.		
		Do not undertake any concrete mixing within 500m of surface water, if this is not possible minimum distance to be 100m.		
		Provide portable sanitary facilities for construction workers, so as to avoid surface and ground water pollution. Locate these at least 500m away from surface waterbodies including rivers/ponds and groundwater sources including springs/wells/pumps, away from waterlogged land and shallow groundwater.		

Project Component or Activity	Impact or Risk to be mitigated	Mitigation Measures	Compliance Status	Remarks
On-site pre-construction and construction activities		Strict prohibition on open defecation and urination by construction workers; no use of pit latrines for worker camps.		
		Toilets and washing facilities to be connected to existing sewerage system, septic tank (with soak pit) or as portable self-contained units for disposal of wastewater off site to sewage treatment works. No untreated wastewater is to be discharged direct to surface water or the ground.		
		Construct adequate drainage with oil interceptors for all new substation sites according to detailed design; install adequate bunding to transformers and storage areas.		
	Use of raw materials and generation construction waste	Comply with CWMP and with IFC EHS General Guidelines in relation to waste management.	Will be complied	
		Import all materials from existing licensed sources and keep records of all materials used, and sources.		
		Storage yards will be fenced.		
		Prior to the start of works the contractor will ensure the waste management system is established at the construction sites and workers camps.		
		Separate waste containers (drums, bins, skips or bags) will be provided for different types of waste.		
		Sensitize workers on good housekeeping and the environmentally sound storage and disposal of construction and wastes, and importantly not to leave garbage lying around.		
		Collect and segregate construction wastes including scrap metal, oil, and solid waste; ensure all workers are familiar with this segregation and arrange garbage bins to collect these wastes so they are not thrown on the floor.		

Project Component or Activity	Impact or Risk to be mitigated	Mitigation Measures	Compliance Status	Remarks
		Store all the wastes produced in an environmentally sound manner in designated, labelled area with separate waste containers (drums, bins, skips or bags) for each distinct type of waste.		
		Store solid waste in enclosed bins to contain leachate and avoid vermin.		
		Encourage recovery of recyclable wastes that could be reused or sold to recyclers, rather than disposing of it.		
		Prohibit use of waste (e.g. empty cement bags and containers, plastic, wooden planks) for backfilling – only inert spoil may be used for backfilling to avoid need for off-site disposal (any excess inert spoil is to be disposed of at suitably licensed waste facilities).		
		Prohibit burning of construction wastes.		
		Prohibit dumping of construction wastes on-site, into drains, rivers, in agricultural fields etc.		
		Provide weekly toolbox talk to remind of the importance of waste disposal, prohibition of disposal on the road, in drains etc., prohibition on burning of wastes, and open defecation and urination. Develop a procedure/system to penalize through escalating fines or similar any construction workers who breach these requirements.		
		Contractor may compost biodegradable kitchen scraps on site if of small volume in enclosed composting facilities (enclosed to avoid attraction of vermin etc.) located ideally 500m but at least 100m from water sources (surface water and groundwater wells, springs etc.).		
		Document all wastes removed off site using transfer notes, to be taken by licensed waste contractors who should reuse/recycle or dispose of the waste to suitably licensed and		

Project Component or Activity	Impact or Risk to be mitigated	Mitigation Measures	Compliance Status	Remarks
		<p>engineered waste management facilities according to type – for solid waste disposal this will need to be to Kathmandu, and for hazardous waste this will need to be to a neighboring country since no such facilities currently exist in Nepal.</p> <p>Excavated spoil that cannot be reused to a licensed disposal site as suitable for accepting inert wastes ensuring no solid or hazardous wastes are comingled with the inert excavated spoil.</p> <p>Collect solid waste and dispose of it to suitably engineered and licensed sanitary waste facilities– in Kathmandu as no such facilities are existing in rural municipalities.</p> <p>Ensure any hazardous waste such as oily rags or old drums disposed of in suitably licensed hazardous waste facilities– out of country since no such facilities in Nepal.</p>		
Socio-economic Impacts				
On-site pre-construction and construction activities	Changes to land use as substation compound and tower footing land is permanently lost and temporary crop loss during installation within the ROW	<p>Compensate private land required for the project through acquisition or rental in agreement with the land and/or property owners. Permanent land acquisition and crops or private trees lost due to construction will be compensated according to the Resettlement Plan.</p> <p>Phase activities according to the agricultural cycle to allow farmers to harvest standing crops.</p> <p>Except for substations as mentioned in the IEE, no construction of access track is allowed, use will be made of existing access roads and tracks for transporting tower materials and machinery, in locations where access is restricted use of manual labor to transport, install and string the towers and lines traversing uncultivated land (not natural habitat) as much as possible to avoid damage to crops.</p>	Will be complied	

Project Component or Activity	Impact or Risk to be mitigated	Mitigation Measures	Compliance Status	Remarks
		On completion of works restore all temporarily used sites to at least their pre-project condition following works; this will involve cleaning site of any debris or wastes, left over material and soil/rocks/sand, contaminated soil although this should have been avoided through EMP measures; revegetation if required; drainage if required; local topographical adjustments; addition of good quality soil if the latter was eroded/removed by construction works; etc.		
		Follow detailed design drawings and implement careful construction practices to avoid damage to existing structures (e.g. buildings) and roads, utilities, drains etc.		
		Contractor to repair and/or compensate for any unforeseen damage to at least pre-project condition in conjunction with relevant local authorities and/or property owner at cost to the contractor.		
		Safe access to property will be maintained and alternative signed routes and access will be provided where there are temporary diversions or blockages.		
		Locate stockpiles away from properties and only in designated areas where no access will be blocked.		
On-site pre-construction and construction activities	Occupational health and safety of workers at risk due to the hazards created during the construction period, e.g. movement of heavy equipment, vehicles,	Comply with CHSMP and with IFC EHS General Guidelines in relation to occupational H&S.	Will be complied	
		Ensure health and safety supervisor is on site at all times (implies an alternate off on leave or on sick).		

Project Component or Activity	Impact or Risk to be mitigated	Mitigation Measures	Compliance Status	Remarks
	and machineries, working conditions, etc. Workers may be exposed to occupational health risks and safety hazards, regarding site clearance for pre-construction and during construction relating to working with electricity and working at height, as well as from handling PCBs or asbestos in upgrade works at existing substations	<p>Require subcontractors and workers to confirm they have seen and understood the requirements of the CHSMP before proceeding with their work.</p> <p>Provide worker training on H&S and daily/weekly briefings led by site-appointed Health and Safety Officer.</p> <p>PPE to be provided for all workers (regardless formal and informal, directly contracted or subcontracted) in accordance with Table 2.7.1. Summary of Recommended Personal Protective Equipment According to Hazard in IFC EHS Guidelines on OHS.</p> <p>Enforce disciplinary system (e.g. immediate removal from site) for non-compliance with PPE requirements and other H&S measures (e.g. social distancing for COVID-19).</p> <p>Check health condition of workers on daily basis, for example, use of self-certification forms and temperature checks before being allowed on the construction site with more thorough monthly health checks by qualified medical professional.</p> <p>Check the load of the vehicles before use, all drivers, and passengers to fasten seatbelt and comply with all transportation-related H&S laws and regulations.</p> <p>Examination of all equipment and tools' quality and the presence of operational safety features before use</p> <p>Implementation of safety measures while excavating to avoid collapse e.g. shoring if soil unstable.</p> <p>Untrained workers will not be permitted to work with live electricity or at height.</p> <p>Observe IFC EHS Guideline on Electric Power Transmission and Distribution requirements for working with live power lines;</p>		

Project Component or Activity	Impact or Risk to be mitigated	Mitigation Measures	Compliance Status	Remarks
		only allow suitably trained workers that meet the requirements set out in above-referred IFC guideline to work on live power lines with strict adherence to safety standards including those listed in said guidelines; these workers must have training record of attending suitable training course on electrical safety and be provided with and wear the appropriate PPE for their role.		
		Ensure proper grounding and deactivation of any live power lines during construction work or before any work in close proximity to the lines and that this has been checked and certified by the on-site Health and Safety Officer in advance.		
		Measure exposure levels to electromagnetic fields (EMF) and provide workers working in zones where EMF levels are above reference levels with personal EMF monitoring device to be attached onto their PPE.		
		Require workers to observe the minimum approach distances for excavations, tools, vehicles, pruning, and other activities when working around power lines.		
		Observe IFC EHS Guideline on Electric Power Transmission and Distribution requirements for working at height; only allow suitably trained and qualified workers to work at height, these workers must have training record of attending suitable training course and be provided with and wear the appropriate PPE for their role. Require workers to test the structural integrity of towers prior to proceeding with the work. Use fall protection measures when working on towers, i.e. mobile elevated working platform, and all workers at height are required to wear body harness. Ensure sufficient harnesses and gear are available on site for all workers, that workers are trained to use such harness and are obligated to use the latter at all times when working at height.		
		Unless transformers have been certified PCB free workers must wear suitable chemical and/or oil resistant gloves, goggles, and protective clothing whilst working with transformers. Eye wash		

Project Component or Activity	Impact or Risk to be mitigated	Mitigation Measures	Compliance Status	Remarks
		station and water supply to shower to be provided during works due to risk of PCB coming into contact with skin.		
		Ensure good housekeeping in the premises at all times, including on construction site, workers camps, storage areas, etc. Perimeter is to be kept neat and tidy, with no trip hazards on the ground e.g. open channels, materials, equipment, trash laying around. Do not leave hazardous conditions (e.g. unlit open excavations without means of escape) overnight unless no access by public can be ensured.		
		During construction works, ensure qualified first aider and trained fire marshal is available on-site at all times with an appropriately equipped first aid kit and appropriate fire extinguisher and other firefighting equipment immediately available for use.		
		Provide an ambulance for more serious cases to transport the patient to the hospital for treatment		
		Prepare signboards reminding of health and safety measures and procedures to follow in case of accident, including key contact details (ambulance, doctor, hospital, etc.)		
		Keep a log of all incidents, near-misses and accidents and include these in monthly monitoring reports submitted to NEA and periodic monitoring reports to ADB.		
		Temporary construction camps will include proper sanitation, alternative fuel to firewood, clean eating area, water supply, and secure storage of domestic solid wastes for disposal off site to suitably licensed waste management facilities.		
		Pit latrines prohibited, and adequate number (about 1 toilet per 10 workers, can refer to EBRD guidance note on workers' accommodation) of toilets and washing facility with hot and cold running water. Toilets to be connected to existing sewerage system, septic tank, or as portable self-contained units for disposal of wastewater off site to sewage treatment works to be provided.		

Project Component or Activity	Impact or Risk to be mitigated	Mitigation Measures	Compliance Status	Remarks
		Toilets to be equipped with soap and hand sanitizer.		
		There should be an indication of whether toilet and washing facility is "in use" or "vacant" if not gender segregated.		
		Toilets should be cleaned at least twice daily to ensure they are kept in a hygienic condition.		
		Prevent standing water as it may become a breeding habitat for mosquitoes etc.		
		Provide workers with access to a shaded rest area on-site.		
		Provide workers with a clean eating area for breaks and lunchtime		
		Provide all construction workers will an adequate supply of potable drinking water meeting national standards. Groundwater used must be appropriately treated and only be used where it will not put stress on local water resources. Where a risk of arsenic contamination is identified, prohibit the use of groundwater as a source of the drinking water.		
		If ground or surface water is used for drinking water, it must first be tested to confirm it meets drinking water standards and continue to be regularly tested every week. If drinking water standards are not met, potable water shall be imported to site.		
		If workers are not local to the area use may be made of existing accommodation facilities but if a construction camp is provided it must be adequately equipped with sufficient toilets, hand washing facilities, showers or baths, food preparation and clean eating area, etc.		
		Comply with CHSMP and with IFC EHS General Guidelines in relation to community H&S.		

Project Component or Activity	Impact or Risk to be mitigated	Mitigation Measures	Compliance Status	Remarks
On-site pre-construction and construction activities	Community health and safety - at increased H&S risk from communicable diseases as workers coming from elsewhere, including COVID-19, social disturbances related to workers camps, traffic, electricity infrastructure etc.	Installation of barriers (a temporary fence ideally solid fence) at construction areas with hazard warning signs to deter people from accessing the construction site.	Will be complied	
		Do not leave hazardous conditions (e.g. unfenced and unlit open excavations without means of escape) overnight unless no access by public can be ensured.		
		Define construction schedule for sections along or crossing roads in coordination with local authorities/traffic police particularly where road closures required.		
		Implement CTMP during construction works with advance warning signs or flag persons to ensure traffic safety of construction workers and road users, in coordination with traffic police.		
		Road safety and warning signs must be posted at 500m, 100m, and immediately in advance of the works at least two weeks prior to the works commencing to inform the public of the temporary blockage.		
		Access to the construction site will be under traffic controls when trucks enter and exit.		
		Require all project drivers to abide by Nepal road safety regulations at all times.		
		Use of scaffold and bamboo frames to support stringing to protect structures, roads, utilities etc. as well as pedestrians, vehicles, and the conductor itself.		
		Restore the utilities immediately after all necessary works carried out to minimize public inconvenience.		

Project Component or Activity	Impact or Risk to be mitigated	Mitigation Measures	Compliance Status	Remarks
On-site pre-construction and construction activities	Loss of physical cultural resources (PCR) - chance find procedures will be implemented in case of chance find (including fossils).	Construction workers including subcontractors will be given awareness raising in HIV/AIDS, other communicable diseases including COVID-19, and sexual, exploitation, abuse and harassment with strict penalties (e.g. immediate removal from site) for any non-compliance of workers to an agreed code of practice.	Will be complied	
		Avoid ponding of water during construction to avoid habitat creation of vector borne diseases e.g. malaria.		
		Keep a log of all incidents, near-misses and accidents and include these in monthly monitoring reports submitted to NEA and periodic monitoring reports to ADB.		
		Comply with CEMP and chance find procedure; implement as soon as any monuments or artefacts encountered during construction activities.		The Contractor of DRTLSS Project have submitted CEMP, which is under review.
		Strictly ensure no chance finds are tampered with.		
		Brief workers on chance find protocol and on apply penalties applying for tempering with them.		
		Contractor to declare a chance find to DOA and NEA within 24h of find.		
		PMD to report on any chance find having occurred within 48h to ADB.		

Operation & Maintenance

Project Component or Activity	Impact or Risk to be mitigated	Mitigation Measures	Compliance Status	Remarks
General Maintenance	Environment, health, and safety impacts and risks of the project in general for operation and maintenance stage	During maintenance activities, mitigation measures applicable to the construction stage are also applicable to NEA maintenance activities and workers.	Will be complied	Will be complied during O&M Stage
		Regular visual and technical inspection of condition and maintenance as required to be carried out by NEA daily at substations to check any leaking oil from transformers or any SF6 leak both of which are to be immediately addressed		
		Regular visual and technical inspection of condition and maintenance as required to be carried out by NEA quarterly for transmission lines and distribution lines to check: minimum vertical clearance (6.1m) is maintained; integrity of the towers and wires is in good condition, including bird diverters, insulation, anti-climbing devices; electrical safety warning signs and lighting arrestors; missing or corroded parts are immediately identified and replaced; and, any vegetation growth that may damage or threaten the integrity of the lines etc.		
		Keep photographic records and log of all inspections and actions taken in response.		
<hr/>				
<u>Biological Environment</u>				
Reforestation and general maintenance of ROW	Impacts on biodiversity supported by Parsa National Park, Koshi Tappu Wildlife Reserve buffer zone, Chure Hill Conservation Area, and designated forest land from transmission line	<u>Protected Areas:</u> NEA will continue to implement the promotion/enhancement measures agreed with the protected area During inspections of power lines count fauna carcasses encountered, if any, record species and assess cause of death (e.g. electrocution/collision).	Will be complied	Will be complied during O&M Stage
		<u>Restoration and reforestation:</u>		

Project Component or Activity	Impact or Risk to be mitigated	Mitigation Measures	Compliance Status	Remarks
		<p>NEA to nurture revegetated areas in disturbed hilly terrains during 5 years after construction.</p> <p>NEA to take care of planted sites for period of 5 years and subsequently handover to the concerned DFO and Community Forest Group. NEA is responsible for taking care of the reforestation areas; alternatively, NEA may choose to delegate the management of the plantation areas to the local DFO / Community Forest Group with support from the project for 5 years.</p> <p>Project will continue to perform regular monitoring of these sites, which is to be included in the semi-annual safeguards monitoring reports submitted to ADB.</p> <p>Tree losses are to be immediately replaced with new saplings.</p>		
		<p><u>Maintenance and vegetation control:</u></p> <p>Regularly visually inspect the lines to spot any low hanging lines to ensure 6.1 m clearance is kept at all times above ground for safe passage of terrestrial fauna and that "bird sensitive" design features including bird divertors have not be lost or damaged, immediately undertake maintenance work if required.</p> <p>Prohibit the use of herbicides, pesticides or burning to control any vegetation growth or to manage vegetation waste, in substations and along ROW.</p> <p>Regularly trim trees located within the RoW that are above 5 m high, at least once every two years, following maximum clearance as per Electricity Regulation, 1993</p> <p>During maintenance activities, all EMP requirements for construction phase, in particular strict prohibitions on workers are applicable. Tree trimming and ROW vegetation clearance in general to be carried out manually (by human labor and using hand-held equipment) and in protected and forest areas to be cut/trimmed are to be selected in presence and with approval of concerned protected area management, DFO and Community Forest Group representative.</p> <p>Promote if protected area management and forest officials in concurrence ecofriendly vegetation removal methods, while ensuring no disturbance to pre-existing habitat, for instance through the use of goats for clearing overgrown bushes and small trees (under strict supervision) around high voltage power</p>	Will be complied	Will be complied during O&M Stage

Project Component or Activity	Impact or Risk to be mitigated	Mitigation Measures	Compliance Status	Remarks
		<p>lines is known to be more effective as it is faster, cheaper and more ecofriendly. These animals can reach difficult places that are challenging for people to access and can eliminate the need of fuel for cutting devices.</p> <p>Schedule tree clearance/trimming in ROW in protected and forest area outside bird breeding season (in particular, vultures breeding season is Jan-March). In such areas, trimming of trees to be carried out in presence of and under supervision of ecologist.</p>		
Physical Environment				
GIS Substations	Climate change from fugitive emission of SF6	Keep record of all gas insulated switchgear and gas insulated transformers, including presence, if any, and quantity of SF6 in these.	Will be complied	Will be complied during O&M Stage
		Provide SF6 leakage detection kit at each substation.		
		NEA to monitor SF6 emissions through inventory control and accounting per the requirements set out in the EMOF.		
		Proper handling and storage procedures to be implemented in accordance with equipment suppliers' specifications and best practices. Check for SF6 gas leakage in every shift of the operation.		
		Maintain SF6 leakage records in every substation and report in periodic monitoring reports to ADB.		
Substation operation	Noise in the form of buzzing or humming can often be heard around transformers or	Define a safe SF6 retrieval arrangement, with appropriate handling, storage, disposal process for end of life equipment in accordance international good practice.	Will be complied	Will be complied during O&M Stage
		Maintain transformers and other noise generating equipment to ensure noise to be limited to the following as 1 hour LAeq: (i) 70 dB(A) at the site boundary; (ii) at residential properties, 55 (day) and 45 (night) dB(A) in urban areas and 45 (day) and 40 (night) dB(A) in rural areas as defined by Nepal regulations; and (iii) at "peace areas" such as schools as defined by Nepal regulations, 50 (day) and 40 (night) dB(A).		

Project Component or Activity	Impact or Risk to be mitigated	Mitigation Measures	Compliance Status	Remarks
	power lines producing corona. Transformer oil spill and leakage.	<p>Transformers to be routinely inspected and maintained to avoid spills and leakage.</p> <p>Collect and segregate O&M wastes including scrap metal, oil, and solid waste; ensure all workers are familiar with this segregation.</p> <p>Store all the wastes produced in an environmentally sound manner in designated, labelled area with separate waste containers (drums, bins, skips or bags) for each distinct type of waste.</p> <p>Store solid waste in enclosed bins to contain leachate and avoid vermin.</p> <p>Encourage recovery of recyclable wastes that could be reused or sold to recyclers, rather than disposing of it.</p> <p>Prohibit open/uncontrolled burning of wastes.</p> <p>Prohibit dumping of O&M wastes on-site, into drains, rivers, in agricultural fields etc.</p> <p>NEA may compost biodegradable kitchen scraps on site if of small volume in enclosed composting facilities (enclosed to avoid attraction of vermin etc.) located ideally 500m but at least 100m from water sources (surface water and groundwater wells, springs etc.).</p> <p>Incineration may be permitted on-site if enclosed, small volume solid waste incinerator with stack and pollution control that is designed for residence time and temperatures that minimize incomplete combustion for waste disposal at substation is available.</p> <p>Document all wastes removed off site using transfer notes, to be taken by licensed waste contractors who should reuse/recycle or dispose of the waste to suitably licensed and</p>		

Project Component or Activity	Impact or Risk to be mitigated	Mitigation Measures	Compliance Status	Remarks
		<p>engineered waste management facilities according to type – for solid waste disposal this will need to be to Kathmandu, and for hazardous waste this will need to be to a neighboring country since no such facilities currently exist in Nepal.</p> <p>Collect solid waste and dispose of it along with municipal waste to suitably engineered and licensed sanitary waste facilities– in Kathmandu as no such facilities are existing in rural municipalities.</p> <p>-----</p> <p>Ensure any hazardous waste such as oily rags or old drums disposed of in suitably licensed hazardous waste facilities– out of country since no such facilities in Nepal.</p> <p>-----</p> <p>Label all containers with its content and potential risk signs (e.g. flammable, corrosive, toxic, etc.) Display material data sheets for fuels, oil, or chemicals. If chemicals are handled on site, provide an emergency eye wash or shower.</p> <p>-----</p> <p>Store end-of-life or unused equipment in designated areas on site, ensure these are not left lying around.</p> <p>-----</p> <p>Store equipment in the dedicated, covered, labelled storage area (tools, machinery, material, equipment, and spare parts)</p> <p>-----</p> <p>Ensure liquids (fuel, oil, and chemicals, empty drums, old transformers, etc.) are stored in area with impermeable floor with spill containment bund of 110% capacity.</p> <p>-----</p> <p>Ensure liquids storage areas are locked at all times.</p> <p>-----</p> <p>Keep track of any maintenance activities carried out with regards to transformers (in particular each time transformer oil is changed) on a maintenance logbook kept on the premises.</p> <p>-----</p> <p>Ensure transformers have a label indicating it contains PCB (polychlorinated biphenyl) or is PCB free. Obtain and keep evidence to confirm transformers are PCB free, for future reference.</p>		

Project Component or Activity	Impact or Risk to be mitigated	Mitigation Measures	Compliance Status	Remarks
		Perform visual checks of any evidence of oil leaking or having previously leaked from transformers, and if identified, address immediately - maintenance of and handling of transformer oil is to be carried out only by trained workers using appropriate PPE.		
		Keep spill prevention equipment available on site at all times.		
<u>Socio-economic Environment</u>				
Presence of electrical infrastructure and need for maintenance	Occupational safety risks (project maintenance workers) and community safety risks for operation stage	Ensure adequate sag and tension always maintained.	Will be complied	Will be complied during O&M Stage
		Maintain warning / advisory signs in good and visible condition on all dangerous equipment.		
		Maintain the good condition of non-climb features on transmission towers.		
		Maintain the good condition of boundary fences, regularly check the security fence for any gaps and repair. Keep boundary gates locked at all times (except when workers are in-coming or exiting) but at times when the gate is unlocked, ensure one staff is always present to control any unauthorized entry.		
		Consider employing security personnel to guard the premises where the risk of entry for theft might be high.		
		Carry out periodic safety related awareness raising in neighboring communities regarding living in proximity to power lines and substations, including but not limited to, electrocution risks and effects of EMF; include information to the community regarding potential corona noise heard during operation.		
		NEA to ensure all substation staff and maintenance workers have received appropriate OHS trainings for their role.	Will be complied	Will be complied during O&M Stage
		<u>EMF:</u>		

Project Component or Activity	Impact or Risk to be mitigated	Mitigation Measures	Compliance Status	Remarks
		<p>Monitor electromagnetic field strength workers are exposed to and ensure occupational exposures are within the limits of the International Commission on Non-Ionizing Radiation Protection (ICNIRP) reference level. If EMF limits are often reached, provide workers with personal radiation monitors that shall set off an alarm when exposure limits are reached.</p> <p>Monitor electromagnetic field strength where regularly occupied properties are in the ROW and ensure public exposures are within the reference levels of the International Commission on Non-Ionizing Radiation Protection (ICNIRP) guidelines.</p>		
		<p><u>Housekeeping:</u></p> <p>Keep the substation neat and tidy at all times.</p> <p>Remove any trip hazards on the ground, e.g. open channels, materials, equipment, trash laying around.</p> <p>Carry out regular pest control where pests are a risk; favor natural pest control measures when possible.</p> <p>Display clear emergency exits signs (in working order, if light signs, ensure works) and keep exits clear of any blockage.</p> <p>Visually inspect for any standing water on site, and when identified, remove or provide appropriate drainage to remove in timely manner; ensure drainage system is not blocked and fully operational.</p> <p>Maintain all lights in working order.</p> <p>Ensure all vents are free of blockages and regularly maintained</p>	Will be complied	Will be complied during O&M Stage
		<p><u>Emergency situations:</u></p> <p>Ensure a recent, full, first aid kit and adequate firefighting equipment is available on site at all times, stored in clearly labelled and easily accessible area.</p> <p>Replace the first aid equipment timely as required to keep all equipment within its expiry date.</p> <p>Service the firefighting equipment timely as required to keep all equipment in date</p> <p>Provide first aid and firefighting training to select, volunteer staff; at least one staff having recently carried out first aid and</p>	Will be complied	Will be complied during O&M Stage

Project Component or Activity	Impact or Risk to be mitigated	Mitigation Measures	Compliance Status	Remarks
		<p>firefighting training must be present on site at all times. Refreshers are to be provided once a year.</p> <p>Hang posters showing first aid procedures especially for electrocution, and fire procedures, as well as listing all emergency contacts. Display the emergency phone number and location of doctor and hospital in a clear and easily accessible location.</p> <p>Keep an accident log and make accident logbook available on site upon request.</p> <p>Monitor closely in case of extreme weather events and be ready to act immediately.</p> <p>Ensure any buildings on site are structurally sound if any earthquake occurs, check building soundness prior to allowing workers back on site.</p>		
Site Specific EMP				
Component 1 – Dadakheth - Rahughat				
Component 1 – Dadakheth - Rahughat	<ul style="list-style-type: none"> Impacts from forest habitat fragmentation and restrictions on faunal movement Loss of trees Regular trimming (alternate years) of tall trees growing in RoW during operation to maintain safety distances, only small shrubs and trees can establish up to 5m Use of firewood/timber/non-timber forest products 	For Dadakheth substation provides flood protection measures e.g. embankment (dyke) or floodwall or heightening the grounds of the substation as well as improving the drainage system to drain surface water runoff.	Being complied	Adequate drainage system to drain surface water runoff is being designed to prevent flooding of substation.
		Contractor to employ a suitably qualified and experienced, dedicated, biodiversity officer for each contract package involving new transmission lines - to be based on-site and provide trainings and awareness raising activities, monitor and supervise all construction works in protected areas and forest land on a full-time basis for their duration.	Will be complied	The contractor is yet to employ a suitably qualified and experienced, dedicated, biodiversity officer.
		Install bird divertors in accordance with the general requirements of the Avian Protection Plan, this includes 500m of proposed	Will be complied	Installation of bird divertors at the crossing crossing of the RahugangaKhola is being planned.

Project Component or Activity	Impact or Risk to be mitigated	Mitigation Measures	Compliance Status	Remarks
	(NTFPs)/hunting or poaching of fauna by the workers (no commercially important NTFPs) <ul style="list-style-type: none"> • Risk of forest fires in dry season • Disturbance to fauna during works • Primate (e.g. langur) electrocution • Bird electrocution and collision 	crossing of the RahugangaKhola which is tributary of Kali Gandaki River near Galeshwor.		
		Contractor to develop site-specific biodiversity management plan (BMP) detailing mitigation and monitoring measures as required for approval and clearance by ADB prior to the commencement of any works, including enabling works. BMP will set out how impacts on biodiversity will be minimized through the detailed design, construction methods, siting of temporary construction facilities, restrictions on construction workers etc.	Will be complied	Contractor have developed site-specific biodiversity management plan (BMP), which is under review.
		NEA to deliver awareness raising on bird electrocution and collision with power lines and adopting international good practice for "bird sensitive" design to those with design responsibilities, with the invite extended to line agency government officials responsible for environmental clearance.	Will be complied	
		NEA to support awareness raising program in association with the Department of National Parks and Wildlife Conservation (DNPWC) for Community Forest Groups within the ROW of transmission and distribution lines on sustainable use of non-timber forest products and biodiversity conservation, to commence pre-construction and continue for 3 years into operation..	Will be complied	
		NEA to support awareness raising program in association with the Department of National Parks and Wildlife Conservation (DNPWC) for Community Forest Groups within the ROW of transmission and distribution lines on sustainable use of non-timber forest products and biodiversity conservation, to	Will be complied	

Project Component or Activity	Impact or Risk to be mitigated	Mitigation Measures	Compliance Status	Remarks
		commence pre-construction and continue for 3 years into operation.		
		NEA in association with Bird Conservation Nepal (BCN) to support vulture conservation awareness raising activities for local communities, particularly those within 500m, to commence pre-construction and continue for 3 years into operation.	Will be complied	
		Purchase land as required under national regulations to replace the permanently acquired forest land under towers, planted at ratio of 1,600 trees per ha in addition to compensatory reforestation at 1:25 ratio.	Will be complied	
<u>Component 2 – Ghorahi - Madichaur</u>				
<u>Component 2 – Ghorahi - Madichaur</u>	<ul style="list-style-type: none">Impacts from forest habitat fragmentation and restrictions on faunal movementOutside of protected area, impacts from forest habitat fragmentation and restrictions on faunal movementLoss of treesRegular trimming (alternate years) of tall trees growing in RoW during operation to maintain safety distances, only small shrubs and	Consider use of gabion wall and embankments (dykes) including bioengineering options on Balim Khola	Will be complied.	Will be complied after award EPC Contract.
		NEA to employ ecological third-party services to TOR agreed with ADB for works under component 2 located in Chure Conservation Area to undertake pre- and post-construction vulture surveys, provide trainings and awareness raising activities, monitor and supervise on a full-time basis all construction works in the protected areas for their duration, act as liaison with the protected area management, and, support implementation of promotion/enhancement measures agreed with protected area management. Ecologists will be delegated veto power to suspend the Contractor's works if needed due to an unanticipated impact/risk or non-compliance with requirements until corrective action is taken.	Will be complied.	,

Project Component or Activity	Impact or Risk to be mitigated	Mitigation Measures	Compliance Status	Remarks
	<p>trees can establish up to 5m</p> <ul style="list-style-type: none"> • Use of firewood/timber/non-timber forest products (NTFPs)/hunting or poaching of fauna by the workers (no commercially important NTFPs) • Risk of forest fires in dry season • Disturbance to fauna during works • Primate (e.g. langur) electrocution • Bird electrocution and collision particularly given Dang Deukhuri Foothill Forests and West Rapti Wetlands IBA 	<p>Contractor to employ a suitably qualified and experienced, dedicated, biodiversity officer for each contract package involving new transmission lines – to be based on-site and provide trainings and awareness raising activities, monitor and supervise all construction works in protected areas and forest land on a full-time basis for their duration. In addition, for component 2 they will help liaise with the protected area management, and support implementation of promotion/enhancement measures agreed with them.</p> <hr/> <p>NEA to comply with existing facility requirements for Ghorahi substation.</p> <hr/> <p>Contractor to undertake alignment review during detailed route survey for the Ghorahi-Madichaur transmission line, to consider re-siting of angle point towers, if possible, such that routing within Chure Conservation Area falls entirely to the west of the river and entirely outside Dang Deukhuri Foothill Forests and West Rapti Wetlands Key Biodiversity Area.</p> <hr/> <p>Install bird divertors in accordance with the general requirements of the Avian Protection Plan for the entire length of Ghorahi – Madichaur transmission line given presence of critically endangered vulture and Dang Deukhuri Foothill Forests and West Rapti Wetlands IBA, within Dang district spacing to be at maximum of 5m, spacing on rest of route maximum 10m.</p> <hr/> <p>NEA to continue to consult with Bird Conservation Nepal sharing detailed designs of transmission lines within 5km of Dang Deukhuri Foothill Forests and West Rapti Wetlands Key</p>	<p></p> <hr/> <p>Will be complied</p> <hr/> <p>Will be complied</p>	

Project Component or Activity	Impact or Risk to be mitigated	Mitigation Measures	Compliance Status	Remarks
		Biodiversity Area and Koshi Tappu Wildlife Reserve for review and comment		
		Avoid all construction during vultures breeding season (Jan-March).	Will be complied	
		During detailed route survey to, minimize cutting of the tall species of trees used by vulture as far as practical	Will be complied	
		Pre-construction and post-construction surveys of the breeding vulture population in Dang district.	Will be complied	
		Contractor to develop site-specific biodiversity management plan (BMP) detailing mitigation and monitoring measures as required for approval and clearance by ADB prior to the commencement of any works, including enabling works. BMP will set out how impacts on biodiversity will be minimized through the detailed design, construction methods, siting of temporary construction facilities, restrictions on construction workers etc.	Will be complied after award EPC Contract.	
		NEA to support awareness raising program in association with the Department of National Parks and Wildlife Conservation (DNPWC) for Community Forest Groups within the ROW of transmission and distribution lines on sustainable use of non-timber forest products and biodiversity conservation, to commence pre construction and continue for 3 years into operation	Will be complied after award EPC Contract.	
		NEA in association with Bird Conservation Nepal (BCN) or similar organization specialized in bird conservation to support vulture conservation awareness raising activities for local communities,	Will be complied	

Project Component or Activity	Impact or Risk to be mitigated	Mitigation Measures	Compliance Status	Remarks
		particularly those within 500m, to commence pre construction and continue for 3 years into operation.		
		NEA to support habitat conservation plan for vultures which the project area is critical habitat namely White-rumped Vulture (<i>Gyps bengalensis</i>), Red-headed Vulture (<i>Sarcogyps calvus</i>), Slender-billed Vulture (<i>Gyps tenuirostris</i>) with an emphasis on Dang Dekhuri Foothill Forest and West Rapti Wetland and nearby Charinge Community Forest e.g. construction of artificial wetland and other habitat elements needed by vulture, strengthening the Vulture Safe Zone Program , to commence pre construction and continue for 3 years into operation. It will be developed in coordination with key agencies in Nepal e.g. DNPWLC as well as the Bird Conservation Nepal.	Will be complied	
		Contractor to undertake alignment review during detailed route survey for the Ghorahi-Madichaur transmission line, to consider re-siting of angle point towers such that routing in vicinity of the Janaki temple is located as far as possible from it, ideally outside the ROW but at minimum ensuring the entire temple compound falls well outside safety clearances under the Electricity Rules.	Will be complied after award EPC Contract.	
		To inform the alignment review and Contractor to consult with communities who utilize Janaki temple to seek their views on the routing and reflect their concerns in the detailed design, consultations are to be documented.		
		Purchase land as required under national regulations to replace the permanently acquired forest land under towers, planted at		

Project Component or Activity	Impact or Risk to be mitigated	Mitigation Measures	Compliance Status	Remarks
		ratio of 1,600 trees per ha in addition to compensatory reforestation at 1:25 ratio.		
		Use local, native species of community and/or ecological value for afforestation: in this location will focus on trees, such as, <i>Bombax cebia</i> , <i>Acacia sp.</i> etc., which provide suitable nesting habitat for vultures.		
Component 3 – Borang – Lapang - Ratmate				
Component 3 – Borang – Lapang - Ratmate	Impacts from forest habitat fragmentation and restrictions on faunal movement	For Lapang substation provide flood protection measures e.g. embankment (dyke) or floodwall or heightening the grounds of the substation as well as improving the drainage system to drain surface water runoff.	Will be complied after award EPC Contract.	EPC Contrac is yet to be awarded.
	Loss of trees	Contractor to employ a suitably qualified and experienced, dedicated, biodiversity officer for each contract package involving new transmission lines –to be based on-site and provide trainings and awareness raising activities, monitor and supervise all construction works in protected areas and forest land on a full-time basis for their duration.	Will be complied after award EPC Contract.	
	Regular trimming (alternate years) of tall trees growing in RoW during operation to maintain safety distances, only small shrubs and trees can establish up to 5m	Install bird divertors in accordance with the general requirements of the Avian Protection Plan, this includes 500m either side of the Trisuli River crossing as well as 500m either side of all other ridge/valley crossings and waste dumps at maximum 10m spacing of divertors	Will be complied after award EPC Contract.	
	Use of firewood/timber/non-timber forest products (NTFPs)/hunting or poaching of fauna by	Contractor to develop site-specific biodiversity management plan (BMP) detailing mitigation and monitoring measures as required for approval and also clearance by ADB prior to the	Will be complied after	

Project Component or Activity	Impact or Risk to be mitigated	Mitigation Measures	Compliance Status	Remarks
	the workers (no commercially important NTFPs)	commencement of any works, including enabling works. BMP will set out how impacts on biodiversity will be minimized through the detailed design, construction methods, siting of temporary construction facilities, restrictions on construction workers etc.	award EPC Contract.	
	Risk of forest fires in dry season	NEA to support awareness raising program in association with the Department of National Parks and Wildlife Conservation (DNPWC) for Community Forest Groups within the ROW of transmission and distribution lines on sustainable use of non-timber forest products and biodiversity conservation, to commence pre construction and continue for 3 years into operation.	Will be complied after award EPC Contract.	
	Disturbance to fauna during works			
	Primate (e.g. langur) electrocution			
	Bird electrocution and collision	Contractor to undertake alignment review during detailed route survey for the Borang-Lapang transmission line, to consider re-siting of angle point towers such that routing in vicinity of the school referred to in the IEE is located as far as possible from it, ideally outside the ROW but at minimum ensuring the entire school compound falls well outside safety clearances under the Electricity Rules.	Will be complied after award EPC Contract.	
		NEA will provide fencing to school found along Borang-Lapang transmission line, so the school compound is clearly demarked. PMD to recruit the necessary third party to build a fence around the school grounds	Will be complied	
		NEA will provide awareness raising on electrical safety to pupils of school found along Borang-Lapang transmission line, given unless it can be moved outside the ROW pupils may play in close proximity to it (climbing on towers, flying kites, etc.). The opportunity to carry out along with these activities additional	Will be complied after award EPC Contract.	

Project Component or Activity	Impact or Risk to be mitigated	Mitigation Measures	Compliance Status	Remarks
		simple talks on electricity and electricity networks is recommended, which could raise children's interest in science, with special consideration of gender inclusion and girls' interest in science.		
		Purchase land as required under national regulations to replace the permanently acquired forest land under towers, planted at ratio of 1,600 trees per ha in addition to compensatory reforestation at 1:25 ratio.	Will be complied	
<u>Component 4 – Pangtan Substation</u>				
<u>Component 4 – Pangtan Substation</u>	Impacts of existing and associated facility	NEA to comply with existing facility requirements for Barhabise substation	Being complied	Contract awarded but the Contractor is yet to be mobilised at site. No work has been started.
		NEA to comply with associated facility requirements for Balefi Corridor 132 kV DC Transmission Line.		
		NEA and associated facilities contractor to comply with requirements for new transmission lines (e.g. Component 1) including developing site-specific biodiversity management plan (BMP) detailing mitigation and monitoring measures as required for approval together with clearance by ADB prior to the commencement of any works, including enabling works. BMP will set out how impacts on biodiversity will be minimized through the detailed design, construction methods, siting of temporary construction facilities, restrictions on construction workers etc.		
<u>Component 5 – Keraun</u>				
<u>Component 5 – Keraun</u>	Distribution line connecting to	For alignment of Keraun 33 kV new distribution line which is still to be determined, as far as is practical, Contractor is to route	Contract awarded but	Contract awarded but physical activities are yet to be started.

Project Component or Activity	Impact or Risk to be mitigated	Mitigation Measures	Compliance Status	Remarks
	Keraunsubstation to be defined.	alignment within road RoW and carefully select routing to avoid all forest land and natural habitat, to avoid existing structures (e.g. schools, hospitals, residential properties, physical cultural resources) falling in the RoWs or at minimum within the safety clearance corridor, and to minimize interference with existing roads, agricultural crops, utilities, drains, surface waterbodies, and groundwater wells, etc.	IEE in process of update and to share with ADB it is ensured that ; No physical activities will be started until IEE finalised.	
		Update IEE to reflect the final alignment of 33 kV lines for clearance and disclosure by ADB before any works commence.		
<u>Component 6 – Substation Automation outside Kathmandu Valey</u>				
<u>Component 6 – Substation Automation outside Kathmandu Valey</u>	Impacts from retrofitting of existing substations within boundaries of existing sites. Substations in Protected Area/IBA: Kusum, Ghorahi, Mahendranager, Bhurlguan, Lamahi, Pokhara, Lakhanatri, Simra, Godak, Bharatpur, Hetauda, and Kamane Lahan SS: During monsoon season water	NEA to comply with existing facility requirements for all existing substation.	Being complied	
		For Kusum, Ghorahi, Mahendranager, Bhurlguan, Lamahi, Pokhara, Lakhanatri, Simra, Godak, Bharatpur, Hetauda, and Kamane to retrofit substations with high electrocution risks with “bird sensitive” design measures where technically feasible.	Will be complied	Contract is yet to be awarded
		For Damak substation ensure that flood and erosion protection adequate given right bank is formed by a riverbank .	Will be complied	Contract is yet to be awarded
		For Lahan substation provide flood protection measures e.g. embankment (dyke) or floodwall or heightening the grounds of the substation as well as improving the drainage system to drain surface water runoff.	Will be complied	Contract is yet to be awarded

Project Component or Activity	Impact or Risk to be mitigated	Mitigation Measures	Compliance Status	Remarks
	floods the ground level rooms inside substation.			
Component 9a – Pathlaiya - Dhalkebar				
Component 9a – Pathlaiya - Dhalkebar	Impacts from restringing of existing lines within protected area – Parsa National Park and ChureHills Conservation Area Re-clearance of forest land under existing RoW which is already subject to regular trimming (alternate years) of tall trees growing in RoW during operation to maintain safety distances, only small shrubs and trees established up to 5m Use of firewood/timber/ NTFPs/hunting or poaching of fauna by the workers (no	<u>Detailed design and pre-construction:</u> NEA to employ ecological third-party services to TOR agreed with ADB for works under component 9a and located in Parsa National Park, and Chure Conservation Area to provide trainings and awareness raising activities, monitor and supervise on a full-time basis all construction works in the protected areas for their duration, act as liaison with the protected area management, and, support implementation of promotion/enhancement measures agreed with protected area management. Ecologists will be delegated veto power to suspend the Contractor's works if needed due to an unanticipated impact/risk or non-compliance with requirements until corrective action is taken.	Will be complied	Contract is yet to be awarded. NEA will ensure the provisions will be planned and complied when physical works will commence.
		Contractor to employ a suitably qualified and experienced, dedicated, biodiversity officer for components 9a and 9b (e.g. one officer for each component, unless undertaken sequentially) to be based on-site and provide trainings and awareness raising activities, monitor and supervise all construction works in protected areas and forest land on a full-time basis for their duration, help liaise with the protected area management, and support implementation of promotion/enhancement measures agreed with them.	Will be complied	

Project Component or Activity	Impact or Risk to be mitigated	Mitigation Measures	Compliance Status	Remarks
	commercially important NTFPs)	Retrofit to ensure minimum height from ground level of 6.1 m is ensured all along the wire (lowest point between two towers) to ensure sufficient clearance for safe passage ground fauna.	Will be complied	
	Risk of forest fires in dry season	Ensure no increase in number (6no.) or smaller diameter of conductors which would increase collision risk.	Will be complied	
	Primate (e.g. langur) electrocution from upgraded line using the existing towers	Install bird divertors in accordance with the general requirements of the Avian Protection Plan, this includes all 8.4km transmission line within the Parsa National Park, plus 7.1km section along Bagmati River Corridor/Chure Conservation Area, and an additional 6.2km and 8.5km re Chure Conservation Area at a maximum 5m spacing of divertors, as well as 500m either side of all ridge/valley crossings and waste dumps at a maximum 10m spacing of divertors.	Will be complied	
	Bird electrocution and collision	Contractor to develop site-specific biodiversity management plan (BMP) detailing mitigation and monitoring measures as required for approval with clearance by ADB prior to the commencement of any works, including enabling works. BMP will set out how impacts on biodiversity will be minimized through the detailed design, construction methods, siting of temporary construction facilities, restrictions on construction workers etc.	Will be complied	
		NEA to support awareness raising program in association with the Department of National Parks and Wildlife Conservation (DNPWC) for Community Forest Groups within the ROW of transmission and distribution lines on sustainable use of non-timber forest products and biodiversity conservation, to	Will be complied	

Project Component or Activity	Impact or Risk to be mitigated	Mitigation Measures	Compliance Status	Remarks
		commence pre-construction and continue for 3 years into operation.		
		Use existing Pathlaiya substation as a site office and storage area. Do not set up any other site office, storage area, and worker camps and other related project facilities within protected area or on forest land; locate worker camps, if any, at least 500m away from protected area and from the forest's external edge.	Will be complied	
Component 9b – Duhabi- Kusaha				
Component 9b – Duhabi- Kusaha	<ul style="list-style-type: none"> Impacts from restringing of existing lines through agricultural land, modified habitat but 6km located within protected area – Koshi Tappu Wildlife Reserve buffer zone 	NEA to employ ecological third-party services to TOR agreed with ADB for works under component 9b located in Koshi Tappu Wildlife Reserve buffer zone to provide trainings and awareness raising activities, monitor and supervise on a full-time basis all construction works in the protected areas for their duration, act as liaison with the protected area management, and support implementation of promotion/enhancement measures agreed with protected area management. Ecologists will be delegated veto power to suspend the Contractor's works if needed due to an unanticipated impact/risk or non-compliance with requirements until corrective action is taken.	Will be complied	Contract is yet to be awarded. NEA will ensure the provisions will be planned and complied when physical works will commence.
	<ul style="list-style-type: none"> Hunting or poaching of fauna by workers, including within Koshi Tappu Wildlife Reserve 	Contractor to employ a suitably qualified and experienced, dedicated, biodiversity officer for components 9a and 9b (e.g. one officer for each component, unless undertaken sequentially) to be based on-site and provide trainings and awareness raising activities, monitor and supervise all construction works in protected areas and forest land on a full-time basis for their duration, help liaise with the protected area management, and	Will be complied	

Project Component or Activity	Impact or Risk to be mitigated	Mitigation Measures	Compliance Status	Remarks
	<ul style="list-style-type: none"> Disturbance to fauna during works, including fauna in adjacent wildlife reserve Bird electrocution and collision, from existing lines but which are upgraded – adjacent to Ramsar site 	support implementation of promotion/enhancement measures agreed with them.		
		Retrofit to ensure minimum height from ground level of 6.1 m is ensured all along the wire (lowest point between two towers) to ensure sufficient clearance for safe passage ground fauna.	Will be complied	
		Ensure no increase in number (6no.) or smaller diameter of conductors which would increase collision risk.	Will be complied	
		Install bird divertors in accordance with the general requirements of the Avian Protection Plan, this includes all 6.7km transmission line within the Koshi Tappu Wildlife Reserve buffer zone (between tower 1 to 18 and 1km section between tower 18 to 20) at a maximum 5m spacing of divertors, as well as 500m either side of all ridge/valley crossings and waste dumps at a maximum 10m spacing of divertors; in buffer zone of Koshi Tappu Wildlife Reserve the divertors must incorporate night-time visibility option due to night-time movements of the birds.	Will be complied	
		Avoid all construction within Koshi Tappu Wildlife Reserve buffer zone to be outside bird migratory period in order to minimize disturbance to birds.	Will be complied	
		Contractor to develop site-specific biodiversity management plan (BMP) detailing mitigation and monitoring measures as required for approval together with clearance by ADB prior to the commencement of any works, including enabling works. BMP will set out how impacts on biodiversity will be minimized through the	Will be complied	

Project Component or Activity	Impact or Risk to be mitigated	Mitigation Measures	Compliance Status	Remarks
		detailed design, construction methods, siting of temporary construction facilities, restrictions on construction workers etc.		
		NEA to support awareness raising program in association with the Department of National Parks and Wildlife Conservation (DNPWC) for local communities e.g. on sustainable livestock grazing and opportunities for alternative tourism-orientated (e.g. bird watching) livelihoods to help promote biodiversity conservation and for better ownership of conservation efforts within the wildlife reserve itself, to commence pre construction and continue for 3 years into operation.	Will be complied	
		NEA in association with Bird Conservation Nepal (BCN) to support culture conservation awareness raising activities for local communities, particularly those within 500m	Will be complied	
		Establish site office, storage area, and worker camps and other related project facilities strictly outside the Koshi Tappu Wildlife Reserve buffer zone, at least 500m away from its boundary.	Will be complied	
<u>Component 9c – Kathmandu Valley</u>				
<u>Component 9c – Kathmandu Valley</u>	Impacts from restringing existing line in a dense urban area, passing through Kathmandu Valley World Heritage Site (Swayambhu)	NEA to take the services of a third-party archeologist (either consultant and/or DOA expert) as agreed with ADB in relation to component 9c and upgrading the Suichatar-Balaju 66kV transmission line within the Kathmandu Valley World Heritage Site (Swayambhu) to provide trainings and awareness raising activities, monitor and supervise on a full-time basis all construction works in the current and proposed World Heritage Site boundary for their duration to ensure no damage to monuments, and act as liaison with UNESCO, the Department of	Will be complied	Contract is yet to be awarded. NEA will ensure the provisions will be planned and complied when physical works will commence.

Project Component or Activity	Impact or Risk to be mitigated	Mitigation Measures	Compliance Status	Remarks
		Archaeology and community users. The archaeologist will be delegated veto power to suspend the Contractor's works if needed due to an unanticipated impact/risk or non-compliance with requirements until corrective action is taken to address this.		
		Contractor to employ a suitably qualified and experienced, dedicated, heritage officer for component 9c to be based on-site and provide trainings and awareness raising activities, monitor and supervise all construction works in the World Heritage Site on a full-time basis for their duration to ensure no damage to monuments, and help liaison with UNESCO, the Department of Archaeology and community users.	Will be complied after award EPC Contract	
		NEA will obtain all necessary national approvals from the Department of Archaeology in order to undertake works within Kathmandu Valley World Heritage Site (Swayambhu)		
		NEA and Contractor will follow the requirements of the Department of Archaeology and recommendations of the heritage assessment in implementing works within the current and proposed boundary Kathmandu Valley World Heritage Site (Swayambhu)		
		Contractor to develop site-specific heritage management plan (HMP) detailing mitigation and monitoring measures for approval followed with clearance by ADB prior to the commencement of any works, including enabling works, on the Suichatar-Balaju 66kV transmission line. HMP will set out how impacts on the Kathmandu Valley World Heritage Site (Swayambhu) will be minimized through the detailed design, construction methods,	Will be complied after award EPC Contract	

Project Component or Activity	Impact or Risk to be mitigated	Mitigation Measures	Compliance Status	Remarks
		<p>siting of temporary construction facilities, restrictions on construction workers etc.</p> <p>Contractor to carry out detailed line route survey of the existing alignment during detailed design to identify any structures situated within the right of way and/or safety clearance corridor</p> <p>Contractor will undertake a detailed pre-construction photographic record of all structures in 66kV transmission line RoW of 18m, in case of any damages claim during the works.</p> <p>Contractor to identify any regularly occupied properties that are encroaching in the existing safety clearance corridor which will need to be relocated, in accordance with the project's Resettlement Plan.</p> <p>Contractor to identify any trees situated within the right of way and/or safety clearance corridor that will need to be cut, quantify any public and private tree loss by number, size (including seedlings, saplings, poles, and trees) and species.</p> <p>Contractor to identify other over ground utilities crossed during detailed line route survey including other transmission lines and undertake a detailed pre-construction photographic record of all over ground utilities in 66kV transmission line RoW of 18m, in case of any damages claim during the works</p> <p>Contractor to identify in consultation with service providers appropriate measures to minimize period of disruption to utilities and reduce health and safety risks during installation.</p>		

Project Component or Activity	Impact or Risk to be mitigated	Mitigation Measures	Compliance Status	Remarks
		<p>If services must be disrupted Contractor (via service providers if appropriate) to notify affected communities well in advance of any power outage etc</p> <p>Contractor will undertake a detailed pre-construction photographic record of all physical cultural resources including WHS monuments within the right of way of 66kV transmission line, detailed condition survey of WHS monuments located within the ROW must be undertaken if one is not already available from Department of Archaeology</p> <p>If monuments are used by community and access must be restricted to ensure health and safety Contractor to notify affected communities well in advance, and time works to avoid any such restrictions during important festivals etc.</p> <p>During pre-construction, Contractor will undertake a condition survey of all tower foundations to confirm they are sound, paying particular attention to the condition of foundations in the Kathmandu Valley World Heritage Site (Swayambhu) parts of which have been subject to landslide. If there is a risk of tower failure due to foundation condition remedial works to be undertaken prior to restringing works.</p> <p>Contractor to plan for using appropriate scaffolding or overhead bamboo frames during stringing works crossing utilities, roads, and structures to minimize traffic disruption and risks of accident. For transmission lines running along streets a temporary road closure is to be requested for duration of restringing works in that location to protect the road users.</p>	<p>Will be complied</p> <p>Will be complied after award EPC Contract</p>	

Project Component or Activity	Impact or Risk to be mitigated	Mitigation Measures	Compliance Status	Remarks
		Contractor to provide appropriate scaffolding or overhead bamboo frames to monuments within Kathmandu Valley World Heritage Site (Swayambhu) located within ROW of 66kV transmission line (12m)		
		Department of Archaeology must be informed of and agree to construction schedule in order that they can facilitate on-site supervision		
		Prior to the start of any works, with Contractor to provide trainings and awareness raising activities to all workers to inform them of (i) presence of and precautions to be taken for works in Kathmandu Valley World Heritage Site (Swayambhu) and (ii) chance find procedures.		
		Transport equipment and when roads are involved to undertake stringing only during non-rush hours i.e. avoid the hours of 6am to 8 am and 4pm to 6 pm.	Will be complied after award EPC Contract	
		NEA archaeologist and Contractor's heritage officer to monitor and supervise on a full-time basis all construction works in the current and proposed World Heritage Site boundary for their duration to ensure no damage to any monuments.	Will be complied after award EPC Contract	
		Contractor must immediately stop work if requested by Department of Archaeology or NEA's archaeologist and before resuming works agree and implement appropriate corrective action for dealing with unanticipated impact or non-compliance.		

Project Component or Activity	Impact or Risk to be mitigated	Mitigation Measures	Compliance Status	Remarks
		<p>Contractor will be responsible for repairing at their costs any damage to utilities, roads, and structures prior to completion of their contract.</p> <hr/> <p>Contractor will be responsible for repairing at their cost any damage to physical cultural resources including WHS monuments within the right of way of 66kV transmission line. Repairs to WHS monuments would need to be undertaken under the instruction of Department of Archaeology by appropriately qualified and experienced restoration contractors using appropriate materials and construction techniques etc.</p>		

Annexure #14: Status of compliance to the EMP implementation during preconstruction, construction stage for (EGMP-AF: 4109)

Reporting Period 1st Half 2022

CONTRACT FOR ANY OF THE PROJECT OF EGMP-AF IS YET TO BE AWARDED.
THEREFORE, COMPLIANCE TO EMP IMPLEMENTATION WILL BE INCLUDED IN NEXT
REPORT.

Tractebel is a global engineering company delivering game-changing solutions for a carbon-neutral future. Insights gathered during our more than 150 years of experience in energy, water, infrastructures and nuclear projects combined with local expertise allow us to tackle complex future-oriented projects. By connecting strategy, design, engineering and project management, our community of 4,800 imaginative experts helps companies and public authorities create positive impact towards a sustainable world, where people, planet and profit collectively thrive. With offices in Europe, Africa, Asia, the Middle East and Latin America, the company registered a turnover of 579 million Euros in 2021. Tractebel is part of the ENGIE Group, a global reference in low-carbon energy and services.

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**MINUTES OF MEETING FOR COMPLIANCE WITH THE REQUIREMENTS OF EMP
OF EGMP**

Contract No: PMD/EGMP/DRTLSS-077/78-01 (Design, Supply, Installation, Testing and Commissioning of Dadakhet - Rahughat 132 kV Transmission Line and Associated Substations at Rahughat and Dadakhet).

Place: NEA Training Centre, Kharipati

Date: April 18, 2022

Further to the Contract Agreement No: PMD/EGMP/DRTLSS-077/78-01 dated 31st December, 2021 a meeting is held between Nepal Electricity Authority (The Employer) and Larsen and Tourbo Limited, India (The Contractor) for compliance with the requirements of Environment Management Plan (EMP) of EGMP.

The NEA Representative

1. Mr. Roshan Agrawal
2. Mr. Prabin Rai

Project Manager, DRTLSS NEA
Account Officer, DRTLSS, NEA

Representative of Larsen and Tourbo Limited, India

1. Snehasish Debnath
2. SUBASH CHANDER

Chief Project Manager
Authorized representative

Discussions and Conclusion:

Clause SCC 47.1(a) of the Contract Agreement which states that "The Contractor shall comply with all applicable national, provincial, and local environment laws and regulations. The Contractor shall (a) establish an operational system for managing environmental impacts, (b) carry out all of the monitoring and mitigation measures set forth in the Initial Environmental Examination ("IEE") and Environmental Management Plan ("EMP") (c) comply with any corrective or preventative actions set out in safeguards monitoring reports that the Employer will prepare from time to time to monitor implementation of the initial environmental examination and the environmental management plan, and (d) allocate the budget required to ensure that such measures are carried out. The Contractor shall submit semi-annual reports on the carrying out of such measures to the Employer" was discussed.

1. The IEE of the Project along with the EGMP- EMP was shared & discussed and it was agreed by the Larsen and Tourbo Limited, India (The Contractor) to comply with the requirements on its part set forth in IEE and EGMP-EMP.
2. The EGMP-EMP is attached as Annexure-1 with this Minute of Meeting and it was agreed by both the parties this MoM along with the EGMP-EMP shall be the integral part of the Contract Agreement.

Chander

ne/h



Consultancy Services for Project Supervision Consultant for Electricity Grid Modernization Project

Field Visit Report on Safeguard Management #01

NEA - Nepal Electricity Authority, Kathmandu
Kathmandu | Nepal

RESTRICTED

20 June 2022

REPORT
00

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FIELD VISIT REPORT ON SAFEGUARD MANAGEMENT #01



Our ref.: P.019119-Y-11400-E001

Imputation: P.019119

RESTRICTED**Client:** Nepal Electricity Authority, Project Management Directorate**Project:** Consultancy Services for Project Supervision Consultant for Electricity Grid Modernisation Project**Subject:** Field Visit Report on Safeguard Management # 01 (May 2022)**Comments:**

Revision No.	Date	Prepared / Revision By	Description
00	20.06.2022	MK/BPS/PKS	Issued for Information & Record.

00	20.06.2022	For Information & Record	MK/BPS/PKS	HPB	RVA	HPB
REV.	DATE	STAT.	WRITTEN	VERIFIED	APPROVED	VALIDATED

CONSULTING SERVICES FOR PROJECT SUPERVISSION CONSULTANT FOR, ELECTRICITY
GRID MODERNISATION PROJECT

Field Visit Report on Safeguard Management # 01(May 2022)

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LIST OF ANNEXURES

Attachments		Description
Annexure # 1	:	Map showing Locations of EGMP Projects
Annexure # 2	:	List of Personnel Participated in Field Visit

LIST OF ACRONYMS

Acronyms		Description
ADB	:	Asian Development Bank
EDoC	:	Effective Date of Contract
EGMP	:	Electricity Grid Modernisation Project
GoN	:	Government of Nepal
km	:	Kilo meter
kV	:	Kilo Volt
MVA	:	Mega Volt Ampre
MW	:	Mega Watt
No. / Nos.	:	Number / Numbers
NEA	:	Nepal Electricity Authority
PM	:	Project Manager
PMD	:	Project Management Directorate
PSC	:	Project Supervision Consultant
SS or S/S	:	Substation
TL	:	Transmission Line
TMS	:	Total Management Services Pvt. Ltd
TRACTEBEL / TEPL	:	Tractebel Engineering Pvt. Ltd

1. INTRODUCTION

About 63% of the population of Nepal had access to electricity in 2010 which has increased to 90% including solar energy in 2020. Nepal is planning to achieve 100 percent access to electricity by 2023 and reliable and efficient electricity for all by 2030. Where the demand has been rapidly increasing, the quality and reliability of electricity supply do not meet the requirement. NEA is working on both meeting the electricity demand and improving the quality and reliability of electricity supply. The current challenges, to meet electricity demand and improve quality and reliability of supplied electricity, are the construction of new transmission infrastructure and upgradation of existing infrastructures. Further, meeting electricity demand through expansion of transmission infrastructures and enhancing quality and reliable electric supply can be helpful to exploit full potential benefit of the investment made in electricity sector which will play valuable role in poverty alleviation, industrialization of nation and improvement of quality of life of the people.

Modernization of existing transmission and distribution system is also imperative for NEA to improve transmission system stability and to minimize cost of the service delivery. NEA is enthusiast to step in modern era of energy sector by introducing Distribution system automation, Grid Substation Automation and Smart Metering. The proposed project "Electricity Grid Modernization Project" will include expansion and upgradation of Transmission system Infrastructures, Automation of Transmission and Distribution System along with the implementation of Advanced Metering Infrastructures which will improve operational efficiency of NEA, provide safe and reliable electricity supply at cheaper rate to the customers and in turn improve financial health of NEA.

The overall objective of the proposed project is to augment the transmission and distribution system and to modernize electricity system in order to meet the future demand of electricity for all consumers and to improve reliability and quality of electric supply through advanced control and monitoring mechanisms of transmission and distribution system.

Tractebel Engineering pvt. Ltd. (TRACTEBEL), based in Gurgaon, India, in association with Total Management Services Pvt. Ltd. (TMS) based in Nepal has been awarded the Contract for "Consultancy Services for Project Supervision Consultant for Electricity Grid Modernisation Project".

Association of TRACTEBEL & TMS are providing services as Project Supervision Consultant to NEA and assisting NEA in the following major activities:

- Project Supervision, implementation, monitoring and reporting
- Safeguard Management, implementation, monitoring and reporting
- Capacity Building of NEA Staff.

This Field Visit Report on Safeguard Management # 01 is intended to cover the observation on Social Safeguard Specialist, Environmental Safeguard Specialist and Biodiversity Experts during their field visits of Category 1 projects from May 05 to May 11, 2022.

Team members of PSC convey their heartiest gratitude to the members of the project teams and members of SSEMD of NEA for extending courtesy and required support during entire period of the field visit.

2. OBEJCTIVE

The main objective of this field visit was to collect first-hand information on social, environmental and biodiversity aspects of Category 1 Projects.

List of projects with dates taken up for field visits are provided below: -

TABLE 2.1: LIST OF PROJECTS WITH DATES TAKEN UP FOR FIELD VISIT

Project Site	Date of Visit
132 kV Underground Transmission Line from Chobhar to Lagankhel	05 May, 2022
Mulpani 132/11kV GIS Substation	05 May, 2022
Dadakhet – Rahughat 132 kV Transmission Line and associated Substations at Rahughat and Dadakhet	06 and 07 May 2022
132 kV Kohalpur – Nepalgunj Transmission Line and associated substation at Nepalgunj	08 May 2022
Ghorahi - Khungri (Madichaur) 132 kV Transmission Line and Associated Substations at Khungri and Ghorahi	09 May 2022
132 kV Borang – Lapang and 220 kV Lapang - Naubise (Ratmate) 220 kV Transmission Line and Associated Substations	11 May 2022

Location of above projects are shown in **Annexure #1**.

List of Personnel Participated in Field Visit are provided in **Annexure #2**.

3. OBSERVATIONS DURING FIELD VISIT

Observations made on the individual projects during the field visit by the Safeguard Experts of PSC are priced in the following sub-sections. Suggested mitigation measures are also provided therein.

3.1. Project Site: 132 kV Underground Transmission Line from Chobhar to Lagankhel

Sl. No.	Project component or activity	Observation in the field on the Impact /risk to be mitigated	Mitigation measure (s) Recommended	Suggested measures/ Steps to be taken up
1.	Status of the Site	<ul style="list-style-type: none"> Contract for execution of the project is yet to be signed. Contractor will be mobilised for site activities only after signing of the Contract. 		
2.	Availability of Land for Chobhar Substation.	<ul style="list-style-type: none"> The land allocated for Chobhar Substation belongs to another ADB funded project of NEA namely Kathmandu Valley Transmission Capacity Reinforcement Project. Government of Nepal has already transferred the land to NEA. Construction of this substation is not in the scope of EGMP. 		
3.	Trees at the boundary of Chobhar Substation.	<ul style="list-style-type: none"> Pine trees has been seen on the boundary of the proposed sub-station land. No other tree exist within the substation site. 	<ul style="list-style-type: none"> The Pine trees shall not be cut. The branches of the canopy of trees shall be trimmed for convenience of the project. Minimal tree shall be cut if required. 	<ul style="list-style-type: none"> Shall be abide by all Government Laws of Nepal Forest Department permission shall be taken before cutting of any trees.
4.	Transmission Line (Underground Cable Route)	<ul style="list-style-type: none"> The U/G cable route passes along the road cutting through Nakkhu village. Anticipated potential impacts include temporary disturbance to traffic and inconvenience to residents for a limited period for laying the underground transmission cable along the road. 	<ul style="list-style-type: none"> Alternative route for diverting the traffic may available, which should be explored.. 	<ul style="list-style-type: none"> Permission from appropriate authority shall be taken at the time of execution. Road safety and traffic management plan to be prepared and implemented.
5.	Transmission Line (Underground Cable Route)	<ul style="list-style-type: none"> The transmission line will pass along the following structures, where access will be temporarily disturbed during laying of cables: - Chobhar Ganesh Temple. 	<ul style="list-style-type: none"> Alternate access to be provided during execution of the project. 	<ul style="list-style-type: none"> Permission from appropriate authority shall be taken at the time of execution. Road safety and traffic management plan to be prepared

Sl. No.	Project component or activity	Observation in the field on the Impact /risk to be mitigated	Mitigation measure (s) Recommended	Suggested measures/ Steps to be taken up
		<ul style="list-style-type: none"> Prison / rehabilitation centre on the way to Lalitpur City Mahalaxmi Temple Complex at Lalitpur City School adjacent to the Mahalaxmi Temple Complex. 		and implemented.
6.	Transmission Line (Underground Cable) Route) – Biodiversity Aspects	<ul style="list-style-type: none"> No Schedule –I and Endangered birds or mammals has been observed. No primate species like langur and Rhesus monkey has been observed. The birds observed during visit are- <i>Cuculus micropterus, Centropus sinensis, Eudynamys solace, Apus melba, Acridotheres tristis, Zoothera salimalii, Corvus splendens, Corvus macrorhynchos, Milvus migrans.</i> <p>These birds has been more or less commonly found in the Kathmandu city and no major impact anticipated on these small sized birds.</p> <ul style="list-style-type: none"> While the alignment of the transmission line crosses the Baghmati river, where a bridge has been there. On the upstream of the bridge the rocky steep banks has been used by the Common pigeon for nesting. 	<ul style="list-style-type: none"> Birds nest if found shall not be disturbed as the transmission line alignment goes downside of the bridge, which is underground in other parts 	<ul style="list-style-type: none"> The biodiversity management plan shall be prepared and act accordingly. Forest Department permission shall be taken before cutting of any trees. Disturbance avoidance management measures shall be adopted in the biodiversity management plan.
7.	Availability of Land for Patan Substation.	<ul style="list-style-type: none"> GIS Substation will be constructed within the existing Substation premises. Land belongs to NEA. 		

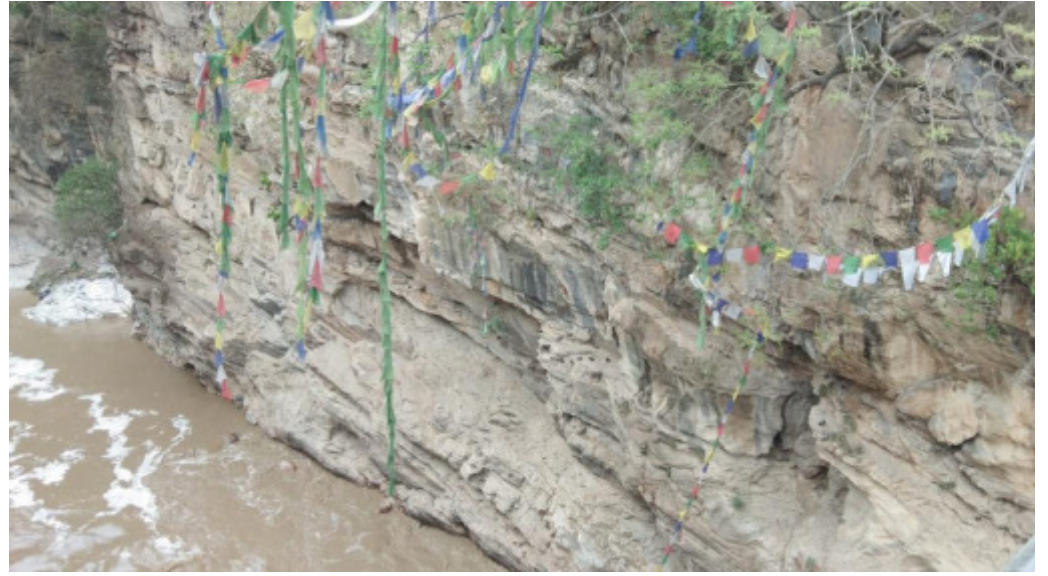
Sl. No.	Project component or activity	Observation in the field on the Impact /risk to be mitigated	Mitigation measure (s) Recommended	Suggested measures/ Steps to be taken up
8.	Trees within Patan Substation.	<ul style="list-style-type: none"> There are two big camphor trees, one Rudraksha tree and four other trees located within the existing S/S premises, and these may need to be cut for clearing the land for the proposed new S/S to be constructed at this site. 	<ul style="list-style-type: none"> Required permission from the concerned authorities may be required as per the local regulatory framework for tree cutting 	<ul style="list-style-type: none"> Shall be abide by all Government Laws of Nepal Forest Department permission shall be taken before cutting of any trees.

Site Photographs

		
Trees Present Within Patan Substation	Trees Present Within Patan Substation	Trees Present on the boundary of the Chobar Sub Station



Birds Nesting area



Birds Nesting area

3.2. Project Site: Mulpani 132/11kV GIS Substation

Sl. No.	Project component or activity	Observation in the field on the Impact /risk to be mitigated	Mitigation measure (s) Recommended	Suggested measures/ Steps to be taken up
1.	Status of the Site	<ul style="list-style-type: none"> Contract for execution of the project is yet to be signed. Contractor will be mobilised for site activities only after signing of the Contract. 		
2.	Availability of Land for Substation.	<ul style="list-style-type: none"> The required land for the S/S is already acquired by NEA. The total land acquired for the S/S is 12 Ropani, which is equivalent to approximately 6000 sq m. The entire land that has been acquired was privately owned cultivated land. At the time of the field visit compensation to all landowners whose land has been acquired was already paid except to one owner. Payment of compensation to this one owner was reported to be in progress. The reason for delay in payment to the latter was stated to be the unavailability of valid land ownership documents and delayed presentation by the landowner before the concerned authorities. Substation land is free from any tree and vegetation. 		
3.	Access Road	<ul style="list-style-type: none"> There are a few houses located adjacent to the S/S land. Access to at least three houses is likely to be adversely impacted by the construction of the proposed S/S at Mulpani. The houseowners have demanded provision of a motorable access road by NEA. 	<ul style="list-style-type: none"> Access to the houses to be provided. In case signing of EPC contract is delayed it is recommended to construct Boundary wall around along the property line of NEA. Common access road for the substation and above houses may be constructed. 	<ul style="list-style-type: none"> Appropriate actions shall be taken during construction of boundary wall and Access Road.
4.	Biodiversity Aspects	<ul style="list-style-type: none"> No Schedule –I and Endangered birds or mammals has been observed. 	Disturbance to birds and mammals occasionally visiting the site shall be	<ul style="list-style-type: none"> The biodiversity management plan shall be prepared by the

Sl. No.	Project component or activity	Observation in the field on the Impact /risk to be mitigated	Mitigation measure (s) Recommended	Suggested measures/ Steps to be taken up
		<ul style="list-style-type: none"> The birds observed are -<i>Columba livia</i>, <i>Corvus splendens</i>, <i>Corvus macrorhynchos</i>, <i>Milvus migrans</i>, <i>Acridotheres tristis</i>, <i>Passer domesticus</i> etc. has been observed. No birds nest has been observed. 	reduced during construction.	Contractor and act accordingly.

Site Photographs



Mulpani Substation Area

3.3. Project Site: Dadakhet – Rahughat 132 kV Transmission Line and associated Substations at Rahughat and Dadakhet

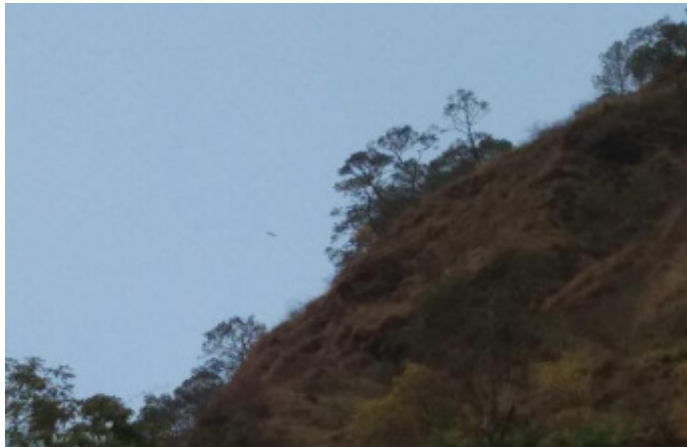
Sl. No.	Project component or activity	Observation in the field on the Impact /risk to be mitigated	Mitigation measure (s) Recommended	Suggested measures/ Steps to be taken up
1.	Status of the Site	<ul style="list-style-type: none"> The Contractor has been mobilised at site and Site development work is in progress. 		
2.	Availability of Land for Rahughat Substation.	<ul style="list-style-type: none"> The required land for the S/S has already been acquired by NEA. Boundary Wall as well as main gate has also been constructed. Compensation to all landowners whose land has been acquired was already paid. Substation land is free from any tree. 		
3.	Availability of Land for Dadakhet Substation.	<ul style="list-style-type: none"> The required land for the S/S has already been acquired by NEA. Boundary Wall as well as main gate has also been constructed. Compensation to all landowners whose land has been acquired was already paid. Substation land is free from any tree. 		
4.	EHS Issues	<ul style="list-style-type: none"> Site office and labour camp is under development and construction In labour camp, toilet and other sanitary systems are planned and under development. There is natural water stream. Apparently, the water looks clean. After testing, the water may be tapped for potable water. 	<ul style="list-style-type: none"> The labour camp would be provided with LPG as fuel, canteen area, bathing place, separate toilets for Men/Women, clean potable water, First Aid and other facilities as required as per contract. The water quality would be tested for usage as potable water before being used for drinking purposes. 	<ul style="list-style-type: none"> Contractor shall abide by all EHS guidelines applicable for EGMP Projects.

Sl. No.	Project component or activity	Observation in the field on the Impact /risk to be mitigated	Mitigation measure (s) Recommended	Suggested measures/ Steps to be taken up
5.	Biodiversity Issues at Dadakhet & Rahughat Sub Station Site	<ul style="list-style-type: none"> No Schedule –I and Endangered birds or mammals has been observed. The birds observed are -<i>Columba livia</i>, <i>Corvus splendens</i>, <i>Corvus macrorhynchos</i>, <i>Milvus migrans</i>, <i>Acridotheres tristis</i>, <i>Passer domesticus</i> etc. has been observed. No birds nest has been observed. 	Disturbance to birds and mammals occasionally visiting the site shall be reduced during construction.	<ul style="list-style-type: none"> Contractor shall abide by all Government Laws of Nepal
6.	Environmental Issues	<ul style="list-style-type: none"> <i>There is no tree being impacted on the land proposed for SS</i> <i>Some trees may be impacted during installation of TL and tower erection. The final survey and exact locations of tower is not fixed yet. The survey work is still underway.</i> 	Tree cutting shall be minimized. The branches of the canopy of trees shall be trimmed for convenience of the project.	<ul style="list-style-type: none"> Forest Department permission shall be taken before cutting of the trees.
7.	Biodiversity Issues at 132 kV Transmission Line Tower site	<ul style="list-style-type: none"> The transmission line alignment has been visited wherever road communication was convenient. During visit no primate species (Langur) has been observed along the RoW Between the tower AP3 and AP4 the movement of raptors has been observed viz. <i>Milvus migrans</i> over the Tatopani river. The birds observed are -<i>Columba livia</i>, <i>Corvus splendens</i>, <i>Corvus macrorhynchos</i>, <i>Milvus migrans</i>, <i>Acridotheres tristis</i>, <i>Passer domesticus</i> etc. has been observed. No Schedule –I and Endangered birds or mammals has been observed along the alignment. The area near the Kaligandagi River has been visited by migratory birds as per WWF, Nepal report. 	<p>Disturbance to birds and mammals occasionally visiting the site shall be reduced during construction.</p> <p>Birds nest if found shall not be disturbed as the transmission line alignment moves through thin forest cover.</p> <p>Avian protection plan shall include migratory birds protection.</p>	<ul style="list-style-type: none"> The biodiversity management plan shall be prepared and act accordingly. NEA, PSC and Contractor shall done monitoring of the migratory birds and if required shall come up with avian protection plan targeting migratory birds if required. However final decision to be taken based on the final results of the birds monitoring at site. Area between the tower AP3 and AP4 shall be taken into consideration for providing avian protection measures if required. Disturbance avoidance management measures shall be adopted in the biodiversity management plan.

Site Photographs



Area Where Birds Species Seen Over river Valley



Raptors Obseerved near alignment



Sub Station Area in Dadakheth



Informal discussion with Local People at Malika Nagar Palika

3.4. Project Site: 132 kV Kohalpur – Nepalgunj Transmission Line and associated substation at Nepalgunj

Sl. No.	Project component or activity	Observation in the field on the Impact /risk to be mitigated	Mitigation measure (s) Recommended	Suggested measures/ Steps to be taken up
1.	Status of the Site	<ul style="list-style-type: none"> Contract for execution of the project is yet to be signed. Contractor will be mobilised for site activities only after signing of the Contract. 		
2.	Availability of Land for Nepalgunj Substation	<ul style="list-style-type: none"> Entire land required for construction of substation has already acquired by NEA. Boundary wall is yet to be constructed. 		
3.	Environmental Issues in Sub Station Area	<ul style="list-style-type: none"> There is a brick kiln and a cement crushing plant located within 1 km radius. These installations do not have impact on the SS and TL. There are a few orchards of commercial trees within 500m radius but does not have any impact on the SS and TL. There is no tree in the proposed land of Substation. No other environmentally sensitive spot/issue found in the SS 	<ul style="list-style-type: none"> At this stage no major issues are envisaged. 	<ul style="list-style-type: none"> Appropriate actions shall be taken as per requirement during execution stage..
4.	Environmental Issues in Transmission Alignment	<ul style="list-style-type: none"> A few trees may be impacted during installation of TL and tower erection. The final survey and exact locations of tower is not fixed yet as final survey will be done by the Contractor. 	<ul style="list-style-type: none"> Tree cutting shall be minimized. The branches of the canopy of trees shall be trimmed for convenience of the project. 	<ul style="list-style-type: none"> Forest Department permission shall be taken before cutting of the trees.
5.	Biodiversity issues in Nepalgunj Sub Station and Transmission Line Alignment Area	<ul style="list-style-type: none"> The area has been covered with mosaic agro-forestry areas with the Eucalyptus species. The common birds seed during the field visit are- <i>Bubulcus ibis</i>, <i>Egretta garzetta</i>, <i>Milvus migrans</i>, <i>Streptopelia orientalis</i>, <i>Acridotheres tristis</i>, <i>Passer domesticus</i> etc. During visit no primate species (Langur/Rhesus macaque) has been observed along the RoW. No Schedule –I and Endangered birds or mammals 	<ul style="list-style-type: none"> Since the area has man made Eucalyptus forest. The tree cutting shall be minimized. Birds nest if found shall not be disturbed as the transmission line alignment moves though thin forest cover. Disturbance to birds and mammals occasionally visiting the site shall be reduced during construction. 	<ul style="list-style-type: none"> The biodiversity management plan shall be prepared and act accordingly. Disturbance avoidance management measures shall be adopted in the biodiversity management plan.

has been observed along the alignment.

Site Photographs



Nepalgunj Substation Area



Informal Discussion with Local People in one of the tower location at Akalgharwa village

3.5. Project Site: Ghorahi - Khungri (Madichaur) 132 kV Transmission Line and Associated Substations at Khungri and Ghorahi

Sl. No.	Project component or activity	Observation in the field on the Impact /risk to be mitigated	Mitigation measure (s) Recommended	Suggested measures/ Steps to be taken up
1.	Status of the Site	<ul style="list-style-type: none"> Contract for execution of the project is yet to be signed. Contractor will be mobilised for site activities only after signing of the Contract. 		
2.	Availability of Land at Ghorahi Sub Station	<ul style="list-style-type: none"> 2 nos. bay extension will be done within existing Ghorahi Substation. Adequate land is available within the fences area of the existing substation 		
3.	Availability of Land at Khungri (Madichaur) Sub Station	<ul style="list-style-type: none"> Entire land required for construction of substation has already acquired by NEA. Boundary wall with main gate has also been constructed. A store cum guard house has already been constructed and guard has been posted. 		
4.	Biodiversity Issues at Madichaur Sub Station	<ul style="list-style-type: none"> Rhesus macaque has been seen on the boundary wall of the proposed sub-station area. Outside the boundary wall 3-<i>Bombax ceiba</i> trees has been observed. As per local people vulture visits the area whenever, the dead animals appears in the area. Hence, they may use these trees for perching/roosting etc. 	<ul style="list-style-type: none"> The big trees shall not be cut down. Trimming of the upper canopy shall be done after consultation with the local Department of Forests and Soil Conservation and permission from them. 	<ul style="list-style-type: none"> Disturbance avoidance management measures shall be adopted in the biodiversity management plan.
5.	Biodiversity issues at Ghorahi - Madichaur 132 kV Transmission Line Alignment	<ul style="list-style-type: none"> The birds observed in the area are- <i>Pavo cristatus</i>, <i>Streptopelia orientalis</i>, <i>Acridotheres tristis</i>, <i>Passer domesticus</i>, <i>Pycnonotus cafer</i>, <i>Glaucidium cuculoides</i> etc. No langur has been observed along the alignment tower positions. 	<ul style="list-style-type: none"> Biodiversity shall be protected during the period of construction. Tree cutting shall be minimised The branches of the canopy of trees shall be trimmed for convenience of the project. 	<ul style="list-style-type: none"> Vulture survey during winter shall be done in the entire alignment- viz. before construction and after construction. Vulture protection plan shall be there. The biodiversity management plan shall be prepared and act accordingly.

Sl. No.	Project component or activity	Observation in the field on the Impact /risk to be mitigated	Mitigation measure (s) Recommended	Suggested measures/ Steps to be taken up
		<ul style="list-style-type: none"> No Schedule –I and Endangered birds or mammals has been observed along the alignment. Considerable forest cover has been observed near Ghorahi side foothills mostly Sal forest. As per the information from the local people at Kalimati village, the alignment area has been visited by the vulture, whenever dead animals became available in open areas. 	<ul style="list-style-type: none"> Birds nest if found shall not be disturbed as the transmission line alignment moves through thin forest cover. Disturbance to birds and mammals occasionally visiting the site shall be reduced during construction. 	<ul style="list-style-type: none"> The plan shall include the vulture protection & avian protection measures. Avian protection diverters as per the requirement to protect avian species shall be included in the BOQ of the contract. Forest Department permission shall be taken before cutting of the trees. Disturbance avoidance management measures shall be adopted in the biodiversity management plan.

Site Photographs



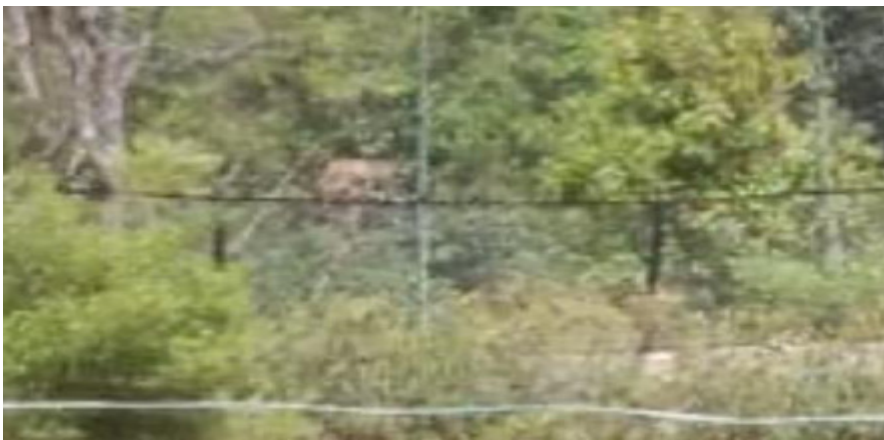
Area visited by Vulture as per locals near Kalimati Village



Informal Discussion with Local People at Kalimati Village



Ghorahi Sub Station Area



Rhesus macaque at Madichaur Sub Station Area



Bombax ceiba plants present at Khungri SubstationSite

3.6. Project Site: 132 kV Borang – Lapang and 220 kV Lapang - Naubise (Ratmate) 220 kV Transmission Line and Associated Substations

Sl. No.	Project component or activity	Observation in the field on the Impact /risk to be mitigated	Mitigation measure (s) Recommended	Suggested measures/ Steps to be taken up
1.	Status of the Site	<ul style="list-style-type: none"> Contract for execution of the project is yet to be signed. Contractor will be mobilised for site activities only after signing of the Contract. 		
2.	Availability of Land at Lapang Sub Station	<ul style="list-style-type: none"> Entire land required for construction of substation has already purchased by NEA. NEA is yet to take possession of the Land. The entire land of substation area is agricultural land and some families are residing there. This is agricultural land and main crop are paddy and maize. The vegetable like Ocra, cucumber, bitter gourd, coriander etc. are grown on the field. 	<ul style="list-style-type: none"> NEA needs to act on compensation on the crops and houses and take possession of the land of substation area. 	<ul style="list-style-type: none"> It was informed that process for paying compensation and taking possession of land is in progress.
3.	Social issues at Lapang Substation	<ul style="list-style-type: none"> There are 19 structures; In which 17 families residing, one school and one temple are also there. 	<ul style="list-style-type: none"> Relocation Plan as required for the families, school & temple to be prepared. 	<ul style="list-style-type: none"> All issues to be closed before mobilisation of the Contractor at Site.
4.	Environmental issues at Lapang Substation	<ul style="list-style-type: none"> There are Approximately 400-500 trees on the land. A few of those are fruit bearing like Mango, Jackfruit, Citrus, and Guava. The shrubs of Banana and berries are also present on the proposed land. 	<ul style="list-style-type: none"> Tree cutting shall be minimized as far as possible. The branches of the canopy of trees shall be trimmed for convenience of the project. 	<ul style="list-style-type: none"> Forest Department permission shall be taken before cutting of the trees.
5.	Availability of Land at Ratmate Sub Station	<ul style="list-style-type: none"> Ratmate Substation is not covered under EGMP. As understood land for this substation has already been acquired. 		

6.	Biodiversity issues Lapang Sub Station Site	<ul style="list-style-type: none"> The area has been cultivated by local people. No major or minor biodiversity seen No primates seen in the area. The birds seen in the site are-<i>Glaucidium cuculoides</i>, <i>Spilopelia chinensis</i>, <i>Motacilla alba</i>, <i>Corvus splendens</i>, <i>Corvus macrorhynchos</i> etc., which are more or less common in distribution in the area. 	<ul style="list-style-type: none"> The agriculture/crop shall be harvested by the owner before starting the construction work Transmission line alignment going out of the sub-station shall minimize any disturbance to biodiversity present in the area. 	<ul style="list-style-type: none"> Disturbance avoidance management measures shall be adopted in the biodiversity management plan.
7.	Biodiversity issues at Borang-Naubise (Ratmate) 220kV Transmission Line Alignmnet	<ul style="list-style-type: none"> No langur has been observed along the alignment tower positions. No Schedule –I and Endangered birds or mammals has been observed along the alignment. Considerable forest cover has been observed near the alignment mostly Sal forest. As per the information from the local people the alignment area has been visited by the vulture, whenever dead animals became available in open areas. 	<ul style="list-style-type: none"> Biodiversity shall be protected during the period of construction. Tree cutting shall be minimized <p>The branches of the canopy of trees shall be trimmed for convenience of the project. Birds nest if found shall not be disturbed as the transmission line alignment moves through thin forest cover.</p> <p>Disturbance to birds and mammals occasionally visiting the site shall be reduced during construction.</p>	<ul style="list-style-type: none"> The biodiversity management plan shall be prepared and act accordingly. The plan shall include the vulture protection measures. Avian protection plan shall be there. Avian protection diverters as per the requirement to protect avian species shall be included in the BOQ of the contract. Forest Department permission shall be taken before cutting of the trees. Disturbance avoidance management measures shall be adopted in the biodiversity management plan.

Site Photographs



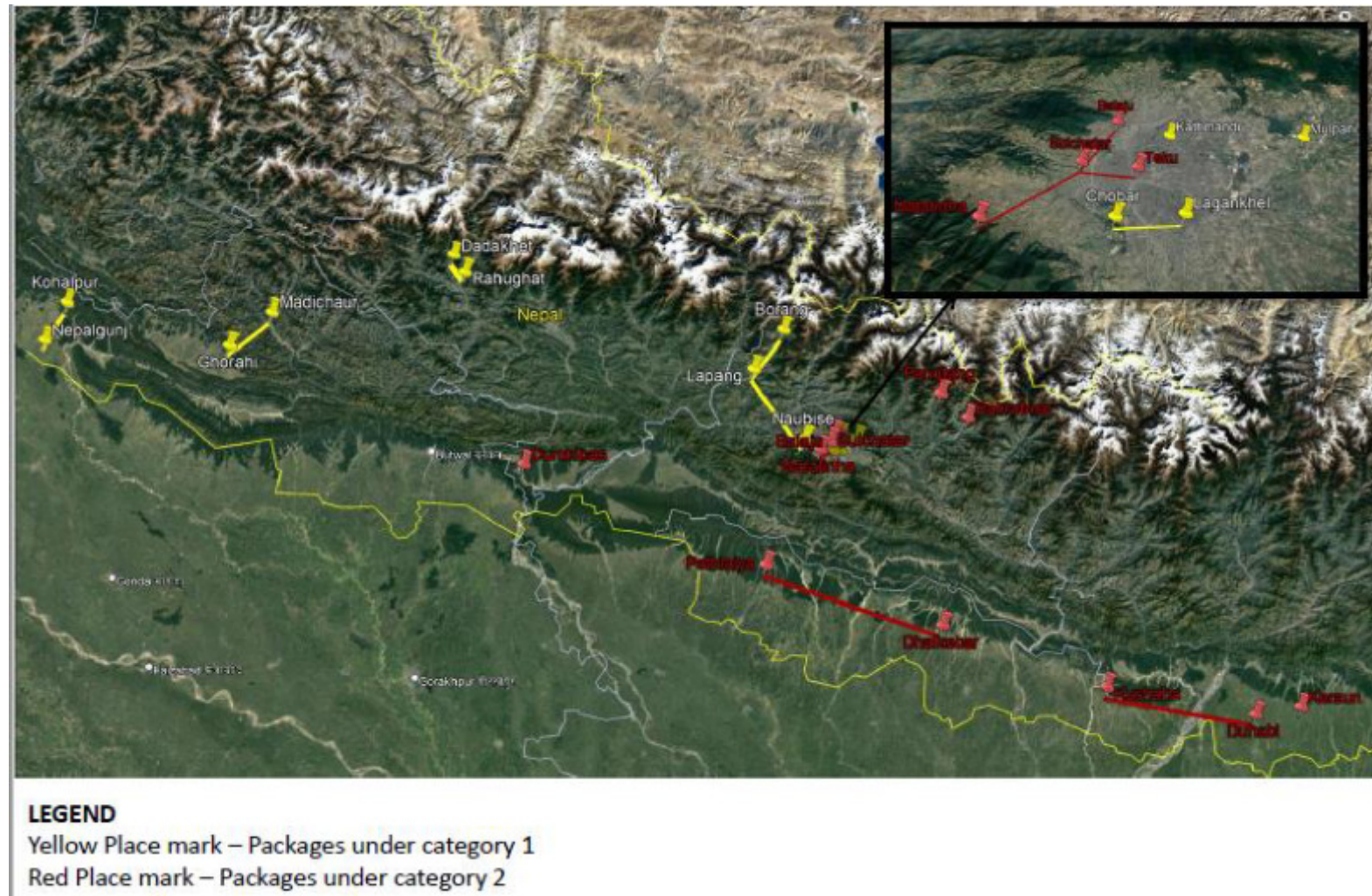
Lapang Sub Station Area



School at Lapang Sub Station Area



Agriculture at Lapang Substation Area

ANNEXURE #1: MAP SHOWING LOCATIONS OF EGMP PROJECTS

ANNEXURE #2: List of Personnel Participated in Field Visit

Sl. No.	Description	Organisation
1.	Project Manager / Project Team member of individual Project	PMD, NEA
2.	Meeta Acharya (Assistant Manager) - Dadakhet–Rahughat only	SSEMD, PMD, NEA
3.	Puspa Raj Wagle (Social Safeguard Expert (Consultant))	SSEMD, PMD, NEA
4.	Navaraj Pokharel (Environmental Specialist (Consultant)) – except Borang-Lapang-Ratmate	SSEMD, PMD, NEA
5.	Mayank Kumar (Environment Safeguard Specialist)	PSC
6.	PAK Sinha (Social Safeguard Specialist)	PSC
7.	Dr Bhritgu Prasad Saikia (Environment Safeguard Specialist)	PSC
8.	Rabindra Raj Shrestha (Transmission Engineer-Electrical)	PSC
9.	Haraprasad Biswas (Team Leader)	PSC

Tractebel is a global engineering company delivering game-changing solutions for a carbon-neutral future. Insights gathered during our more than 150 years of experience in energy, urban, nuclear and water projects combined with local expertise allow us to tackle complex future-oriented projects. By connecting strategy, design, engineering and project management, our community of 5,000 imaginative experts helps companies and public authorities create positive impact towards a sustainable world, where people, planet and profit collectively thrive. With offices in Europe, Africa, Asia, the Middle East and Latin America, the company registered a turnover of 581 million Euros in 2020. Tractebel is part of the ENGIE Group, a global reference in low-carbon energy and services.

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Refer attached Presentation of ADB dated April 04, 2022

Sl. No.	Slide no.	Description	Status as on June 30, 2022
1.	4	Formation of Grievance redressal Mechanism (GRM) at First level (Site)	The GRM of Distribution Control and Command Centre have been formed and in operation. Principally the GRC of the project have been formed.
2.	4	Formation of GRM - Third Level (Committee)	The GRC of Distribution Control and Command Centre have been formed.
3.	5	EnvironmentAssessment. a) Preparation of IEE documents and approved by GoN and cleared by ADB. b) Contactor needs to prepare EMP based on IEE for each project. c) Update of IEE if needed d) NEA to disclose all environmental documents	a) IEE for following projects have been approved: - <ul style="list-style-type: none"> Dadakhet – Rahughat Ghorahi – Madichaur Borang – Lapang - Ratmate NEA to update status of other projects. b) Contractor of Dadakhet – Rahughat has submitted Construction ESMP. Comments provided and document is under revision by the Contractor. NEA to update status of other projects c) At present Update of IEE is not required. d) NEA to update status
4.	6	a) Contract already awarded !! Issue actual EMP, Sign MoU, Proceed for contract variation.	a) Contractor of Dadakhet – Rahughat



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Sl. No.	Slide no.	Description	Status as on June 30, 2022
		b) The contract will explicitly exclude the use of PCBs and any asbestos containing materials.	NEA to update status of other projects b) Communicated to the Contractor of Dadakhet – Rahughat NEA to update status of other projects
5.	7	Trainings and Awareness Raising Activities.	a) PSC is preparing training plan & Training material in consultation with NEA, which is in progress. b) Contractor of Dadakhet – Rahughat has started sensitization session on EHS as part of tool box talk.
6.	8	a) NEA with the support of the PSC to prepare detailed communication/consultation plan upon loan effectiveness. b) Additional meaningful consultations to ensure local affected communities have had the opportunity to be involved in the design and that any concerns raised are duly addressed. c) During detailed route surveys, Contractor to consult with AP of TL as well as all persons occupying properties near the substations (up to 500m and within the ROW up to 50m of the TL alignments) to seek their views and respond to individual environment, health, and safety concerns about the proposed works. d) Contractor to communicate at least one month prior to the commencement of works, advance notice to local communities within 500m verbally through NEA local offices and contact with village heads.	a) PSC is preparing Guidelines on community participation in environment & Social Monitoring. The same will be finalized with the consultation with NEA. b) Informal consultation is ongoing. c) Not applicable for substations. To be complied during construction of foundations, erection of towers and stringing of transmission line. Nor
7.	9	Contractor's Management Plan (CEMP)	Contractor of Dadakhet – Rahughat has submitted Construction ESMP. Comments provided and document is under revision by the



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Sl. No.	Slide no.	Description	Status as on June 30, 2022
			Contractor. NEA to update status of other projects
8.	10	a) At least one suitably qualified and experienced environment officer; one health and safety officer for each contract package b) A project manager based on-site full-time nominated to the role of EHS Supervisor supported by full time OHS steward(s). c) Employ one suitably qualified and experienced, dedicated biodiversity/heritage officer for each contract package impacting on protected area, Chure zone, world heritage site	a) Contractor of Dadakhet – Rahughat have already deputed following personnel at site. <ul style="list-style-type: none"> One Safety Officer One EHS Supervisor b) Will be complied. c) Not applicable for Dadakhet – Rahughat project.
9.	11	Package 1: TL,SS: DRTLSS Project: a) Contractor to develop site-specific EMP & biodiversity management plan (BMP), b) Air quality (SPM, PM10, PM2.5, SO2, and NO2) and Noise Level Monitoring c) Obtain forestry clearance d) Avian Protection Plan to be expediated, contract variation e) Janaki Temple	a) Contractor of Dadakhet – Rahughat has submitted Construction ESMP. Comments provided and document is under revision by the Contractor. Biodiversity management plan will also form part of Construction ESMP. b) Contractor has collected data from site. Test Results will be submitted with Quarterly Progress Report. c) Forest clearance will be obtained after route survey and tree counting is completed. d) Action will be taken after completion of route survey. e) During site visit it was observed that there is no Janaki Temple near the substations and



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Sl. No.	Slide no.	Description	Status as on June 30, 2022
			transmission line route.
10.	12	Package 2: TL,SS: Construction of Ghorahi - Madichaur 132 kV Transmission Line and associated substation <ul style="list-style-type: none"> a) Contractor to develop site-specific EMP & biodiversity management plan (BMP), b) Air quality (SPM, PM10, PM2.5, SO2, and NO2) and Noise Level Monitoring c) Obtain forestry clearance d) Avian Protection Plan to be expediated, contract variation 	<ul style="list-style-type: none"> a) Contract is yet to be awarded. Will be complied after award of Contract. b) Contract is yet to be awarded. Will be complied after award of Contract. c) Contract is yet to be awarded. Will be complied after award of Contract.
11.	13	Package 3: TL,SS: Construction of Borang – Lapang - Ratmate (132/220kV) Transmission Line and associated substations <ul style="list-style-type: none"> a) Contractor to develop site-specific EMP & biodiversity management plan (BMP), b) Air quality (SPM, PM10, PM2.5, SO2, and NO2) and Noise Level Monitoring c) Obtain forestry clearance d) Avian Protection Plan to be expediated, contract variation 	<ul style="list-style-type: none"> a) Contract is yet to be awarded. Will be complied after award of Contract. b) Contract is yet to be awarded. Will be complied after award of Contract. c) Contract is yet to be awarded. Will be complied after award of Contract. d) DCC is going to conduct the Air and water quality test soon e) Dandakhet-Rahughat have already monitored the air quality and noise level as well as water quality
12.	14	Package 9: TL-Upgrading conductors; IFB published- 132 kV/66 kV Transmission Line Conductor Upgradation <ul style="list-style-type: none"> a) Contractor to develop site-specific biodiversity management plan (BMP), b) Obtain forestry clearance 	Not Yet done



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Sl. No.	Slide no.	Description	Status as on June 30, 2022
		c) Avian Protection Plan to be expediated, contract variation	
13.	15	Package 4: SS; IFB Published : Construction of 132/33/11 kV substation at Pangtang a) Contractor to develop site-specific, EMP & biodiversity management plan (BMP), b) Air quality (SPM, PM10, PM2.5, SO2, and NO2) and Noise Level Monitoring	Not Yet done
14.	16	Package 5: SS, DL; Contract Awarded: Construction of 132/33/11 kV substation at Keraun (Morang) a) Air quality (SPM, PM10, PM2.5, SO2, and NO2) and Noise Level Monitoring b) Updating IEE to reflect the final alignment of 33 kV lines for clearance and disclosure by ADB before any works commence	Not Yet done
15.	17	Package 6: SS-substation automation system installation; IFB Published - Grid Substation Automation (Outside Kathmandu Valley) a) Grid Substation Automation (Outside Kathmandu Valley) b) PSC to visit existing substations and verify the gaps identified by desk-based audit (Appendix 3) and thus detailed substation-specific corrective actions.	
16.	19	Other Pre-construction Monitoring a) Water quality check for ongoing sites for drinking water b) All properties/ physical cultural resources along transmission lines requiring condition survey as per Table	Not done yet



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Sl. No.	Slide no.	Description	Status as on June 30, 2022
		10.A of IEE	
17.	20 to 23	<p>Package 7: Distribution Command and Control Centre: Contract Awarded; Contractor Mobilized on site</p> <p>a) EMP was not included as separate item in BoQ</p> <p>b) CEMP should be approved before works start</p> <p>c) Pre-construction measures (Air quality (SPM, PM10, PM2.5, SO2, and NO2) and Noise Level Monitoring</p> <p>d) excavations/drops should have more solid barricading to prevent the fall</p> <p>e) Labour Camp</p> <p>f) Public Communication and Consultation</p> <p>g) Prepare monitoring checklist and share it with contractor for monitoring and reporting.</p> <p>h) Placement of grievances box and posting of the GRM contacts at the entrance</p> <p>a) Monitoring of air and noise quality level as suggested by IEE.</p> <p>b) Preparation of consultation plan and it's implementation as a routine activity.</p> <p>c) NEA IC to support contractor in finalizing CEMP, which is under review at NEA, as a matter of urgency.</p> <p>d) Strict monitoring of personal hygiene (hand washing and sanitization), social distancing, and use of face mask by all the workforce.</p>	<p>CEMP Finalized</p> <p>Air quality, water quality and noise level will be done</p> <p>Consultation was done</p> <p>Done</p> <p>Grievance box has been installed and in operation</p> <p>Not done yet</p> <p>Done</p> <p>Done</p> <p>Done</p>



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Sl. No.	Slide no.	Description	Status as on June 30, 2022
18.	24	<p><u>Recommended Corrective Actions (within month of April)</u></p> <ul style="list-style-type: none"> a) Ensure camp meets ILO requirements, in particular separation of cooking and sleeping facilities: Workers' housing (ilo.org) b) Managing spoil across the site (either disposing in allocated space or storing it for re-use without hampering the worker's movement). c) Remove all trip and fall hazards, materials laying on ground, solid barricade where an excavation/drop. d) Scaffold/ladder safety. e) Avoid the ponded water. 	<p>Not Done yet</p> <p>-</p>



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Response on Environment Safeguard Consideration during Design and Pre-construction Phase (Presentation of ADB dated April 04, 2022)

Date _____
Page _____

आज मिति २०८०/१२/१६ गते यस बितरण प्रणाली नियन्त्रण तथा तथागत केन्द्र आयोजनाका आयोजना प्रमुख श्री रविन्द्र श्रेष्ठ को अध्यक्षतामा ठेकेदार कम्पनी "Yantao Dongfang Wisdom Electric Co. Ltd", सहायक ठेकेदार कम्पनी "Aera Consultant Pvt. Ltd" र नेपाल विद्युत प्राधिकरणका प्रतिनिधिहरु लगायत आयोजना स्तरीय कार्यरत कामदारहरु समेतको उपस्थितिमा बसेको बैठकले गम्गासो व्यवस्थापन समिती गठन गर्ने सम्बन्धी प्रस्ताव प्रावि हलफत्म गरी सर्वसम्मत निर्णय गरियो छ।

उपस्थिति

१. श्री रविन्द्र श्रेष्ठ (आयोजना प्रमुख - ने. वि. प्रा.)
२. श्री लु. लीन (आयोजना प्रमुख - ठेकेदार कम्पनी)
३. श्री थाङ निमाकुन (इन्जिनियर - ठेकेदार कम्पनी)
४. श्री रोलिन्द्र तामाङ (इन्जिनियर - ने. वि. प्रा.)
५. श्री अश्विन कुमार के.सि (साइट सुपरजाइजर - ठेकेदार कम्पनी)
६. श्री अखिलेश झा (इन्जिनियर - सहायक ठेकेदार कम्पनी)
७. श्री दिवा प्रचान्द्रा (इन्जिनियर - सहायक ठेकेदार कम्पनी)
८. श्री कृष्ण शम्भु (कामदार)
९. श्री अमृत तामा (कामदार)
१०. श्री रमेश शर्मा (कामदार)
११. श्री राजु तामाङ (कामदार)
१२. श्री नवराज गिरी (कामदार)
१३. श्री युवराज श्रेष्ठ (कामदार)

TR



Nepal Electricity Authority

(Government of Nepal Undertaking)

Project Management Directorate

Electricity Grid Modernization Project: Project Supervision Consultant (PSC)

Response on Environment Safeguard Consideration during Design and Pre-construction Phase (Presentation of ADB dated April 04, 2022)



१२ श्री प्रिये कुमारी चौधरी उपाध्यक्ष
१२. श्री प्रदीप कुमार चौधरी (कागदा) प्रिडिक्ट
१३. श्री विनोद मानन्धर (सहायक प्रिडिक्ट - ने.वि.प्र.)
१४. श्री सदान बाला (इन्जिनियर - ने.वि.प्र.)
१५. श्री रोशन शर्मा (इन्जिनियर - ने.वि.प्र.)

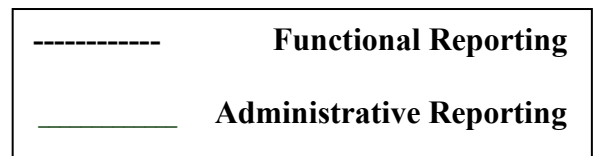
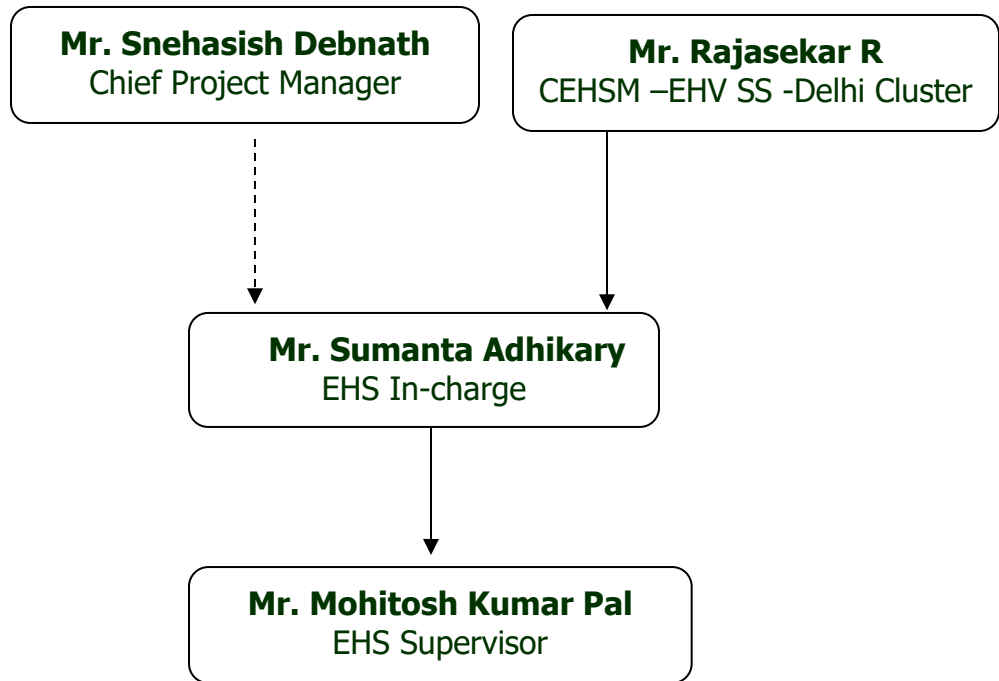
बैठक प्रस्ताव

१. यस विवरण प्रस्तावले निम्नलिखित तथा तथ्यांक केन्द्र आयोजनाको ने.वि.प्र. र Yangang Dongfang Wapong Electric Co. Ltd. बीच २०१८ सालमा भएको सम्झौतामा रहेको आयोजना कार्य सम्पन्न गर्दै रहेको अवस्थामा यस आयोजनाको सिमिल पोलको जिम्मा डेकेदार कम्पनीले सहायक डेकेदार कम्पनी Aera Consultant Pvt. Ltd. लाई जिम्मा दिएको छ। यसै अवस्थामा सहायक डेकेदार कम्पनीले आयोजनाको सिमिल पोलको काम सगरी चलाउँदै रहेको छ जसका निमित्त सहायक डेकेदार कम्पनीले आयोजना स्थलमा कामदारहरू दैनिक रूपमा परिचालन गर्दै आउँदै रहेको छ। यसरी दैनिक रूपमा कामदारहरू परिचालित हुनु पर्ने यस आयोजनामा कामदारहरूको गुनासो सम्वन्धित रहन सक्ने देखिन्छ। यसरी कामस्थलमा आयोजनाको कार्यस्थलमा खटिने कामदारहरूको गुनासाहरूको प्रतिक्रिया सुन्नुपर्ने हुनु पर्ने देखिएकोले गुनासा व्यवस्थापन गर्ने तीन सदस्यीय गुनासा व्यवस्थापन समिति गठन गर्ने प्रस्ताव यस बैठकमा पेसा गरिएको छ।

बैठक निर्णय

Attachment #4
Site EHS Report For A-2 Construction of
Dadakhhet-Rahughat 132 kV Transmission Line and
associated substations at Dandakhhet and Rahughat

EHS Organization Chart



EHS Roles, Responsibilities, Accountabilities & Authorities of EHSO

Functions/ Activities	Roles/Responsibilities/Accountabilities & Authority
IMS	<ul style="list-style-type: none"> ➤ Facilitate in establishing EHS requirements at workplace. ➤ Ensure the implementation of the EHS management system and norms as per the IMS and EHS manual respectively.
Training	<ul style="list-style-type: none"> ➤ Identify the training needs, designing and imparting training for staff, visitor, subcontractor and workmen.
Legal	<ul style="list-style-type: none"> ➤ Monitor the evaluation of compliance to legal requirements as identified by the cluster EHS manager at the prescribed frequency. ➤ Appraise the project manager & CEHSC/M on matters of non-compliance and facilitate compliance.
Performance Monitoring	<ul style="list-style-type: none"> ➤ Conducting periodical site EHS inspections & report the finding for corrective action. ➤ Act as catalyst for the project EHS committee activities. ➤ Review & appraise the site EHS performance and facilitate for improvement. ➤ Ensure the proactive performance monitoring through systems such as key performance indicator on EHS.
Planning	<ul style="list-style-type: none"> ➤ Preparing and updating project EHS plan. ➤ Preparing EHS risk assessment & safe work method. ➤ Timely reporting of EHS shortcoming to project manager for continual improvement.
Campaigns & competitions	<ul style="list-style-type: none"> ➤ Organize campaigns, competitions & other special emphasis programs to promote EHS at workplace.
Incident investigation & initiating CA	<ul style="list-style-type: none"> ➤ Conducting investigation of all incidents & initiate necessary corrective actions at sites. ➤ Analyze incident trends & initiate necessary corrective actions at sites.
Emergency response	<ul style="list-style-type: none"> ➤ Act as a catalyst for establishing, implementing & maintaining emergency preparedness and response procedure at project sites.
EHS performance	<ul style="list-style-type: none"> ➤ Reporting the site EHS performance to CEHSM.
Accountabilities	<ul style="list-style-type: none"> ➤ Accountable for appraising the management for project EHS plan implementation. ➤ Conduct EHS inspections as per monthly schedule. ➤ For reporting UA/UC not attended by the line staff. ➤ Carryout RA for all identified activities. ➤ Prepare and sent to weekly & monthly report to CEHSC/M. ➤ Issue violation memo in case of EHS violation, Cardinal Rule violations ➤ Verify the quality of PPEs & safety gadgets. ➤ Recording all UA/UC through digital mobile app.

Authority	<ul style="list-style-type: none">➤ Access to records, information, property or plans to make work place safety evaluation.➤ Physical access to all areas of the site to perform surveys, inspection, or other site safety related activities.➤ Suspend work activities on behalf of line management if imminent danger exists which may immediately cause harm or occupational illness & If imminent danger exists, the safety officer is authorized, to stop work activities.
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Ref: IM-5.4.1-B

MINUTES OF PROJECT EHS REVIEW MEETING

Name of the Project: 132 kV TL and Associated SS at Rahughat and Dadakheth				Meeting No.1	
Purpose of Meet: IMS implementation				Date of meeting: 22.06.22	
MEMBERS PRESENT (L&T)		INVITEES		MEMBERS ABSENT (L&T)	
1. Mr.Mr.Ashutosh Kumar-(PM) 2. Mr.Devarajan S-(store in charge) 3. Mr.Bala Sundaram (admin 4. Mr.Raja Kumar (planning In charge) 5. Mr.Ashok Kumar Jaiswal (6. Mr.Gopal Jee (site Incharge) 7. Mr.Ashish kumar Singh (TL incharge) 8. Mr.Sumanta Adhikary(EHSO) 9. Mr.Ruman Beniya (S/C supervisor					
REPORT SENT TO					
No. of Copies	Name / Dept.	No. of Copies	Name / Dept.	No. of Copies	Name / Dept.
01.	AK (Project-In charge)	05.	S.D(CPM)		
02.	RK(Planning)	06.	RR(CEHSM)		
03.	PLJ (COH-DNCL)	07.	All Site Incharges / All Site Engineers		
Prepared By:  Sumanta Adhikary Date: 23.06.22					

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MINUTES OF EHS MEETING

Item No.	Description of Discussion	Action By	Target	Remarks
1	Complaints received from Customers, Cluster, Corrective Action & Preventive Action.			
1.1	Checklist not filled 100% against DWP. Discussion: Checklist shall be filled on before start of the work against DWP.	All concern	WIE	
1.2	Leading indicator fixed for project is 1. Discussion: Capture more observations & Near Miss for achieving Leading indicator 1	All concern	WIE	
1.3	All site engineers shall be captured min 10 unsafe observations per month. Discussion: Target shall be fulfilled by site execution team	All concern	WIE	
1.4	Safety Park establishment is pending at Dadakhet & rahughat Discussion: Safety Park shall be established when restart the work	All concern	10.07.22	
1.5	CEHSP shall be resubmit . Discussion: CEHSP shall be resubmit in this week	All concern	30.06.21	

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2.1	Medical tie up nearest hospital . Discussion: medical tie up letter to be submitted	Mr.Devarajan S	30.06.21	
2	Review of MOM of previous meeting			
	First meeting	Nil		
3	Non-Conformity, Observation from external interested parties			
	-NIL-			
4	First - Aid cases / Reportable accident cases			
	-NIL-			
5	Future jobs and specific requirement:			
5.1	20 no's chair is required for safety induction & Training purpose. Discussion: Chair shall be purchased	Store in charge	20.07.22	
5.2	RCCB tester is required for RCCB testing . Discussion: It will come from KC 2 project	Store in charge	10.07.22	
5.3	PPEs stock shall be review and buffer stock shall be maintain. Discussion: Every month stock shall be review .	Store in charge	1.07.22	
6	Sub-contractor EHS Performance			
6.1	EHS Performance is Average; Hence, all sub-contractors must counselled & called for meeting for further improves on their performance for safe working			

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	<div>environment.</div> <div>-Discussed, Referred to IM-13-A-Sub Contractor evaluation</div> <div>PPE observation is more .</div> <div>S/C M/S Sharamjivi Nirman Sewa .</div>			
8	<div>Analysis of first-aid cases:</div> <div>-NIL-</div> <div><div><div><div>1</div><div>0.8</div><div>0.6</div><div>0.4</div><div>0.2</div><div>0</div></div><div><div><div>Apr-22</div><div></div></div><div><div>Apr-22</div><div>0</div></div></div></div><div><div>FA</div><div></div><div>0</div></div></div>			
10	Observation of EHS committee during last walkdown			
10.1	<div>SA informed that, Improper segregation of fabrication materials & poor housekeeping found in all the work area .</div> <div>Discussion :In reply-AK(PM sir) instructed, to AKJ coordinate with engineer and takes the necessary action immediate make scarp yard .</div> <div>(Steel & wooden and Bio)</div>	Store in charge		
10.2	<div>Huge waste material found at entrance of workman camp.</div> <div>Discussion: scrap Materials shall be disposed from the location</div>	Admin	30.06.22	

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10.3	Unsafe Electrical connection found at workman camp. Discussion: Weekly basis visit at workmen camp and rectify observation immediate basis	Admin	30.06.22	
10.04	SOP deviation found some work activities at workplace. Discussion: No work shall be carried out without SOP and supervisor shall be present during working time.	All Concern	Complied, to be maintain	

Next meeting is scheduled on: 22.07.22



SWAT/F/C/04
Version no: 01
Issue no: 02
Revision no: 03
Effective date: 2020/07/26

Soil Water and Air Testing Laboratories Pvt. Ltd.
VAT No: 605928743
Tel: +977-01 4249480
Email: swatlab2017@gmail.com
PO Box: 25752, Kathmandu, Nepal
Sisir Marga 11, Babarmahal, Kathmandu, Nepal



AIR QUALITY MONITORING REPORT

Name of the Client:	Nepal Electricity Authority & Construction	Lab Code:	22/06-659 (f)
Collector:	Srijana Sharma	Location:	Myagdi, Dandakhet
Latitude:	28°27'04.3" N	Longitude:	83°22'57.9" E
Source:	Air	Sampled By:	Aalekh Bhattarai, Suman Basnet
Sampling Date/ Run hours:	2022/05/31-2022/06/01, 24 hrs.	Analyzed Date:	2022/06/04-2022/06/08
Receipt Date:	2022/06/03	Completion Date:	2022/06/14
Project Name:	Rahughat Dandakhet Project	Issued Date:	2022/06/15

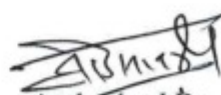
Parameters	Results ($\mu\text{g}/\text{m}^3$)	Tolerance Limit (National Air Quality Standard, Ministry of Forests and Environment, 2012) ($\mu\text{g}/\text{m}^3$)	Remarks
Particulate Matter (PM_{10})	25	120	Within the limit
Particulate Matter ($\text{PM}_{2.5}$)	6.7	40	Within the limit
Suspended Particulate Matter (SPM)	44	230	Within the limit
Sulphur Dioxide (SO_2)	0.02	80	Within the limit
Nitrogen Dioxide (NO_2)	0.01	70	Within the limit

Note: The integrity of the sample and results are dependent on the quality of sampling. The results refer only to the parameters tested of the samples provided/collected for analysis. Statements of conformity have been made without taking Measurement Uncertainty into account except when specifically requested by the customer.

Remarks: Particulate Matter (PM_{10}), Particulate Matter ($\text{PM}_{2.5}$), and Total Suspended Particles (TSP) are found within the limit of the National Air Quality Standard, Ministry of Forests, and Environment, 2012.




Analyzed and Checked By


Authorized By
Lokesh Sapkota



SWAT/F/C/04
Version no: 01
Issue no: 02
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Sisir Marga 11, Babarmahal, Kathmandu, Nepal



AIR QUALITY MONITORING REPORT


Name of the Client:	Nepal Electricity Authority	Lab Code:	22/06-659 (g)
Collector:	Srijana Sharma	Location:	Myagdi, Rahughat Substation
Latitude:	28°23'9.6" N	Longitude:	83°34'19" E
Source:	Air	Sampled By:	Aalekh Bhattarai
Sampling Date/ Run hours:	2022/06/01-2022/06/02, 24 hrs.	Analyzed Date:	2022/06/04-2022/06/08
Receipt Date:	2022/06/03	Completion Date:	2022/06/14
Project Name:	Rahughat Dandakhel Project	Issue Date:	2022/06/15

Parameters	Results ($\mu\text{g}/\text{m}^3$)	Tolerance Limit (National Air Quality Standard, Ministry of Forests and Environment, 2012) ($\mu\text{g}/\text{m}^3$)	Remarks
Particulate Matter (PM_{10})	27	120	Within the limit
Particulate Matter ($\text{PM}_{2.5}$)	9.3	40	Within the limit
Suspended Particulate Matter (SPM)	42	230	Within the limit
Sulphur Dioxide (SO_2)	0.01	80	Within the limit
Nitrogen Dioxide (NO_2)	0.01	70	Within the limit

Note: The integrity of the sample and results are dependent on the quality of sampling. The results refer only to the parameters tested of the samples provided/collected for analysis. Statements of conformity have been made without taking Measurement Uncertainty into account except when specifically requested by the customer.

Remarks: Particulate Matter (PM_{10}), Particulate Matter ($\text{PM}_{2.5}$), and Total Suspended Particles (TSP) are found within the limit of the National Air Quality Standard, Ministry of Forests, and Environment, 2012.




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Email: swatlab2017@gmail.com
PO Box: 25752, Kathmandu, Nepal
Sisir Marga 11, Babarmahal, Kathmandu, Nepal

NOISE LEVEL MONITORING REPORT

Name of the Client:	Nepal Electricity Authority	Lab Code:	22/06-659 (i)
Collector:	Srijana Sharma	Location:	Myagdi, Rahughat Substation
Latitude:	28°23'9.6" N	Longitude:	83°34'19" E
Source:	Noise	Sampled By:	Aalekh Bhattarai
Sampling Date:	2022/06/01-2022/06/02, 24 hrs.	Analyzed Date:	2022/06/04-2022/06/08
Receipt Date:	2022/06/03	Completion Date:	2022/06/14
Project Name:	Rahughat Dandakhet Project	Issue Date:	2022/06/15


Parameters	Results (dB)	Nepal Standard for Noise Quality, 2069 (For Industrial Area)	Remarks
Daytime Sound Pressure Level (Ld)	63.12	75	Within the limit
Night Time Sound Pressure Level (Ln)	49.2	70	Within the Limit


The sampling site is used for the construction propose, so the observed results are set for the industrial areas according to Nepal Standard for Noise Quality, 2069.
Nepal Standard for Noise Quality, 2069 (75 dB for day and 70 dB for the night for Industrial areas).
Sound Level Meter (SL-4023SD) was used for noise quality monitoring.

Remarks: The observed Noise Level is within the limit of Nepal Standard for Noise Quality, 2069.

Note: The integrity of the sample and results are dependent on the quality of sampling. The results refer only to the parameters tested of the samples provided/collected for analysis. Statements of conformity have been made without taking Measurement Uncertainty into account except when specifically requested by the customer.




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Sisir Marga 11, Babarmahal, Kathmandu, Nepal

NOISE LEVEL MONITORING REPORT

Name of the Client:	Nepal Electricity Authority	Lab Code:	22/06-659 (h)
Collector:	Srijana Sharma	Location:	Myagdi, Dandakhet
Latitude:	28°27'04.3" N	Longitude:	83°22'57.9" E
Source:	Noise	Sampled By:	Aalekh Bhattarai, Suman Basnet
Sampling Date:	2022/05/31-2022/06/01, 24 hrs.	Analyzed Date:	2022/06/04- 2022/06/08
Receipt Date:	2022/06/03	Completion Date:	2022/06/14
Project Name:	Rahughat Dandakhet Project	Issue Date:	2022/06/15

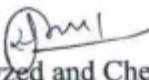
Parameters	Results (dB)	Nepal Standard for Noise Quality, 2069 (For Industrial Area)	Remarks
Daytime Sound Pressure Level (Ld)	59.28	75	Within the limit
Night Time Sound Pressure Level (Ln)	46.2	70	Within the Limit

The sampling site is used for the construction propose, so the observed results are set for the industrial areas according to Nepal Standard for Noise Quality, 2069.
Nepal Standard for Noise Quality, 2069 (75 dB for day and 70 dB for the night for Industrial areas).
Sound Level Meter (SL-4023SD) was used for noise quality monitoring.

Remarks: The observed Noise Level is within the limit of Nepal Standard for Noise Quality, 2069.

Note: The integrity of the sample and results are dependent on the quality of sampling. The results refer only to the parameters tested of the samples provided/collected for analysis. Statements of conformity have been made without taking Measurement Uncertainty into account except when specifically requested by the customer.




Analyzed and Checked By


Authorized By
Lokesh Sapkota



Palpa Cement Industries Ltd.

29.06.2022

TO WHOM SO EVER IT MAY CONCERN

We are manufacturing OPC-43 Grade and PPC cements as per Nepal Standard (NS 572 & NS 385) and testing all parameters as per NS requirements.

We are not adding Asbestos in our cement and confirm that our cements OPC 43 Grade & PPC are free from Asbestos .



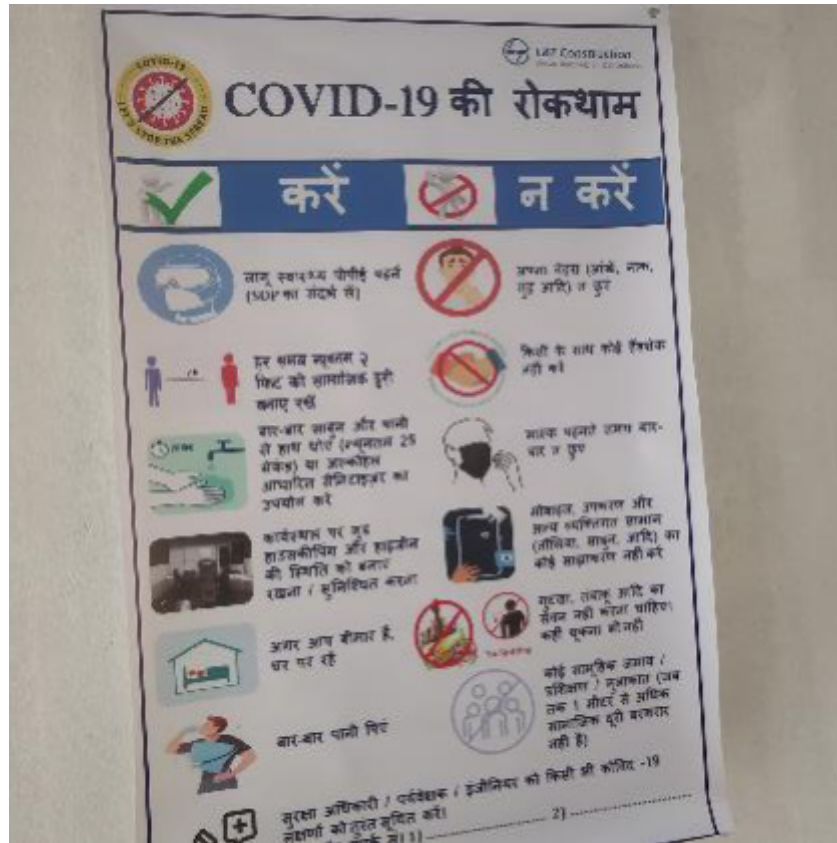
Photographs on the followings:-

- a) Safety signage at site
- b) Barricading excavated area
- c) Use of PPE by the workers
- d) Photographs of labour camps and toilets
- e) Toolbox talks and orientation sessions at site
- f) Waste bins at site

Safety signage at site



Safety signage at site





Safety signage at site

Barricading



Attachment-4



Pep talk at Dadakhet

Attachment-4



Pep talk at Rahughat



Induction training



Use of PPE by
the workers



Attachment-4



Waste bins
at site



First Aid Kit

Labour camps and toilets

Attachment-4



SITE PHOTOGRAPHS



Rahughat substation -Noise and Air quality tested.



Tree Plantation by DCO of Mayagdi District & Project Manager of NEA at Rahughat Substation site Site



Tree Plantation by PSC team leader at Rahughat Substation site Site



Tree Plantation by NEA's Project Manager at Dadakhet Substation site Site



Rahughat substation -Office room of L&T.



Rahughat Site Grading Works



Rahughat Site Grading Works



Rahughat Site Grading Works



Rahughat Site Grading Works



Dadakhhet Substation Site Grading work in Progress



Dadakhet Substation Site Grading work in Progress



Construction of RRM wall at Approach Road of Dadakhet substation



Site Levelling works at Dadakhet substation

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ATTENDANCE SHEET FOR PEP-TALK

Name of the Project: 132 kV TL and Associated SS at Rahughat and Dadakheth

BU/Segment/Cluster: SS/NE/DLCO

Job Code: LE21MA93

Date: 10 June 2022.

Time: 8:30 Am

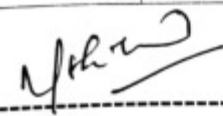
Location: Road Site (Waterfunt)

Topics: Safe Work Practices.

Conducted By: Mohitosh.

Sl. No.	Name	Designation	Signature
1	Di'bas Baniya.	Supervisor	Di'bas
2	Uttam Pun.	Helper	Uttam
3	Raman Chapang.	Maason.	Ram
4	Rabin Chapang	Maason.	Rabin
5	Beifay Chapang.	Maason.	Beifay
6	Seem Lal Chapang.	Helper	Seem
7	Suk Bahadar Chapang.	Maason.	Suk
8	Sontosh Chapang	Maason.	Sontosh
9	Bikas Chapang.	Helper	Bikas
10	Dhruva Chapang.	Helper.	Dhruva
11	R.K. (Harke)	Helper	R.K.
12	Arjun Vardari	Ex Operator.	Arjun
13.	Krishna Parihar	Driver.	Krishna

Signature of Trainer



Job Code: LE21MA93
Time: 8:20 AM

[illegible]

John

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Issue 2-Rev 00

ATTENDANCE SHEET FOR PEP-TALK

Name of the Project: 132 kV TL and Associated SS at Rahughat and Dadakhel
 BU/Segment/Cluster: SS/NE/DLCO
 Job Code: LE21MA93

Date: 14/06/2022

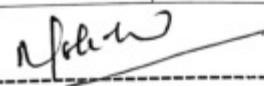
Time: 9:00 AM

Location: Dadakhel - Cement Store

Topics: Used of P.P.E.

Conducted By:

MOHITOSH

Sl. No.	Name	Designation	Signature
①	Anand Raka Magar -	Masson -	Ans
②	Sankalpa Raka Magar -	Masson -	Shuk
③	Ramkrant Gharti Magar -	Helper	Shuk
④	Rahul -	Helper	Rah
⑤	Abhi Sri	Helper	Shuk
⑥	Santosh Chapang.	Masson -	Shuk
⑦	Suk Bahadar Chapang.	Helper	Suk Bah
⑧	Harku Chapang.	Helper	Suk
⑨	Senslat Chapang.	Helper	Rah/RU
⑩	Bikash. Chapang.	Helper	Somesh
⑪	Bejany Chapang.	Masson	Bikash
⑫	Rabin Chapang.	Masson	Bejany
⑬	Dharba Chapang.	Helper	Rah/RU
⑭	Uttam	Ex Helper	3rd/17
⑮	Rahul	Relator	Rah
⑯	Dibas - Barri	Supervisor -	
⑰			
Signature of Trainer			

Apokefish.

Signature of Trainer

Conducted By:

Sensitivity: LNT Construction Internal Use

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ATTENDANCE SHEET FOR PEP-TALK

Name of the Project: 132 kV TL and Associated SS at Rahughat and Dadakhel
BU/Segment/Cluster: SS/NE/DLCO

Date: 13/8/2022

Job Code: LE21MA93

Location: Dadakhel

Time: 8:30 AM

Topics: Excavation Work Safety, E.O.P.

Conducted By: Yohi Jish -

Sl. No.	Name	Designation	Signature
①	Dibas Baniya.	Supervisor.	D
②	Uttam Pan.	Ex Asstt.	Uttam
③	Arjun Vandas	Ex Operator	Ar
④	Ramkrishna Chapang.	Mason	RKM
⑤	Herke -	Helper	H.K
⑥	Sonfosh Chapang -	Mason	S
⑦	Raman Chapang.	Mason	Rom
⑧	Bijaya Chapang.	Mason	Bijay
⑨	Nikash -	Helper	Nikash
⑩	Somdal Chapang.	Helper	Somdal.
⑪	Suk Bahadur -	Helper	SAK
⑫	Shyam Chapang -	Helper	SHAM
⑬	Dharba Chapang -	Helper	D
⑭	Pramat -	Helper	Pramat
⑮	Bisul -	Mason	Bisul.
⑯	Anande -	Mason	Anand
⑰	Rahul -	Helper	Rahul
⑱	Latit -	Driver	Latit
⑲	Krishna -	Driver	KRISHNA
Signature of Trainer			Yohi Jish

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ATTENDANCE SHEET FOR PEP-TALK

Name of the Project: 132 kV TL and Associated SS at Rahughat and Dadakhel

BU/Segment/Cluster: SS/NE/DLCO

Job Code: LE21MA93

Date: 18/06/2022

Time: 8:30 AM

Location: Dadakhel

Topics: used to P.P.E & Housekeeping.

Conducted By: Mohan

Sl. No.	Name	Designation	Signature
①	Dibas Baniya.	Supervisor	D
②	Uttam Pun-	EA Asst.	Uttam
③	Arjun Vandan-	EA Operator	A
④	Ram Krishna Chapang.	Mason	RKM
⑤	Hirke.	Helper	H.K
⑥	Soonthsh. Chapang.	Mason	S
⑦	Rabin Chapang.	Mason	Rabin
⑧	Raman Chapang.	Mason	R
⑨	Bijaya Chapang.	Mason	B
⑩	Nikash	Helper	D.
⑪	Sooraj Chapang.	Helper	Sooraj
⑫	Suk Bahadur - Chapang	Helper	Suk Bahadur
⑬	Shyam	Helper	S
⑭	Pranav	Helper	Pranav
⑮	Rishabh	Mason	R.
⑯	Anand	Mason	A

Signature of Trainer

Mohan

L&T CONSTRUCTION
POWER TRANSMISSION & DISTRIBUTION IC

Issue 2-Rev 00

ev 00

ATTENDANCE SHEET FOR PEP-TALK

Name of the Project: 132 kV TL and Associated SS at Rahughat and Dadakheta

BU/Segment/Cluster: SS/NE/DLCO

Job Code: LE21MA93

Date: 19/06/2022

Time: 8:30 AM

Location: Dadakheta

Topics: Housekeeping

Conducted By: Mohan

Sl. No.	Name	Designation	Signature
①	Dibas Baniya	Supervisor.	D
②	Ram Krishna Chapang.	Marion -	RKM
③	Santosh Chapang.	"	S
④	Vijay Chapang.	"	Vijay
⑤	Rabin Chapang.	"	R
⑥	Roman Chapang.	"	ROM
⑦	Vikash -	Helper	Vikash
⑧	Bem Lal Chapang.	"	S
⑨	Suk Bahadur Chapang.	"	SUK
⑩	Shyam Bahadur -	"	S
⑪	Harke.	"	H
⑫	Pranav -	Marion -	P
⑬	Danad -	"	A
⑭	Bisal -	"	B
⑮	Asgun -	Ex operator	Asgun
⑯			
<p align="right">Mohan</p> <p>Signature of Trainer</p>			

ATTENDANCE SHEET FOR PEP-TALK

Name of the Project: 132 kV TL and Associated SS at Rahughat and Dadakhel

BU/Segment/Cluster: SS/NE/DLCO

Job Code: LE21MA93

Date: 20/6/22

Time: 8:30 am

Location: Dadakhel -

Topics: S.O.P.

Conducted By: N. B. Joshi.

Sl. No.	Name	Designation	Signature
①	Dibas Baniya.	Supervisor	D
②	Ram Krishna Chapang.	Mason	RKM
③	Santosh Chapang.	Mason	S
④	Vijay Chapang.	Mason	Bijay
⑤	Rabin Chapang.	Mason	R
⑥	Roman Chapang.	Mason	ROMAN
⑦	Vikash -	Helper	B
⑧	Gomlat Chapang.	"	S
⑨	Suk Bahadur Chapang.	"	SUK
⑩	Shyam Bahadur Chapang.	"	S.
⑪	Harke.	"	H.K.
⑫	Damodar -	Mason	P
⑬	Danad -	"	A
⑭	Bisal.	"	B
⑮	Arijan	Ex Operator	A
⑯	Uttam -	Ex Operator	Uttam
⑰	Falit	Driver	U.
⑱	Krishna -	"	"
Signature of Trainer		N. B. Joshi	

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POWER TRANSMISSION & DISTRIBUTION IC

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ATTENDANCE SHEET FOR PEP-TALK

Name of the Project: 132 kV TL and Associated SS at Rahughat and Dadakhel

BU/Segment/Cluster: SS/NE/DLCO

Job Code: LE21MA93

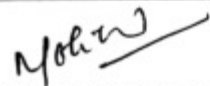
Date: 21/06/2022

Time: 8:30 AM

Location: - Masanang Hall

Topics: - Safe Work pass

Conducted By: - Mohitosh -

Sl. No.	Name	Designation	Signature
①	Somesh - Chapang -	Masson -	Somesh
②	Vijay Chapang -	Masson -	Bijay
③	Ram Krishna - Chapang -	Foreman -	RKM
④	Bikash -	Helper	Bikash
⑤	Harkhe -	Helper	HARK
⑥	Uttam -	Ex Helper	Uttam
⑦	Som Lal - Chapang -	Helper	Som
⑧	Argun	Ex Operator	ARJUN
⑨	Krishna -	Driver	Krishna
⑩	Suk Bahadur -	Helper	SUK
⑪	Robin Chapang -	Masson -	R96B
Signature of Trainer			 -----

Attachment-4
L&T CONSTRUCTION
POWER TRANSMISSION & DISTRIBUTION IC

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ATTENDANCE SHEET FOR PEP-TALK

Name of the Project: 132 kV TL and Associated SS at Rahughat and Dadakhel

BU/Segment/Cluster: SS/NE/DLCO

Job Code: LE21MA93

Date: 22/6/2022

Time: 8:30 AM

Location: Dadakhel

Topics: PPE

Conducted By: Nphitrikh.

Sl. No.	Name	Designation	Signature
①	Ram Krishna Chapang.	Masson -	RKM
②	Dontosh Chapang.	Masson.	Songun
③	Rabin Chapang.	Masson -	Rabin
④	Roman Chapang.	Masson -	Roman
⑤	Bigay Bahadur Chapang.	Masson -	Bir
⑥	Harka.	Helper	HARK
⑦	Bikash -	Helper	Bikash
⑧	Shyam Bahadur - Chapang	Helper	Sym
⑨	Suk Bahadur Chapang.	Helper	Suk
⑩	Som Lal Chapang.	Helper	SOM
⑪	Bisal.	Masson -	Bisal
⑫	Rahul -	Masson -	Rahul
⑬	Deenad -	Masson	Aanad
⑭	Argun.	Ex Oper	Argun
⑮	Krishna -	Driver -	Krish.
⑯	Uttam	Helper.	Uttam

Signature of Trainer

Nphitrikh

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POWER TRANSMISSION & DISTRIBUTION IC

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ATTENDANCE SHEET FOR PEP-TALK

Name of the Project: 132 kV TL and Associated SS at Rahughat and Dadakheth

BU/Segment/Cluster: SS/NE/DLCO

Job Code: LE21MA93

Date: 23/06/2022.

Time: 8:30 PM

Location: Dadakheth

Topics: GOW

Conducted By: Nohi Faly.

Sl. No.	Name	Designation	Signature
①	Ram Krishna - Chapang.	Foreman -	RKM
②	Bigay chapang.	Manon -	Bitya
③	Roman - chapang.		Ran
④	Raman chapang.		26.1
⑤	Shontosh chapang -		20.14
⑥	Suk Bahadur - chapang -		20.14
⑦	Som Lal chapang.		21.11
⑧	Bikash chapang -		Bikash
⑨	Harke chapang -		2.11.11
⑩	Chyom Bahadur chapang		A
⑪	Anand -		21.5.1
⑫	Bisal -		D
⑬	Rahul.		
⑭	Uttam -	E Helper Ant	Utt
⑮	Krishna -	Ex Assistant Ant	2.5.1
⑯	Arjun -	Ex Operator	Arjun
Signature of Trainer			

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ATTENDANCE SHEET FOR PEP-TALK

Name of the Project: 132 kV TL and Associated SS at Rahughat and Dadakheth

BU/Segment/Cluster: SS/NE/DLCO

Job Code: LE21MA93

Date: 24/6/22-

Time: 8 30 AM

Location: Retaining Wall.

Topics: House keeping.

Conducted By: N. K. Jish.

Sl. No.	Name	Designation	Signature
①	Ram Krishna Chapang.	Masson.	RKM
②	Bejay Chapang.	masson.	B.
③	Roman Chapang.	Masson.	ROMAN
④	Robin Chapang.	masson.	R
⑤	Strontosh Chapang.	Masson.	S
⑥	Bekash Chapang.	Helper	Bikash
⑦	Horke Chapang.	Helper	H.K
⑧	Suk Bhadrin Chapang.	Helper	SUK
⑨	Som Lal Chapang.	Helper.	SOM
⑩	Bhyan Babadur Chapang.	Helper.	S.
⑪	Arjun.	Ex Operator.	ARJ
⑫	Krishna.	Driver.	KRISHNA
⑬			
⑭			
Signature of Trainer			N. K. Jish.

Name of the Project: 132 kv Datan & R BU/Segment/Cluster: SS/NE/DLCO
Job Code: SS/NE/DLCO Time: 9:30 am
Date: 02/06/22
Location:
Topics: (1) BOP of civil structural work
(2) Use of PPE. (3) Six direction Heavy

[illegible]

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ATTENDANCE SHEET FOR PEP-TALK

Name of the Project: 132 kV TL and Associated SS at Rahughat and Dadakhel
 BU/Segment/Cluster: SS/NE/DLCO
 Date: 28/05/22
 Location: Rahughat Site
 Topics: SOP of Civil Construction Work
 Conducted By: SA
 Job Code: LE21MA93
 Time: 9:30 AM

Sl. No.	Name	Designation	Signature
①	दीनेश राम	Helper	दीनेश
②	अजय चौरसिया	Barbender	अजय
③	परदीप राम	Helper	परदीप
④	हिविन्दर पटेल	Helper	हिविन्दर
⑤	प्रदीप मध्य	Helper/cook	प्रदीप
⑥	रामपाल (CRLS Staff)	Survey Helper	रामपाल
⑦	Tej Raw	fitter	Tej
⑧	Dipak	fitter	Dipak
⑨	Balbir chaitra	Helper	Balbir
<p>Signature of Trainer _____</p>			

Topics: Cardinal safety PRE ~~an~~ file, SOP of Civil struc
ucted By: SA 1002

SA -

~~2018-2019~~
~~2019-2020~~

ATTENDANCE SHEET FOR PEP-TALK

Name of the Project: 132 kV TL and Associated SS at Rahughat and Dadakhel

BU/Segment/Cluster:SS/NE/DLCO

Job Code: LE21MA93

Date: 7/6/21

Time: 9:30 AM

Location: Kahuglat, etc

Topics: SOP of Civil Construction Work, Use PPE, Electrom-

Conducted By: D. SA

[illegible]

Job Code: LE21MA93

Time: 9:00 AM

Date: 1/28/21
Location: Rahuyhat, Site

Topics:

Conducted By: Dr S O

Page 2 of 2

Conducted By:

Signature of Trainer

Conducted By: SA

Signature of Trainer

Conducted By: SA

Page 2 of 2

Topic Cardinal Safety Rule.

SA

~~Don~~
C. S. Davis

• use of PPE
thermal buffer

20180930
Gdp 1058

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Issue 2-Rev 0

ATTENDANCE SHEET FOR PEP-TALK

Name of the Project: 132 kV TL and Associated SS at Rahughat and Dadakhet

BU/Segment/Cluster:SS/NE/DLCO

Job Code: LE21MA93

Date: 13/06/2022


Time: 9:30 AM

Location: Rahughat Site

Topics: SOP of Civil Construction Work

Conducted By: SA

Sl. No.	Name	Designation	Signature
1	Ravindra Singh	Helper Survey	Ravindra
2	Rampal Rathour	Helper Survey	Rampal
3	Radhe shyam das	mosson	Radhe
4	Jailal paswant	mosson	Jailal
5	Dasdeep paswant	mosson	Dasdeep
6	Subhodh paswant	mosson	Subhodh
7	Suzit kumar	helper	Suzit
8	Bahlu Kumar.	helper	Bahlu
9	Rupesh Thapa	Engineer	Rupesh
10	Balbir Khatri	misaki	Balbir
11.	Tej Rai	" fitter	Tej
12.	Deepak Thapa	" fitter	Deepak
Signature of Trainer			

Conducted By: 

Signature of Trainer

Conducted By: SA

Signature of Trainer

Name of the Project: 132 kV TL and Associated SS at Rahughat and Dadakheth
 BU/Segment/Cluster: SS/NE/DLCO
 Date: 16/06/21
 Location: Rahughat
 Topics: SOP of civil structural work
 Conducted By: S.A. Mahesh

Page 2 of 2

Conducted By:

Signature of Trainer

Name of the Project: 132 kV TL and Associated SS at Rahughat and Dadlakhet
BU/Segment/Cluster: SS/NE/DLCC
Date: 18/06/22
Location: Rahughat
Topics: Use of PPEs, civil construction work
Conducted By: SA
Job Code: LE21MA93
Time: 9:00 am

Page 2 of 2

ATTENDANCE SHEET FOR PEP-TALK

Name of the Project: 132 kV TL and Associated SS at Rahughat and Dadakhel

BU/Segment/Cluster:SS/NE/DLCO

Job Code: LE21MA93

Date: 24/05/21

Time: 9:50 AM

Location: Rahurhat

Topics: SOP of civil construction work

Conducted By: Cadinn Safety Mrp
SA

Sl. No.	Name	Designation	Signature
(i)	Bhagiman Bhriti mager	Mason	
(ii)	Anand	mason	
(iii)	Alkainary	Helper	
(iv)	Rahul	Helper	
(v)	Vishal	Helper	
(vi)	Pranav Kumar	Helper	
(vii)	Prabesh	Mason	
(viii)	Balbix Khatri	Helper	
Signature of Trainer			

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POWER TRANSMISSION & DISTRIBUTION IC**

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ATTENDANCE SHEET FOR PEP-TALK

Name of the Project: 132 kV TL and Associated SS at Rahughat and Dadakhel

BU/Segment/Cluster: SS/NE/DLCO

Job Code: LE21MA93


Date: 28/06/21

Time: 9:30 AM

Location:

Topics: Rahughat Site

Conducted By: Sop of civil Construction work.

Sl. No.	Name	Designation	Signature
1	Parbesh Roka nagar	Mason	Parbesh
2	Anand Roka nagar	Mason	Anand
3	Rahul Bhatta nagar	Helper	Rahul
4	Karaj DUA nagar	Mason	Karaj
5	RAM 11 11	Helper	RAM
6			
7	Bhagimani	Mason	Bhagimani
8	Bishal	Helper	Bishal
9	Abiraj	Helper	Abiraj
10	pramod	Helper	pramod
11	Saksham	Mason	Saksham
12	Ganesh nagar	Helper	Ganesh
13	BALBIR KHA TB I	Helper	BALBIR
14	Maresh Desai	Engineer Civil	Maresh
Signature of Trainer			 (S. Adhikari)

Conducted By: S A

Signature of Trainer

BU/Segment/Cluster:

9:00 Am

Time: 9/20/2022

29/06/2022

Safety Related topics / PEP talk

Conducted By: E.R.

Page 2 of 2

Job Code: LE21MA93

Time: ၁:၅၀ မှာ

Location:

Topics:

Conducted By: S. A.

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Attachment-5 : Site Photograph of 132/33 kV AIS at Keraun



Boundary Wall of Project Site



Project Site



Approach Road of Project Site

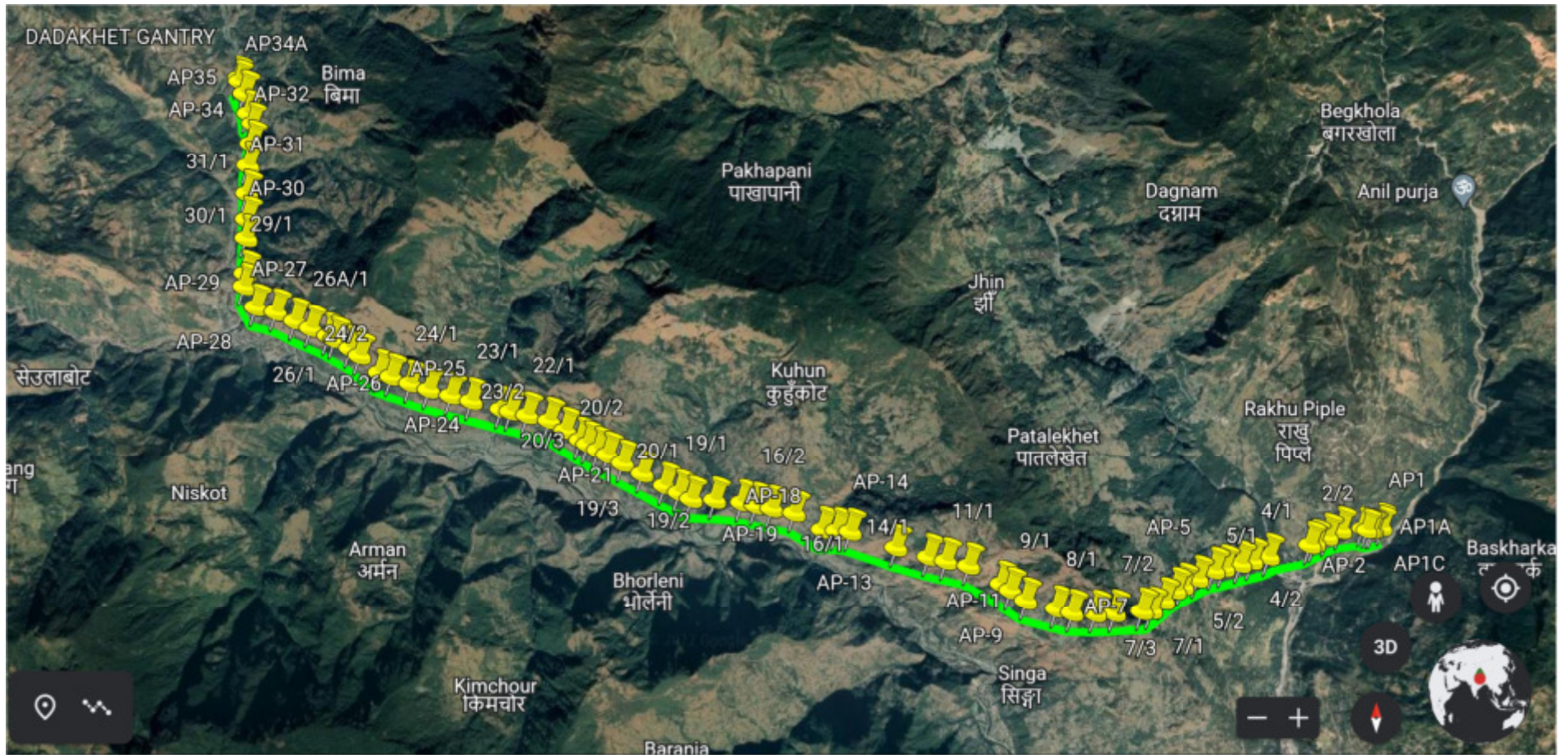
**Attachment-6 : Distribution System Control and Data Centre Project
Kathmandu**





Constitution work in progress

Attachment #7 Final Route for Dadakhet-Rahughat TL



ATTACHMENT #8 – Details of Landowners for 7 Substations of EGMP

Land acquisition and individual list of seven substations

1. Dadakhet 132 kV Substation Myagdi district

HHs	Name of Land Owner	Land Address		Total Area old Kitta		Sq.m	Acquire Area			AS per CDC	
		VDC	Ward	Old. Kitta	Total. Ropani		ROPANI	sqm	HA	Rate/Ropani	Compensation
1	Ramesh Bdr. Jugjali	Darbang	9 Kha	68	0.86	439.19	0.86	439.19	0.04	425000	366894.53
	Ramesh Bdr. Jugjali	Darbang	9 Kha	93	2.30	1170.50	2.30	1170.50	0.12	425000	977832.03
	Ramesh Bdr. Jugjali	Darbang	9 Kha	329	2.33	1186.40	2.33	1186.40	0.12	425000	991113.28
2	Sam Bdr Jugjali	Darbang	9 Kha	86	2.20	1120.82	2.20	1120.82	0.11	425000	936328.13
3	Sam Bdr Jugjali	Darbang	9 Kha	79	0.64	325.91	0.64	325.91	0.03	425000	272265.63
4		Darbang	9 Kha	84	0.61	308.03	0.61	308.03	0.03	425000	257324.22
5	Buddhi Bdr. Jugjali	Darbang	9 Kha	78	0.46	234.50	0.46	234.50	0.02	425000	195898.44
6	Bajra Pun	Darbang	9 Kha	65	2.59	1319.54	2.59	1319.54	0.13	425000	1102343.75
7	Bal Bdr. Jugjali	Darbang	9 Kha	69	1.45	735.29	1.45	735.29	0.07	425000	614257.81
	Bal Bdr. Jugjali	Darbang	9 Kha	71	2.16	1100.95	2.16	1100.95	0.11	425000	919726.56
8	dal Bdr Sherpunja	Darbang	9 Kha	58	1.62	824.72	1.62	824.72	0.08	425000	688964.84
	dal Bdr Sherpunja	Darbang	9 Kha	59	1.11	562.40	1.11	562.40	0.06	425000	469824.22
	dal Bdr Sherpunja	Darbang	9 Kha	82	0.58	294.12	0.58	294.12	0.03	425000	245703.13
9	Mansango Garbuja	Darbang	9 Kha	89	5.31	2700.69	5.31	2700.69	0.27	425000	2256152.34
10		Darbang	9 Kha	83	0.52	266.29	0.52	266.29	0.03	425000	222460.94
11		Darbang	9 Kha	88	0.62	315.98	0.62	315.98	0.03	425000	263964.84
12	Narshing Bdr Sherpunja	Darbang	9 Kha	66	2.02	1029.40	2.02	1029.40	0.10	425000	859960.94
13	Narshing Bdr Sherpunja	Darbang	9 Kha	73	0.41	210.65	0.41	210.65	0.02	425000	175976.56
14	Nandamati Jugjali	Darbang	9 Kha	60	1.94	985.68	1.94	985.68	0.10	425000	823437.50
	Nandamati Jugjali	Darbang	9 Kha	90	0.52	264.31	0.52	264.31	0.03	425000	220800.78
	Nandamati Jugjali	Darbang	9 Kha	92	0.74	375.59	0.74	375.59	0.04	425000	313769.53

ATTACHMENT #8 – Details of Landowners for 7 Substations of EGMP

HHS	Name of Land Owner	Land Address		Total Area old Kitta		Sq.m	Acquire Area			AS per CDC	
		VDC	Ward	Old. Kitta	Total. Ropani		ROPANI	sqm	HA	Rate/Ropani	Compensation
	Nandamati Jugjali	Darbang	9 Kha	94	0.74	375.59	0.74	375.59	0.04	425000	313769.53
15	Purna Bdr. Sherpunja	Darbang	9 Kha	67	0.52	266.29	0.52	266.29	0.03	425000	222460.94
	Purna Bdr. Sherpunja	Darbang	9 Kha	70	1.02	520.66	1.02	520.66	0.05	425000	434960.94
	Purna Bdr. Sherpunja	Darbang	9 Kha	72	0.71	359.70	0.71	359.70	0.04	425000	300488.28
16	Purna Bdr. Jugjali	Darbang	9 Kha	80	0.86	435.21	0.86	435.21	0.04	425000	363574.22
17	Fas Bdr. Jugjali	Darbang	9 Kha	76	0.62	315.98	0.62	315.98	0.03	425000	263964.84
	Fas Bdr. Jugjali	Darbang	9 Kha	95	2.04	1035.37	2.04	1035.37	0.10	425000	864941.41
18	Tika Bdr Jugjali	Darbang	9 Kha	74	1.52	775.03	1.52	775.03	0.08	425000	647460.94
19	Tika Ram Sherpunja	Darbang	9 Kha	75	1.04	530.60	1.04	530.60	0.05	425000	443261.72
	Tika Ram Sherpunja	Darbang	9 Kha	64	0.97	494.83	0.97	494.83	0.05	425000	413378.91
	Tika Ram Sherpunja	Darbang	9 Kha	81	0.31	158.98	0.31	158.98	0.02	425000	132812.50
20	Krishna Bdr. Jugjali	Darbang	9 Kha	77	2.83	1440.77	2.83	1440.77	0.14	425000	1203613.28
	Krishna Bdr. Jugjali	Darbang	9 Kha	85	0.29	149.04	0.29	149.04	0.01	425000	124511.72
21	Kali Bir Jugjali	Darbang	9 Kha	87	0.40	204.69	0.40	204.69	0.02	425000	170996.09
22		Darbang	9 Kha	91	1.75	890.30	1.75	890.30	0.09	425000	743750.00
23	Kali Bir Jugjali	Darbang	9 Kha	61	2.17	1102.93	2.17	1102.93	0.11	425000	921386.72
24	Khadke Jugjali	Darbang	9 Kha	330	2.34	1188.38	2.34	1188.38	0.12	425000	992773.44
					51.14	26015.29	51.14	26015.29	2.60		10781054.69

ATTACHMENT #8 – Details of Landowners for 7 Substations of EGMP

2. Rahughat Substation Myagdi District

Dandakhet - Rahughat 132/33kV TL Project Myagdi District (Substation Land acquire progress)											
HHs. Nos	Name of Land Owner	Address		Total Area old Kitta		Acquire Area				AS per CDC	
		VDC	Ward	Old. Kitta	Total. Ropani	New Kitta.	ROPANI	sqm	HA	Rate/Ropani	Compensation
1	Laxmi Shahi	Rakhupiple	1 ka	81	23.00	156,157	6.87	3493.61	0.35	500000	3433593.75
2	Pritam Shahi	Rakhupiple	1 ka	80	22.63	154	22.36	11373.12	1.14	500000	11177734.38
3	Sarada Kumari Malla	Rakhupiple	1 ka	62	2.92	62	2.92	1486.47	0.15	400000	1168750
4	Bhim Kumari Shahi	Rakhupiple	1 ka	74	7.96	74	7.96	4052.03	0.41	400000	3185937.5
5	Man Kumari Malla	Rakhupiple	1 ka	79	8.29	152	7.38	3755.93	0.38	500000	3691406.25
6	Lok Bdr. Shahi	Rakhupiple	1 ka	53	4.50	53	4.50	2289.33	0.23	400000	1800000
7	Purna Bdr. Shahi	Rakhupiple	1 ka	54	0.23	54	0.23	119.24	0.01	400000	93750
	Purna Bdr. Shahi	Rakhupiple	1 ka	63	3.48	63	3.48	1768.67	0.18	400000	1390625
8	Tek Bdr.	Rakhupiple	1 ka	58	2.80	58	2.80	1424.87	0.14	400000	1120312.5
	Tek Bdr.	Rakhupiple	1 ka	61	1.06	61	1.06	540.54	0.05	400000	425000
9	Purna Bdr. Kshetri	Rakhupiple	1 ka	64	4.64	64	4.64	2360.87	0.24	400000	1856250
10	Til Kumari Malla	Rakhupiple	1 ka	60	2.02	60	2.02	1025.43	0.10	400000	806250
11	Gothe Dargi	Rakhupiple	1 ka	59	3.52	59	3.52	1788.54	0.18	400000	1406250
12	Bhaba Datta Sharma	Rakhupiple	1 ka	52	5.05	52	5.05	2569.53	0.26	400000	2020312.5
13	Til Kumari Karki	Rakhupiple	1 ka	51	5.10	51	5.10	2595.37	0.26	400000	2040625
Total					97.20		79.89	40643.56	4.06		35616796.88

ATTACHMENT #8 – Details of Landowners for 7 Substations of EGMP

3. 132/33kV Madichaur Substation Project Sindhupalchok District

HHs. Nos.	Name of Land Owner			Address		Total Area old Kitta			Acquire Area				AS per CDC	
				VDC	Ward	old Kitta	Sqm	Ropani	New Kitta	ROPANI	sqm	HA	Rate/SQm	Compensation
1	Thagendra	Man Bdr.	Bamba Bdr	Khunri	3	512	6735	13.30	512	13.30	6735	0.6735	1375	9260625
2	Madan Khatri	Nam Bdr	Tulasi Ram	Khunri	3	513	2255	4.59	513	4.59	2255	0.2255	1325	2987875
	Madan Khatri	Nam Bdr	Tulasi Ram	Khunri	3	817	1200	2.60	817	2.60	1200	0.12	1325	1590000
3	Basudev Subedi	Chet Prd	Dili Raj	Khunri	3	514	1425	2.86	514	2.86	1425	0.1425	1325	1888125
4	Basanta Raj Subedi	Tej Raj	Chet Prd	Khunri	3	517	2010	4.15	517	4.15	2010	0.201	1325	2663250
5	Prem Bdr. Mahara	Kumbhe	Tike	Khunri	3	518	4655	9.29	927	5.26	2619	0.2619	1325	3470175
6	Basanta Sing	Krishna Bdr.	Mirgendra Bdr.	Khunri	3	522	6980	13.74	929	6.22	3052	0.3052	1325	4043900
7	Gita Sing	Direndra	Tekendra	Khunri	3	788	513	1.17	788	1.17	513	0.0513	1325	679725
8	Amar Raj Adhikari	Tej Prd	Gajadhar	Khunri	3	789	514	1.17	789	1.17	514	0.0514	1325	681050
9	Gobinda Adhikari	Tej Prd.	Gajadhar	Khunri	3	790	514	1.17	790	1.17	514	0.0514	1325	681050
10	Shanta Raj Adhikari	Tej Prd.	Gajadhar	Khunri	3	791	514	1.17	791	1.17	514	0.0514	1325	681050
11	Tuk Man Khatri	Nar Bdr.	Tulasi Ram	Khunri	3	816	2655	5.22	816	5.22	2655	0.2655	1325	3517875
Total							29970	60.43		48.88	24006	2.4006		32144700

ATTACHMENT #8 – Details of Landowners for 7 Substations of EGMP

4. Borang Substitution Dhading District

Nos. HHs	Name of old Land Owner	Address		Total Area old Kitta		Acquire Area				AS per CDC	
		VDC	Ward	Old Kitta	Ropani	New Kitta	Ropani	sqm	HA	Rate/Ropani	Compensation
1	Aita Lama Tamang	Sertung	1 Ga	1203	0.11	1203	0.11	55.64	0.01	500,000.00	54,687.50
	Aita Lama Tamang	Sertung	1 Ga	1205	0.63	1205	0.63	317.96	0.03	500,000.00	312,500.00
2	Budhurona Tamang	Sertung	1 Ga	263	0.61	1296	0.30	151.03	0.02	500,000.00	148,437.50
3	Chari Tamangni	Sertung	1 Ga	272	0.84	272	0.84	429.25	0.04	500,000.00	421,875.00
4	chhegu lama Tamang	Sertung	1 Ga	255	3.02	1294	2.31	1176.46	0.12	500,000.00	1,156,250.00
	chhegu lama Tamang	Sertung	1 Ga	152	3.44	1292	2.30	1168.51	0.12	500,000.00	1,148,437.50
5	Chhidup Tamang	Sertung	1 Ga	157	889.07	157	1.68	854.47	0.09	500,000.00	839,843.75
	Chhidup Tamang	Sertung	1 Ga	180	0.69	180	0.69	349.76	0.03	500,000.00	343,750.00
	Chhidup Tamang	Sertung	1 Ga	163	0.39	163	0.39	198.73	0.02	500,000.00	195,312.50
6	Chittaman Tamang	Sertung	1 Ga	972	0.44	972	0.44	222.57	0.02	500,000.00	218,750.00
	Chittaman Tamang	Sertung	1Ga	984	0.36	984	0.36	182.83	0.02	500,000.00	179,687.50
	Chittaman Tamang	Sertung	1 Ga	986	0.00	986	0.00	158.95	0.02	500,000.00	156,250.00
	chunuman Tamang	Sertung	1 Ga	1206	0.64	1315	0.13	63.59	0.01	500,000.00	62,500.00
7	Chunumaya Tamang	Sertung	1 Ga	1201	0.17	1201	0.17	87.44	0.01	500,000.00	85,937.50
8	Dal Bdr. Tamang	Sertung	1 Ga	966	0.02	1273	0.02	7.95	0.00	500,000.00	7,812.50
	Dal Bdr. Tamang	Sertung	1 Ga	966	1280.85	1274	0.47	238.47	0.02	500,000.00	234,375.00
9	Damairong Tamang	Sertung	1 Ga	987	0.30	987	0.30	151.03	0.02	500,000.00	148,437.50
10	Damasya Tamang	Sertung	1 Ga	160	2.14	160	2.14	1089.02	0.11	500,000.00	1,070,312.50
11	Dhanamaya Tamang	Sertung	1 Ga	1130	2.27	1300	2.05	1041.33	0.10	500,000.00	1,023,437.50
	Dhanamaya Tamang	Sertung	1 Ga	1127	0.64	1127	0.64	325.91	0.03	500,000.00	320,312.50
12	Dhansing Tamang	Sertung	1 Ga	166	2.14	166	2.14	1089.02	0.11	500,000.00	1,070,312.50
	Dhansing Tamang	Sertung	1 Ga	168	3.17	168	3.17	1613.66	0.16	500,000.00	1,585,937.50
13	Dukunchhen Tamang	Sertung	1 Ga	147	281.09	1280	0.36	182.83	0.02	500,000.00	179,687.50

ATTACHMENT #8 – Details of Landowners for 7 Substations of EGMP

Nos. HHs	Name of old Land Owner	Address		Total Area old Kitta		Acquire Area				AS per CDC	
		VDC	Ward	Old Kitta	Ropani	New Kitta	Ropani	sqm	HA	Rate/Ropani	Compensation
14	Gelbo Tamang	Sertung	1 Ga	283	567.52	1267	0.97	492.84	0.05	500,000.00	484,375.00
	Gembo Tamang	Sertung	1 Ga	151	0.23	151	0.23	119.24	0.01	500,000.00	117,187.50
	Gembo Tamang	Sertung	1 Ga	259	0.53	259	0.53	270.27	0.03	500,000.00	265,625.00
	Gyalbo Tamang	Sertung	1 Ga	1093	0.88	1093	0.88	445.15	0.04	500,000.00	437,500.00
15	Hari Bdr. Tamang	Sertung	1 Ga	1128	0.69	1298	0.09	47.69	0.00	500,000.00	46,875.00
	Hari Bdr. Tamang	Sertung	1 Ga	1129	2.27	1129	2.27	1152.61	0.12	500,000.00	1,132,812.50
16	Jaya Lama Tamang	Sertung	1 Ga	973	0.44	973	0.44	222.57	0.02	500,000.00	218,750.00
	Jaya Lama Tamang	Sertung	1 Ga	983	0.50	983	0.50	254.37	0.03	500,000.00	250,000.00
17	KamiringTa.	Sertung	1 Ga	262	0.22	1284	0.20	103.34	0.01	500,000.00	101,562.50
18	Kamirong Tamang	Sertung	1 Ga	164	0.31	164	0.31	158.98	0.02	500,000.00	156,250.00
19	KanchhiMaya Tamang	Sertung	1 Ga	159	0.80	159	0.80	405.40	0.04	500,000.00	398,437.50
20	Karpo Tamang	Sertung	1 Ga	182/1256	0.00	1261	6.22	3163.73	0.32	500,000.00	3,109,375.00
21	Khari Tamang	Sertung	1 Ga	271	0.23	271	0.23	119.24	0.01	500,000.00	117,187.50
22	Khojom Tamang	Sertung	1 Ga	141	0.23	1276	0.23	119.24	0.01	500,000.00	117,187.50
23	Langjong Tamang	Sertung	1 Ga	149	0.45	149	0.45	230.52	0.02	500,000.00	226,562.50
24	ManBdr.Tamang	Sertung	1 Ga	256	0.77	256	0.77	389.50	0.04	500,000.00	382,812.50
25	Min Bdr. Tamang	Sertung	1 Ga	173	1.53	173	1.53	779.01	0.08	500,000.00	765,625.00
26	Mira Tamang	Sertung	1 Ga	1064	0.23	1064	0.23	119.24	0.01	500,000.00	117,187.50
27	Mlang Tamang	Sertung	1 Ga	1202	0.17	1202	0.17	87.44	0.01	500,000.00	85,937.50
	Mlang Tamang	Sertung	1 Ga	1204	0.64	1204	0.64	325.91	0.03	500,000.00	320,312.50
23	Monalama Tamang	Sertung	1 Ga	148	10.17	1302	10.03	5103.30	0.51	500,000.00	5,015,625.00
24	Mopon Tamang	Sertung	1 Ga	158	1.98	158	1.98	1009.53	0.10	500,000.00	992,187.50
25	NewRong Tamang	Sertung	1 Ga	277	167.45	1288	0.22	111.29	0.01	500,000.00	109,375.00
26	Norajit Tamang	Sertung	1 Ga	153	2.42	1263	2.42	1232.10	0.12	500,000.00	1,210,937.50
	Norajit Tamang	Sertung	1 Ga	254	848.41	1265	1.63	826.70	0.08	500,000.00	812,500.00

ATTACHMENT #8 – Details of Landowners for 7 Substations of EGMP

Nos. HHs	Name of old Land Owner	Address		Total Area old Kitta		Acquire Area				AS per CDC	
		VDC	Ward	Old Kitta	Ropani	New Kitta	Ropani	sqm	HA	Rate/Ropani	Compensation
27	Nurong Tamang	Sertung	1 Ga	273	2.36	273	2.36	1200.31	0.12	500,000.00	1,179,687.50
28	Parka Tamang	Sertung	1 Ga	169	555.78	1269	0.75	381.56	0.04	500,000.00	375,000.00
29	Pasang Chhiring Tamang	Sertung	1 Ga	266	1954.66	1271	0.42	214.62	0.02	500,000.00	210,937.50
30	Penwa Tamang	Sertung	1 Ga	261	0.53	261	0.53	270.27	0.03	500,000.00	265,625.00
31	Phaichhiring Tamang	Sertung	1 Ga	179	0.61	179	0.61	310.01	0.03	500,000.00	304,687.50
	Phaichhiring Tamang	Sertung	1 Ga	175	0.77	175	0.77	389.50	0.04	500,000.00	382,812.50
	Phaichhiring Tamang	Sertung	1 Ga	172	0.64	172	0.64	325.91	0.03	500,000.00	320,312.50
	Phaichhiring Tamang	Sertung	1 Ga	281	0.61	281	0.61	310.01	0.03	500,000.00	304,687.50
32	Phaichhiring Tamang	Sertung	1 Ga	150	1.19	150	1.19	604.13	0.06	500,000.00	593,750.00
33	Pharong Tamang	Sertung	1 Ga	176	933.88	1278	1.23	627.98	0.06	500,000.00	617,187.50
34	Phe Lama	Sertung	1 Ga	174	1.02	174	1.02	516.69	0.05	500,000.00	507,812.50
35	Phe Lama Tamang	Sertung	1 Ga	269	0.88	269	0.70	357.71	0.04	500,000.00	351,562.50
36	Phe Lama Tamang	Sertung	1 Ga	143	519.27	1282	0.48	246.42	0.02	500,000.00	242,187.50
37	Phelama Tamang	Sertung	1 Ga	142	1482.67	1286	0.92	468.99	0.05	500,000.00	460,937.50
38	Shree Lama Tamang	Sertung	1 Ga	1030	0.38	1030	0.38	190.78	0.02	500,000.00	187,500.00
39	ShreeBudhman Tamang	Sertung	1 Ga	161	1.33	161	1.33	675.67	0.07	500,000.00	664,062.50
40	Shreemati Jurmain	Sertung	1 Ga	1033	0.34	1033	0.34	174.88	0.02	500,000.00	171,875.00
41	ShreeSune Bdr. Tamang	Sertung	1 Ga	1094	0.92	1094	0.92	468.99	0.05	500,000.00	460,937.50
42	Sree Lamang Tamang	Sertung	1 Ga	1032	0.34	1032	0.34	174.88	0.02	500,000.00	171,875.00
43	Tachchaan Tamang	Sertung	1 Ga	162	1.11	162	1.11	564.38	0.06	500,000.00	554,687.50
44	Taramang Tamang	Sertung	1 Ga	1063	0.30	1063	0.30	151.03	0.02	500,000.00	148,437.50
45	Tarrong Tamang	Sertung	1 Ga	167	0.95	167	0.95	484.89	0.05	500,000.00	476,562.50
46	Tek Bdr.Tamang	Sertung	1 Ga	282	3.89	282	3.89	1979.32	0.20	500,000.00	1,945,312.50

ATTACHMENT #8 – Details of Landowners for 7 Substations of EGMP

Nos. HHs	Name of old Land Owner	Address		Total Area old Kitta		Acquire Area				AS per CDC	
		VDC	Ward	Old Kitta	Ropani	New Kitta	Ropani	sqm	HA	Rate/Ropani	Compensation
47	Yukte Tamang/Karpo Tamang	Sertung	1 Ga	182	9210.70	1255	5.78	2941.15	0.29	500,000.00	2,890,625.00
					3049.08		36.74	18692.17	1.87	36,000,000.00	18,527,343.75

ATTACHMENT #8 – Details of Landowners for 7 Substations of EGMP

5. Lapang Substation Dhadhing District

Nos HHs	Name of old Land Owner	Address		Total Area old Kitta		Acquire Area				AS per CDC	
		VDC	Ward	Old Kitta	Ropani.	New Kitta	Ropani.	sqm	HA	Rate/Ropani	Compensation
1	Balkrishna Sapkota	Kajunje	9 gha	228	2.50	228	2.50	1271.85	0.13	550,000.00	1,375,000.00
2	Balkrishna Sapkota	Kajunje	9 gha	208	2.30	208	2.30	1168.51	0.12	550,000.00	1,263,281.25
3	Bharat Pd. Sapkota	Kajunje	9 ka	342	0.78	342	0.78	397.45	0.04	550,000.00	429,687.50
	Bharat Pd. Sapkota	Kajunje	9 ka	345	1.50	345	1.50	763.11	0.08	550,000.00	825,000.00
	Bharat Pd. Sapkota	Kajunje	9 ka	349	0.84	349	0.84	429.25	0.04	550,000.00	464,062.50
	Bharat Pd. Sapkota	Kajunje	9 KA	337	0.75	337	0.75	381.56	0.04	550,000.00	412,500.00
	Bharat Pd. Sapkota	Kajunje	9 KA	355	0.38	355	0.38	190.78	0.02	550,000.00	206,250.00
4	Bhim Prasad	Kajunje	9 gha	178	0.25	178	0.25	127.19	0.01	550,000.00	137,500.00
5	Bishnu Pd. Sapkota	Kajunje	9 gha	223	0.47	223	0.47	238.47	0.02	550,000.00	257,812.50
6	Dambar Pd. Rimal	Kajunje	9 gha	6	1.30	6	1.30	659.77	0.07	550,000.00	713,281.25
7	Dambar Prasad Sapkota	Kajunje	9 ka	546	5.73	554	1.38	699.52	0.07	550,000.00	756,250.00
8	Debaki Sapkota	Kajunje	9 gha	194	2.61	194	2.61	1327.49	0.13	550,000.00	1,435,156.25
9	Debaki Sapkota	Kajunje	9 gha	193	2.44	193	2.44	1240.05	0.12	550,000.00	1,340,625.00
10	Devi Pd. Sapkota	Kajunje	9 gha	159	4.11	159	4.11	2090.60	0.21	550,000.00	2,260,156.25
11	Durga Pd. Sapkota	Kajunje	9 ka	356	0.45	356	0.45	230.52	0.02	550,000.00	249,218.75
	Durga Pd. Sapkota	Kajunje	9 ka	352	0.23	352	0.23	119.24	0.01	550,000.00	128,906.25
	Durga Pd. Sapkota	Kajunje	9 ka	338	0.75	338	0.75	381.56	0.04	550,000.00	412,500.00
	Durga Pd. Sapkota	Kajunje	9 ka	350	0.20	350	0.20	103.34	0.01	550,000.00	111,718.75
	Durga Pd. Sapkota	Kajunje	9 ka	343	0.64	343	0.64	325.91	0.03	550,000.00	352,343.75
12	Goma Sapkota	Kajunje	9 gha	127	0.25	127	0.25	127.19	0.01	550,000.00	137,500.00

ATTACHMENT #8 – Details of Landowners for 7 Substations of EGMP

Nos HHs	Name of old Land Owner	Address		Total Area old Kitta		Acquire Area				AS per CDC	
		VDC	Ward	Old Kitta	Ropani.	New Kitta	Ropani.	sqm	HA	Rate/Ropani	Compensation
	Goma Sapkota	Kajunje	9 gha	128	0.50	128	0.50	254.37	0.03	550,000.00	275,000.00
	Goma Sapkota	Kajunje	9 gha	126	3.58	126	3.58	1820.34	0.18	550,000.00	1,967,968.75
13	Hari Pd. Sapkota	Kajunje	9 ka	351	0.88	351	0.88	445.15	0.04	550,000.00	481,250.00
	Hari Pd. Sapkota	Kajunje	9 ka	357	0.59	357	0.59	302.06	0.03	550,000.00	326,562.50
	Hari Pd. Sapkota	Kajunje	9 ka	339	0.70	339	0.70	357.71	0.04	550,000.00	386,718.75
14	Harimaya Sapkota	Kajunje	9 gha	229	3	229	0.98	500.79	0.05	550,000.00	541,406.25
	Harimaya Sapkota	Kajunje	9 ka	399	1.00	399	1.00	508.74	0.05	550,000.00	550,000.00
	Hiramani Sapkota	Kajunje	9 ka	397	5.00	397	5.00	2543.70	0.25	550,000.00	2,750,000.00
	Hiramani Sapkota	Kajunje	9 ka	297	4.88	297	4.88	2480.11	0.25	550,000.00	2,681,250.00
15	Kamaladevi Sapkota	Kajunje	9 gha	160	2.56	160	2.56	1303.65	0.13	550,000.00	1,409,375.00
	Kamaladevi Sapkota	Kajunje	9 gha	224	1.36	224	1.36	691.57	0.07	550,000.00	747,656.25
16	Krishna Pd. Rimal	Kajunje	9 ka	136	2.86	558	1.41	715.42	0.07	550,000.00	773,437.50
17	Lilanath Rimal	Kajunje	9 gha	5	10.48	5	10.48	5333.82	0.53	550,000.00	5,766,406.25
18	Lok Prasad Sapkota	Kajunje	9 gha	227	2.50	227	2.50	854.47	0.09	550,000.00	1,375,000.00
19	Lok Prasad Sapkota	Kajunje	9 ka	398	3.13	398	3.13	1589.81	0.16	550,000.00	1,718,750.00
20	Nanda Kumari	Kajunje	9 gha	179	0.81	179	0.81	413.35	0.04	550,000.00	446,875.00
21	Netra Pd. Sapkota	Kajunje	9 ka	298	4.88	298	4.88	2480.11	0.25	550,000.00	2,681,250.00
22	Prakash Rimal	Kajunje	9 gha	31	6.08	31	6.08	3092.19	0.31	550,000.00	3,342,968.75
	Prakash Rimal	Kajunje	9 gha	8	0.84	8	0.84	429.25	0.04	550,000.00	464,062.50
23	Sheshnath/Dhankumari	Kajunje	9 gha	181	4.36	181	4.36	2217.79	0.22	550,000.00	2,397,656.25
24	Shibakumari Sapkota	Kajunje	9 gha	7	0.53	7	0.53	270.27	0.03	550,000.00	292,187.50
25	Thakur Pd. Sapkota	Kajunje	9 gha	183	1.58	183	1.58	802.86	0.08	550,000.00	867,968.75
	Thakur Pd. Sapkota	Kajunje	9 gha	182	1.58	182	1.58	802.86	0.08	550,000.00	867,968.75

ATTACHMENT #8 – Details of Landowners for 7 Substations of EGMP

Nos HHs	Name of old Land Owner	Address		Total Area old Kitta		Acquire Area				AS per CDC	
		VDC	Ward	Old Kitta	Ropani.	New Kitta	Ropani.	sqm	HA	Rate/Ropani	Compensation
	Thakur Pd. Sapkota	Kajunje	9 gha	180	0.81	180	0.81	413.35	0.04	550,000.00	446,875.00
26	Tulasi Pd. Sapkota	Kajunje	9 gha	206	1.38	206	1.38	699.52	0.07	550,000.00	756,250.00
	Tulasi Pd. Sapkota	Kajunje	9 gha	207	0.31	207	0.31	158.98	0.02	550,000.00	171,875.00
	Tulasi Pd. Sapkota	Kajunje	9 gha	210	1.25	210	1.25	635.93	0.06	550,000.00	687,500.00
27	Uma devi	Kajunje	9 gha	209	2.56	209	2.56	1303.65	0.13	550,000.00	1,409,375.00
Total				5	98.47		90.64	46112.51	4.57	26,400,000.00	49,852,343.75

ATTACHMENT #8 – Details of Landowners for 7 Substations of EGMP

6. 132/33kV Pangtan Substation Project Sindhupalchok District												
S.N.	Name of Land Owner	Address		Total Area old Kitta		Acquire Area				Land Type	AS per CDC	
		VDC	Ward	O.K.	T. Ropani	N.K.	ROPANI	sqm	HA	Type	Rate/Ropani	Compensation
1		Pangtan	3	710	1.38	710	1.20	610.09	0.06	Bari	450000	539648.4375
2		Pangtan	3	711	8.08	711	8.08	4109.67	0.41	Bari	450000	3635156.25
3		Pangtan	3	717	2.23	717	2.23	1136.72	0.11	Bari	450000	1005468.75
4		Pangtan	3	718	3.36	718	3.30	1679.24	0.17	Bari	450000	1485351.563
5		Pangtan	3	719	5.48	719	5.43	2760.31	0.28	Bari	450000	2441601.563
6		Pangtan	3	720	2.44	720	2.32	1180.44	0.12	Bari	450000	1044140.625
7		Pangtan	3	721	2.14	721	2.14	1089.02	0.11	Bari	450000	963281.25
8		Pangtan	3	722	8.16	722	8.04	4089.79	0.41	Bari	450000	3617578.125
9		Pangtan	3	723	3.23	723	3.23	1645.46	0.16	Bari	450000	1455468.75
10		Pangtan	3	728	1.19	728	1.19	604.13	0.06	Bari	450000	534375
11		Pangtan	3	957	3.00	957	3.00	1526.22	0.15	Bari	450000	1350000
12		Pangtan	3	715	2.44	961	1.03	522.65	0.05	Bari	450000	462304.6875
13		Pangtan	3	714	2.83	963	2.20	1118.83	0.11	Bari	450000	989648.4375
14		Pangtan	3	713	2.08	965	1.50	763.11	0.08	Bari	450000	675000
15		Pangtan	3	733	3.66	967	3.26	1657.38	0.17	Bari	450000	1466015.625
16		Pangtan	3	743	3.97	969	2.96	1504.36	0.15	Bari	450000	1330664.063
Total					55.66		51.10	25997.41	2.60			22995703.13

ATTACHMENT #8 – Details of Landowners for 7 Substations of EGMP

7. Keraun 132/33kV substation Project Morang District (Substation Land acquire progress)

S.N.	Name of Land Owner	Address		Old. Kitta	Acquire Area			Compensation
		VDC	Ward		New Kitta.	sqm	HA	
1	Rajendra Preasd Nepal	Keraun	4 Gha	225	225	1354.48	0.14	966668
	Rajendra Preasd Nepal	Keraun	4 Gha	217	217	723.80	0.07	516563.2
	Rajendra Preasd Nepal	Keraun	4 Gha	219	219	160.84	0.02	114791.01
	Rajendra Preasd Nepal	Keraun	4 Gha	250	250	1015.86	0.10	725001
2	Bishnu Maya Nepal	Keraun	4 Gha	235	235	4063.44	0.41	2900004
3	Padam Bdr Pandye	Keraun	4 Gha	265	265	1354.48	0.14	966668
4	Meghendra Pandye	Keraun	4 Gha	266	266	1015.86	0.10	725001
5	Tika Maya Khadaka Nepal	Keraun	4 Gha	267	267	863.47	0.09	616250.85
6	Dorna Niraula	Keraun	4 Gha	315	315	10158.61	1.02	7250010
7	Puspa Khadak	Keraun	4 Gha	316	316	3047.58	0.30	2175003
8	Khem Kumari Dulal	Keraun	4 Gha	628	628	338.62	0.03	519584
	Khem Kumari Dulal	Keraun	4 Gha	629	629	338.62	0.03	
9	Chandra Bdr Budathoki	Keraun	4 Gha	201	201	1777.75	0.18	2753962.68
	Chandra Bdr Budathoki	Keraun	4 Gha	200	200	855.01	0.09	
10	Sarswati Subedi Dahal	Keraun	4 Gha	222	222	1015.86	0.10	725001
11	Kumar Bdr. Dahal	Keraun	4 Gha	226	226	2924.82	0.29	2087398.7
12	Keshab Bdr. Thapa	Keraun	4 Gha	324	324	76.19	0.01	2371670.43
	Keshab Bdr. Thapa	Keraun	4 Gha	180	180	905.80	0.09	
13	Komal Nepal	Keraun	4 Gha	561	561	541.78	0.05	1286876.78
	Komal Nepal	Keraun	4 Gha	565	565	1252.88	0.13	
Sub Total						0.00	3.38	26700453.65
Tower Pad								
14	Gita Niraural	Keraun	4 Gha	107	107	338.62	0.03	482500
Sub Total							0.03	482500.00
Total							3.41	27182953.65

ATTACHMENT #9 – Details of Landowners for 1 Substation of EGMP-AF

Land acquisition and individual list of seven substations

1. 132/33/11kV Nepalgunj Substation Project Banke District EGMP -AF																
HHs. Nos	Name of Land Owner	Address		Total Area old Kitta					Acquire Area						AS per CDC	
		VDC	Ward	O.K.	Biga	Katta	Dhur	T. Sqm	N.K.	Biga	Katta	Dhur	Squ.m	HA	Rate/Sqm	Compensation
1	Nanda Kurmi	Belahari	7	433	0	1	2.73	384.85	433	0	1	2.73	384.85	0.038	4134.306	1,591,083.07
	Nanda Kurmi	Belahari	7	426	0	7	17.98	2674.81	426	0	7	18	2674.81	0.267	4134.306	11,058,488.50
2	Shanti Kumari Kurmini	Belahari	7	432	0	1	11.30	529.94	432	0	1	11.3	529.94	0.053	4134.306	2,190,929.92
	Shanti Kumari Kurmini	Belahari	7	434	0	12	7.76	4194.94	434	0	12	7.76	4194.94	0.419	4134.306	17,343,151.88
	Shanti Kumari Kurmini	Belahari	7	740	0	0	18.48	312.87	740	0	0.0	18.5	312.87	0.031	4134.306	1,293,485.40
	Shanti Kumari Kurmini	Belahari	7	741	0	0	18.54	313.88	741	0	0.0	18.5	313.88	0.031	4134.306	1,297,685.02
	Shanti Kumari Kurmini	Belahari	7	742	0	0	18.48	312.87	742	0	0.0	18.5	312.87	0.031	4134.306	1,293,485.40
	Shanti Kumari Kurmini	Belahari	7	255	0	12	10.12	4234.89	418	0	7	9.54	2531.92	0.253	4134.306	10,467,740.84
	Shanti Kumari Kurmini	Belahari	7	255	0	12	10.12	4234.89	418	0	7	9.54	2531.92	0.253	4134.306	10,467,740.84
3	Ram Kumar Barma	Belahari	7	431	0	2	2.81	724.83	431	0	2	2.81	724.83	0.072	4134.306	2,996,682.57
	Ram Kumar Barma	Belahari	7	419	0	2	4.29	749.89	419	0	2	4.29	749.89	0.075	4134.306	3,100,273.40
4	Suke Lal Kurmi	Belahari	7	430	0	10	12.50	3597.93	430	0	10	12.5	3597.93	0.360	4134.306	14,874,922.48
5	Dulare Ahir	Belahari	7	428	0	2	6.65	789.84	428	0	2	6.65	789.84	0.079	4134.306	3,265,458.76
6	Maya Ram Ahir	Belahari	7	289	0	2	11.97	879.91	289	0	2	12	879.91	0.088	4134.306	3,637,825.77
	Maya Ram Ahir	Belahari	7	429	0	6	4.00	2099.50	429	0	6	4	2099.50	0.210	4134.306	8,679,975.19
7	Tara Manihar	Belahari	7	260	0	6	13.47	2259.83	260	0	6	13.5	2259.83	0.226	4134.306	9,342,816.47
8	Ram Dayal Ahir	Belahari	7	259	0	2	14.33	919.87	259	0	2	14.3	919.87	0.092	4134.306	3,803,011.13
9	Subas Kumar Yadav, Bhagamatiya Ahirni Samet	Belahari	7	400	0	2	18.47	989.96	400	0	2	18.5	989.96	0.099	4134.306	4,092,785.46
10	Sursati Kurmi	Belahari	7	394	0	6	9.34	2189.91		0	1	11.9	539.93	0.054	4134.306	2,232,226.26

ATTACHMENT #9 – Details of Landowners for 1 Substation of EGMP-AF

1. 132/33/11kV Nepalgunj Substation Project Banke District EGMP -AF																
HHs. Nos	Name of Land Owner	Address		Total Area old Kitta					Acquire Area						AS per CDC	
		VDC	Ward	O.K.	Biga	Katta	Dhur	T. Sqm	N.K.	Biga	Katta	Dhur	Squ.m	HA	Rate/Sqm	Compensation
11	Rajendra Prasad Kurmi	Belahari	7	245	0	9	9	3200.04	245	0	9	9	3200.04	0.320	4134.306	13,229,944.19
12	Muidi Kurmi	Belahari	7	401	0	2	14.33	919.87		0	0	9.33	157.96	0.016	4134.306	653,042.14
13	Gaya Prd Ahir	Belahari	7	252	0	3	15	1269.84		0	1	15.7	603.92	0.060	4134.306	2,496,802.82
14	Anara Kurmi	Belahari	7	253	0	3	19.73	1349.92		0	1	15.7	603.92	0.060	4134.306	2,496,802.82
15	Jagat Narayan Kurmi Chaudhari	Belahari	7	2	0	2	5.75	774.61	2	0	0	12.5	211.96	0.021	4724.921	1,001,511.27
Total								35674.78					29585.36	2.959		122,440,130.76

ANNEXURE #10

Letter regarding formation of GRC for Keraun Substation



नेपाल विद्युत प्राधिकरण

(नेपाल सरकारको स्वामित्व)

आयोजना व्यवस्थापन निर्देशनालय

आयोजना व्यवस्थापन विभाग

केरौन १३२/३३ के.भी. सब-स्टेशन आयोजना

बिराटचोक, मोरङ

पत्र संख्या: ०७८/७९

च. न. २६८

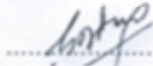
मिति: ०७९/०३/१९

श्री शुशिल बुढाथोकी, वडा अध्यक्ष, वडा नं. २, कानेपोखरी गा.पा. मोरङ ।
श्री सावित्रा चौधरी, महिला वडा सदस्य, वडा नं. २, कानेपोखरी गा.पा. मोरङ ।
श्री दर्शन राय यादव, केरौन १३२/३३ के.भी. सब-स्टेशन आयोजना, मोरङ ।
श्री रमेश गौतम, समाजिक सुरक्षण तथा बतावरण व्यवस्थापन विभाग, ने.वि.प्रा.।
श्री तुल्सी थापा, केरौन १३२/३३ के.भी. सब-स्टेशन आयोजना, मोरङ ।

विषय: गुनासो सम्बोधन समिति गठन गरिएको सम्बन्धमा ।

उपरोक्त सम्बन्धमा ने.वि.प्रा.समाजिक सुरक्षण तथा बतावरण व्यवस्थापन विभागको, पत्र संख्या ०७८/७९ चलानी नं.५०४ मिति ०७९/०३/१९ को पत्रानुसार केरौन गा.पा. वडा नं. २ मा निर्माणाधिन केरौन १३२/३३ के.भी. सब-स्टेशन आयोजनाको प्रभावबाट यस गाँउ पालिका भित्र उत्पन्न हुन सक्ने गुनासो, उजुरी प्राप्त गरी व्यवस्थापन गर्न, प्रभावित व्यक्तिहरुको समस्या वा दावी तुरन्त समाधान गर्न देहाय बमोजिम गुनासो सम्बोधन समिति (Grievance Redress Committee, GRC) गठन गरिएको व्यहोरा निर्देशानुसार जानकारी गराइन्छ ।

- | | |
|---|--------------|
| (क) श्री शुशिल बुढाथोकी, वडा अध्यक्ष, वडा नं. २, कानेपोखरी गा.पा. मोरङ | - संयोजक |
| (ख) श्री सावित्रा चौधरी, महिला वडा सदस्य, वडा नं. २, कानेपोखरी गा.पा. मोरङ | - सदस्य |
| (ग) श्री रमेश गौतम, समाजशास्त्री,
समाजिक सुरक्षण तथा बतावरण व्यवस्थापन विभाग | - सदस्य |
| घ) श्री दर्शन राय यादव, आयोजना प्रमुख,
केरौन १३२/३३ के. भी. सब-स्टेशन आयोजना | - सदस्य |
| ड) श्री तुल्सी थापा, प्रशासन प्रमुख,
केरौन १३२/३३ के. भी. सब-स्टेशन आयोजना | - सदस्य सचिव |


(दर्शन राय यादव)
आयोजना प्रमुख

बोधार्थ :

श्री ने.वि.प्रा., आयोजना व्यवस्थापन निर्देशनालय, मातातिर्थ, काठमान्डौ ।

श्री ने.वि.प्रा., समाजिक सुरक्षण तथा बतावरण व्यवस्थापन विभाग, बानेश्वर, काठमान्डौ ।

ATTACHMENT #11

Minutes of CDC Meeting of Dhading District

आज मिति २०७६।१०।८ रोजी बुधबार, इन्द्रावट जिल्ला अधिकारी श्री अरमान सामाङ्गको अध्यक्षतामा नेपाल विद्युत प्राधिकरण अन्तर्गत रहेको बीराङ - नौबिसे (रातमाटे) २२० के.भी. प्रसारण लाईनको २२०/१३२/३३/११ के.भी. सबस्टेसन निर्माण कार्यको लागि यस जिल्ला अन्तर्गत सेर्तुङ वा.वि.स. वडा नं. ७ हाल सबीभ्वाली वा.पा. वडा नं. ४ मा रहेको जग्गाहरू जग्गा प्राप्ती ऐन २०६४ बमोजिम प्राप्त गर्ने सम्बन्धमा निम्नानुसार पदाधिकारीहरूको उपस्थितिमा छलफल रै देहाय बमोजिम निर्णय गरियो ।

उपस्थिति:

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| १. प्र.वि.अ. श्री अरमान सामाङ्ग, | जिल्ला प्रशासन कार्यालय, धादिङ |
| २. अध्यक्ष श्री देवदत्त सामाङ्ग | सबीभ्वाली गाउँपालिका |
| ३. मान्योत अधिकृत श्री पुरुषोत्तम शम्शारी, | मान्योत कार्यालय, धादिङ |
| ४. चेष्टाध्वज श्री प्रताप सामाङ्ग | सबीभ्वाली गाउँपालिका, धादिङ |
| ५. आयोजना प्रमुख श्री लक्ष्मीशारदा मुषिया, | बीराङ - नौबिसे (रातमाटे) २२० के.भी. |

अगम्यित

- | | |
|--|-------------------------------------|
| १. ज्ञानध्वज श्री किता सामा | सबीभ्वाली गाउँपालिका |
| २. स.प्र.वि.अ. श्री अर्जुन कुमार खर्का | जिल्ला प्रशासन कार्यालय, धादिङ |
| ३. प्र.अ. श्री सुर्वदर्शन पम्पिन, | जिल्ला प्रशासन कार्यालय, धादिङ |
| ४. सारी लक्षिकृत श्री श्रीधर ठुपाना | जिल्ला सारी कार्यालय, धादिङ |
| ५. प्रारम्भिक अधिकृत श्री शिव कुमार खर्का, | बीराङ-नौबिसे(रातमाटे) २२० के.भी. |
| ६. व.स. श्री राबेन्द्र खर्का | बीराङ-नौबिसे(रातमाटे) २२० के.भी. |
| ७. स.लेखापाल श्री श्रीराम सायकोट | बीराङ - नौबिसे (रातमाटे) २२० के.भी. |
| ८. ना.मु.श्री हरिप्रसाद, गौपावे | जिल्ला प्रशासन कार्यालय, धादिङ |
| ९. स.ई श्री हरि बहादुर राउत | बीराङ-नौबिसे(रातमाटे) २२० के.भी. |

निर्णय नं. १.

नेपाल विद्युत प्राधिकरण अन्तर्गत रहेको बीराङ - नौबिसे (रातमाटे) २२० के.भी. प्रसारण लाईनको २२०/१३२/३३/११ के.भी. सबस्टेसन निर्माण कार्यको लागि यस जिल्ला अन्तर्गत सेर्तुङ वा.वि.स. वडा नं. ७ हाल सबीभ्वाली वा.पा. वडा नं. ४ मा रहेको जग्गाहरू स्वाधीन रूपमा प्राप्त गर्ने सम्बन्धमा जग्गा प्राप्ती ऐन २०६४ अनुसार जग्गा अधिग्रहणको लागी मिति २०७५/८/२० रोजी प्रकृतिगत गौराध्वजको सुचना बमोजिम १५० रोपनी रोझा रहेकोमा अधिग्रहणको मिति २०७६/१०/८ गतेको प्रतिवेदनबाट करिब ९२.५ रोपनी मात्र आवश्यक पर्ने भनी माप भएकोले ९२.५ रोपनी अधिग्रहण सरी बाँकी रहेका जग्गाहरू छुट्या गर्ने निर्णय गरियो ।

निर्णय नं. २.

नेपाल विद्युत प्राधिकरण अन्तर्गत रहेको बीराङ - नौबिसे (रातमाटे) २२० के.भी. प्रसारण लाईनको २२०/१३२/३३/११ के.भी. सबस्टेसन निर्माण कार्यको लागि यस जिल्ला अन्तर्गत सेर्तुङ वा.वि.स. वडा नं. ७ हाल सबीभ्वाली वा.पा. वडा नं. ४ मा रहेको जग्गाहरू स्वाधीन रूपमा प्राप्त गर्ने सम्बन्धमा जग्गा प्राप्ती ऐन २०६४ अनुसार जग्गा अधिग्रहणको लागी बुझाएका विध्वंसन सिफारिस गर्न रजिष्टर उप-नमितिबाट फेज भएको प्रतिवेदन, सबीभ्वाली गाउँपालिकाको मुख्यालयमा विध्वंसन मान्योत कार्यालयको आ.स.२०७६/७/७ को मुख्यालयमा पुगिसकेको स्थानीय स्तरमा चलनचलातीको मूख्य उप-नमिति विध्वंसन सम्बन्धमा अझार मानी अधिग्रहण गरिएका मंगल विवरण बमोजिम ९२.५ रोपनी जग्गाहरूको प्रति रोपनी रु.५००,०००/- राई लाग्न दरेको मूख्य निर्धारण गर्ने निर्णय गरियो ।

आज मिति २०७८/०४/१२ गते मंगलबार, प्रमुख जिल्ला अधिकारी श्री मान प्रसाद इकान जुम्लो अध्यक्षतामा नेपाल विद्युत प्राधिकरण अन्तर्गत रहेको बोरौंग - नौबिसे (रातमाटे) २२० के.भी. प्रसारण लाईनको सबस्टेसन निर्माण कार्यको लागि यस जिल्ला अन्तर्गत साबिक सेरतुंग गा.वि.स. वडा नं. १ हाल रुबीभ्याली गा.पा. वडा नं. ४ बोरौंगमा रहेको जग्गाहरू स्वाधी रूपमा प्राप्त गर्ने सम्बन्धमा निम्न पराधिकारीको उपस्थितिमा छलफल भै देहाव समोहम निर्बंध गरियोः-

स्थान: जिल्ला प्रशासन कार्यालय, धादिङ

समय : बिहान ९:१५ बजे

उपस्थिति:

१. प्र.वि.अ. श्री मान प्रसाद इकान ,
२. अध्यक्ष श्री देवेन्द्र तामांग ,
३. प्र.मा.अ. श्री रामकृष्ण तामाङ ,
४. असोजला प्रमुख श्री लक्ष्मीनारायण मुखिया,
५. आमजित
६. स.प्र.वि.अ. श्री मोर्कज प्रसाद उपाध्याय ,
७. उपाध्यक्ष श्रीमती बिना तामा
८. स.निर्देशक श्री मुकुन्द प्रसाद प्रसाई
९. प्रमुख नापी अधिकृत श्री धीरज कुंजना
१०. प्रारम्भिक अधिकृत श्री शिव कु. अर्वाल
११. स.ई. श्री हरी ब. राउत
१२. वडा अध्यक्ष श्री प्रशान्त तामांग
१३. ना.सु. श्री हिम बहादुर बि.के.
१४. ना.सु. श्री जित्त कान्त विश्वकर्मा
१५. स.स. श्री रामेश अर्वाल बोरौंग
१६. स.मे.पा. श्री भीराम सापकोटा
- निर्बंध न १,

जिल्ला प्रशासन कार्यालय, धादिङ
रुबी भ्याली गाउँ पालिका, धादिङ
मानचौत कार्यालय, धादिङ
बोरौंग - नौबिसे (रातमाटे) २२० के.भी.

जिल्ला प्रशासन कार्यालय, धादिङ
रुबी भ्याली गाउँ पालिका, धादिङ
बोरौंग - नौबिसे (रातमाटे) २२० के.भी.
जिल्ला नापी कार्यालय, धादिङ
बोरौंग - नौबिसे (रातमाटे) २२० के.भी.
बोरौंग - नौबिसे (रातमाटे) २२० के.भी.
रुबी भ्याली गाउँ पालिका वडा नं. ४, धादिङ
जिल्ला प्रशासन कार्यालय, धादिङ
जिल्ला प्रशासन कार्यालय, धादिङ
नौबिसे (रातमाटे) २२० के.भी.
नौबिसे (रातमाटे) २२० के.भी.

नेपाल विद्युत प्राधिकरण अन्तर्गत रहेको बोरौंग - नौबिसे (रातमाटे) २२० के.भी. प्रसारण लाईनको सबस्टेसन निर्माण कार्यको लागि यस जिल्ला अन्तर्गत साबिक सेरतुंग गा.वि.स. वडा नं. १ हाल रुबी भ्याली गा.पा. वडा नं. ४ बोरौंगमा रहेको जग्गाहरू स्वाधी रूपमा प्राप्त गर्ने सम्बन्धमा मिति २०७५/०८/१९ सूचना प्रकाशित भई मिति २०७६/१०/०८ मा मुद्दामा निर्धारणको निर्णय भएको थियो , तत्पश्चात केहि जग्गाहरू स्वाधी रूपमा प्राप्त गरियो र केहि जग्गा हुनको कित्त नं. चरक गर्न भएको तथा केहि जग्गाहरू छुट हुन गएकोले उक्त जग्गाहरू स्वाधी रूपमा प्राप्त गर्ने मिति २०७८/०३/२२ गते पुनः सूचना प्रकाशित गरिएको थियो सो सम्बन्धमा मिति २०७६/१०/०८ को मुद्दामा निर्धारणको निर्णयलाई आधार मानी संलग्न पात्रा २ (दुई) अनुसारको जग्गाहरूको मुद्दामा प्रति रोपनी रु.५,००,०००.०० (पाँच लाख) निर्धारण गर्ने निर्णय गरियो ।

(Signatures and stamps)

आज मिति २०७७/०५/०५ गते सोमबार प्रमुख जिल्ला अधिकारी श्री पुष्पबिक्रम पौडेलज्यूको अध्यक्षतामा नेपाल विद्युत प्राधिकरण अन्तर्गत रहेको बोरान - नौबिसे (रातमाटे) २२० के.भी. प्रसारण लाईनको २३०/१३२/३३/११ के.भी. सबस्टेशन निर्माण कार्यको लागि धादिङ जिल्लाको नेत्रावती डबजोड गाउँपालिका वडा नं. ५ साबिक कटुन्गे गा.वि.स. वडा नं. ९ बिहारचोकमा रहेको जग्गाहरू स्थायी रूपमा प्राप्त गर्ने सम्बन्धमा निम्नसार पदाधिकारीहरूको उपस्थितिमा छलफल भई देहाय सम्झौता निर्णय गरियो ।

स्थान: जिल्ला प्रशासन कार्यालय, धादिङ
समय: अपराह्न ४:१५ बजे
उपस्थिति:

१. प्र.नि.अ. श्री पुष्पबिक्रम पौडेल,
२. गा.पा.अध्यक्ष श्री दुर्गाकुमार शाक्य,
३. मा.अ. श्री रामकृष्ण तामाङ,
४. आ. प्र. श्री लक्ष्मीनारायण मुखिया,
५. म.प्र.नि.अ. श्री रामबहादुर माल,
६. प्र.उ.श्री महेन्द्र खड्का
७. उप.अ.नि. श्री सुरेन्द्र सोइराला
८. वडा अध्यक्ष श्री डम्बर अधिकारी
९. प्रारम्भिक अभिवृत्त श्री प्रन्हास कार्की,
१०. व.स. श्री राजेश अर्जुन
११. स.से.पा. श्री श्रीराम मापकोटा
१२. खरिदार श्री गिताकान्त बिष्टकर्मा

जिल्ला प्रशासन कार्यालय, धादिङ
नेत्रावती डबजोड गाउँपालिका, धादिङ
मानपोत कार्यालय, धादिङ
बोरान-नौबिसे(रातमाटे) २२० के.भी. आयोजना

जिल्ला प्रशासन कार्यालय, धादिङ
जिल्ला प्रहरी कार्यालय, धादिङ
राष्ट्रिय अनुसन्धान जिल्ला कार्यालय, धादिङ
नेत्रावती डबजोड गा. पा. वडा नं. ५, धादिङ
बोरान - नौबिसे (रातमाटे) २२० के.भी.
बोरान - नौबिसे (रातमाटे) २२० के.भी.
बोरान - नौबिसे (रातमाटे) २२० के.भी.
जिल्ला प्रशासन कार्यालय, धादिङ

नेपाल विद्युत प्राधिकरण अन्तर्गत रहेको बोरान - नौबिसे (रातमाटे) २२० के.भी. प्रसारण लाईनको २३०/१३२/३३/११ के.भी. सबस्टेशन निर्माण कार्यको लागि धादिङ जिल्लाको नेत्रावती डबजोड गाउँपालिका वडा नं. ५ साबिक कटुन्गे गा.वि.स. वडा नं. ९ बिहारचोकमा रहेको जग्गाहरू स्थायी रूपमा प्राप्त गर्ने सम्बन्धमा जग्गा प्राप्ति ऐन २०३४ को दफा ९, १०, ११ को प्रयोजनार्थ जग्गा प्राप्त गर्न मिति २०७७/०५/२२ साबिक जिल्ला प्रशासन कार्यालय धादिङको विचो । तत् सम्बन्धमा वडा धादिङ जिल्लाको नेत्रावती डबजोड गाउँपालिका वडा नं. ५ साबिक कटुन्गे गा.वि.स. वडा नं. ९ बिहारचोकमा रहेको जग्गाहरू स्थायी रूपमा प्राप्त गर्ने मुद्दाका निर्धारण हेतु अलगअलगको वरेट कुली आफ्नो राय प्रतिवेदन देन गर्ने गठित उप समितिबाट प्राप्त राय प्रतिवेदन उपर छलफल गरी उप समितिको सिफारिस बर्गीकरण नगरी प्रति रोपनी रु.५,५०,०००.०० (पाँच लाख पचास हजार मात्र) , जग्गाधनिहरूको बीच बर्गीकरण नगरी प्रति रोपनी रु. ७,००,०००.०० (सात लाख मात्र) रहेको र जग्गा प्राप्ती पछात सिफारिसहरूको पुनर्जापना नाबल समेतलाई मध्येनजर गर्दा बर्गीकरण नगरी प्रति रोपनी रु. ५,५०,०००.०० (पाँच लाख पचास हजार मात्र) मुद्दाका निर्धारण गर्ने निर्णय गरियो ।

(Handwritten signatures and stamps at the bottom of the page)

निर्णय नं २.

जग्गाको क्षेत्रफल ४ आना र ८ आना भएको किता नं. क्रमसः १२७ र १२८ को हकमा जग्गा धनीको स्वेच्छा अनुसार हुने र हाल अधिग्रहण हुने जग्गा संगै रहेका जग्गा समेत आयोजनाले मुआब्जा दिई प्राप्त गरि दिनु पर्‍यो भनि स्थानीय बासीबाट प्राप्त निवेदन अनुसारका जग्गाको हकमा स्थलगत अनुगमन गर्दा सो भाग समेतलाई सम्बोधन गर्ने कार्य न्यायोचित नै हुने देखिएकोले सो तथ्य बिचार गरि प्राविधिक पक्ष समेत विक्षेपण गरि प्रक्रिया अगाडी बढाउन आयोजना लाई लेखि पठाउने निर्णय गरियो ।

Kalyan

अध्यक्ष

उप-अध्यक्ष



सचिव

उप-सचिव

प्रमुख



अतिरिक्त

Attachment #12 Comments on Environment Management Plan-Rev A DRTLSS

	Dadakhet - Rahughat 132 kV Transmission Line Project Comment Resolution Sheet (CRS)	
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Consultant's Letter Ref.:		P.019119/NEA/DRTLSS/091		Date:	May 01, 2022
Contractor's Transmittal Ref.:		LTCD/PTD/SS/NEA/DR/031		Date:	April 08, 2022
Doc./ Drawing Title:		Environment Management Plan			
Doc./ Drawing Ref. No.:		DRTLSS-EMP		Rev:	A
Latest Approval Status:		CAT- 3: Returned For Correction			
SI No.	Document Reference	Commented / Responded by	Date	Description of Comments	Open / Close
1.	General	TE+NEA (RA)	21/04/2022	The document is titled as EMP. The correct title shall be CESMP as management of social aspects/impacts are an integral part of the entire exercise.	Open
		Contractor (RA)		Response In Black	
2.	General	TE+NEA (RA)	21/04/2022	The introduction has no mention of the project, its components, location, and its characteristics. Although there is a lot of scope to update and upgrade the submitted document, a few areas are completely missing from the document. <div><div>i.</div><div>Project specific Aspect and Impact matrix</div><div>ii.</div><div>Mitigation and Management Plans</div><div>iii.</div><div>Manpower deployment and organization structure for the project</div><div>iv.</div><div>Labour camp management plan</div><div>v.</div><div>COVID-19 and other communicable disease response and control plan</div><div>vi.</div><div>Solid waste management plan</div><div>vii.</div><div>Muck management plan</div><div>viii.</div><div>Plan for protection of vegetation and wildlife</div><div>ix.</div><div>Use of PPEs</div><div>x.</div><div>Material Handling</div></div>	Open
		Contractor (RA)		Response In Black	
3.	General	TE+NEA (RA)	21/04/2022	In the Introduction Section (Page 4), it is stated that the EMP is prepared based on the guidelines of ADB Environmental Manual. In preparation of the CESMP, the Contractor is required to take fully into account	Open

Attachment #12 Comments on Environment Management Plan-Rev A DRTLSS

	Dadakhet - Rahughat 132 kV Transmission Line Project Comment Resolution Sheet (CRS)	
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Consultant's Letter Ref.:		P.019119/NEA/DRTLSS/091		Date:	May 01, 2022
Contractor's Transmittal Ref.:		LTCD/PTD/SS/NEA/DR/031		Date:	April 08, 2022
Doc./ Drawing Title:		Environment Management Plan			
Doc./ Drawing Ref. No.:		DRTLSS-EMP		Rev:	A
Latest Approval Status:		CAT- 3: Returned For Correction			
SI No.	Document Reference	Commented / Responded by	Date	Description of Comments	Open / Close
				the following: <div><div>i.</div><div>ADB Safeguard Policy Statement, June 2009</div></div> <div><div>ii.</div><div>Applicable provisions in Loan Covenants of the Contract signed between ADB and NEA.</div></div> <div><div>iii.</div><div>EMP as incorporated in the Contract signed between NEA and the Contractor.</div></div> <div><div>iv.</div><div>Applicable EMP measures as provided in the ADB IEE.</div></div> <div><div>v.</div><div>Applicable EMP measures as provided in the IEE prepared by NEA for the project under consideration i.e. Dadakhet-Rahughat Transmission Line and Substations project.</div></div> <div><div>vi.</div><div>Applicable provisions in the RIPP prepared for the project under consideration.</div></div>	
		Contractor (RA)		Response In Black	
4.	General	TE+NEA (RA)	21/04/2022	The CEMP has not taken adequately into account the following aspects: <div><div>i.</div><div>Management of labor and working conditions</div></div> <div><div>ii.</div><div>Road safety and traffic management</div></div> <div><div>iii.</div><div>Community relations</div></div> <div><div>iv.</div><div>Community health and safety</div></div> <div><div>v.</div><div>Grievance redress mechanism - for employees, workers and community</div></div> <div><div>vi.</div><div>Gender aspects</div></div> <div><div>vii.</div><div>Biodiversity management / conservation</div></div>	Open
		Contractor (RA)		Response In Black	

Attachment #12 Comments on Environment Management Plan-Rev A DRTLSS

	Dadakhet - Rahughat 132 kV Transmission Line Project Comment Resolution Sheet (CRS)	
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Consultant's Letter Ref.:		P.019119/NEA/DRTLSS/091		Date:	May 01, 2022
Contractor's Transmittal Ref.:		LTCD/PTD/SS/NEA/DR/031		Date:	April 08, 2022
Doc./ Drawing Title:		Environment Management Plan			
Doc./ Drawing Ref. No.:		DRTLSS-EMP		Rev:	A
Latest Approval Status:		CAT- 3: Returned For Correction			
SI No.	Document Reference	Commented / Responded by	Date	Description of Comments	Open / Close
5.	General	TE+NEA (RA)	21/04/2022	Only mitigation measures are mentioned for most of the environmental attributes as included in the CEMP. Environmental monitoring measures as given in the CEMP are not adequate. For instance, monitoring plan is included only for air and noise (page 23 of 25). Further, for air quality monitoring, only SPM is taken as a parameter; other key parameters such as Sox, NOx and CO are not enlisted. Also, frequency of monitoring is not specified. No monitoring measures are specified for soil, drinking water quality, wastewater discharge, solid waste, hazardous waste, workers and community grievances, accidents and injuries, general housekeeping at site, workers accommodation and facilities etc.	Open
		Contractor (RA)		Response In Black	
6.	General	TE+NEA (RA)	20/04/2022	Report is silent on the following points with respect to Biological Environment. i. It does not include any measures related to the Biological environment mentioned and approved in IEE report for this section of the Transmission line. ii. Report does not have any budget component for executing the management works. iii. The IEE report includes budgetary provisions (74045 plants) for the Compensatory plantation and land replacement (Table 8-2) but is not reflected in the contractors Environmental Management Plan. iv. The IEE report includes budgetary provisions as "Estimated Cost for Forest Management" (Table 8-3) but is not reflected in the contractors Environmental Management Plan. v. The IEE report includes budgetary provisions for the NTFP Training	Open



Attachment #12 Comments on Environment Management Plan-Rev A DRTLSS

	Dadakhet - Rahughat 132 kV Transmission Line Project Comment Resolution Sheet (CRS)	
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Consultant's Letter Ref.:		P.019119/NEA/DRTLSS/091		Date:	May 01, 2022
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				(Table 8-5) but is not reflected in the contractors Environmental Management Plan. vi. The IEE report includes budgetary provisions for the Awareness program regarding biodiversity conservation (Table 8-6) but is not reflected in the contractors Environmental Management Plan.	
		Contractor (RA)		Response In Black	
7.	General	TE+NEA (RA)	20/04/2022	One presentation of ADB is attached. Requirement of ADB as mentioned in the presentation shall be included in ESMP.	Open
		Contractor (RA)		Response In Black	
8.	General	TE+NEA (RA)	20/04/2022	Sample template of CESMP is attached. Please revise your CESMP as per this template.	Open
		Contractor (RA)		Response In Black	
9.	General	TE+NEA (RA)	20/04/2022	2 nos. CESMPs of other projects are also attached. Please take help from these samples during revision of CESMP	Open
		Contractor (RA)		Response In Black	

Approval Status

Attachment #12 Comments on Environment Management Plan-Rev A DRTLSS

	Dadakhet - Rahughat 132 kV Transmission Line Project Comment Resolution Sheet (CRS)	TRACTEBEL 
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Approval Category	Approval Status	Details
CAT-1	APPROVED	The Contractor is authorised to proceed with manufacturing / Released for Construction Drawing.
CAT-2	APPROVED EXCEPT AS NOTED	<p>The Contractor is authorised to proceed with manufacturing / Released for Construction Drawing subject to the corrections with incorporation of all comments and resubmission for APPROVAL.</p> <p>Where the Contractor disagrees with or requires clarification of the Owner's comment then these must be resolved with the Owner before proceeding with the next revision</p>
CAT-3	RETURNED FOR CORRECTION	Documentation is significantly short of expected content or quality. Documentation to be resubmitted
CAT-4	INFORMATION	Drawings and documents for which detailed review / approval is not required.

“This approval shall not in any way relieve the Contractor of any part of his obligation to meet all the requirements of the Contract or of the responsibility for correction of the drawings/documents”