SEMI-ANNUAL ENVIRONMENT & SOCIAL SAFEGUARD MONITORING REPORT

(Reporting Period: January, 2019 to June, 2019)

North Eastern Region Power System Improvement Project (NERPSIP)

(The World Bank Project ID - P127974, Loan No. 8631-IN)

Prepared & Submitted by

Power Grid Corporation of India Ltd.

(Environment and Social Management Department)

ABBREVIATIONS

ADC	–	Autonomous District Council
APDCL	–	Assam Power Distribution Company Limited
AEGCL	–	Assam Electricity Grid Corporation Ltd.
APs	–	Affected Persons
CBIS	–	Capacity Building & Institutional Strengthening
CEA	–	Central Electricity Authority
CPTD	–	Compensation Plan for Temporary Damages
CPIU	–	Central Project Implementation Unit
CF	–	Conservator of Forest
DC	–	District Collector
DM	–	District Magistrate
DFO	–	Divisional Forest Officer
DPN	–	Department of Power Nagaland
E&S	–	Environmental and Social
EHV	–	Extra High Voltage
EIA	–	Environment Impact Assessment
ESMD	–	Environment & Social Management Department
ESPPF	–	Environment and Social Policy & Procedures Framework
EMP	–	Environmental Management Plan
FCA,1980	–	Forest (Conservation) Act, 1980
FEAR	–	Final Environment Assessment Report
GOI	–	Government of India
GRM	–	Grievances Redressal Mechanism
GRC	–	Grievance Redressal Committee
IA	–	Implementing Agency
IEAR	–	Initial Environmental Assessment Report
LA	–	Loan Agreement
CKT	–	Circuit Kilometers
MoEFCC	–	Ministry of Environment, Forest and Climate Change
MSPCL	–	Manipur State Power Company Limited
RMoEFCC	–	Regional Office of Ministry of Environment Forest & Climate Change
NOA	–	Notification of Award
NBWL	–	National Board for Wildlife
NO	–	Nodal Officer
NER	–	North Eastern Region
NERPSIP	–	North Eastern Region Power System Improvement Project
OPs	–	Operational Policies
PA	–	Project Agreement
PIU	–	Project Implementation Unit
POWERGRID	–	Power Grid Corporation of India Ltd.
PPEs	–	Personal Protective Equipments
PMU	–	Project Management Unit
RCE	–	Revised Cost Estimate

RoW	–	Right of Way
R& R	–	Rehabilitation and Resettlement
RRM	–	Random Rubble Masonry
SS	–	Substation
SPCU	–	State Project Coordination Unit
TPDP	–	Tribal People Development Plan
T & D	–	Transmission & Distribution (T&D)
TSECL	–	Tripura State Electricity Corporation Limited
USD	–	United States Dollar
WB	–	The World Bank

TABLE OF CONTENTS

Table

Plate

Figure

Appendix

Executive Summary

The North Eastern Region (NER) in India is endowed with rich energy resources but faces significant bottlenecks in its access and availability. To create/augment proper infrastructure/network of Transmission & Distribution (T&D) in the region, Government of India (GoI) with the financial assistance of the World Bank (WB) has planned a composite scheme viz. ***"North Eastern Region Power System Improvement Project" (NERPSIP).*** The scheme covers six North Eastern States including Meghalaya to create a robust power network by improving the intra-state transmission & distribution (33kV and above) network with required capacity building initiatives for effective utilization of assets. The GoI appointed **Power Grid Corporation of India Limited (POWERGRID),** the Central Transmission Utility of the country as the "Implementing Agency" (IA) to implement the project under Tranche-1 in close coordination with the respective State Governments/Utilities. However, the ownership of the assets shall be with the respective State Governments/ State Utilities, who will be responsible for operation and maintenance of assets once they are handed over to them upon progressive commissioning.

In order to ensure environmental and social sustainability of the project, POWERGRID assisted State Utilities in preparation and adoption of state specific **Environment and Social Policy & Procedures Framework (ESPPF)** based on the key principles of **Avoidance, Minimization & Mitigation,** In line with the provisions of ESPPF as well as frameworks agreed with Bank, various E & S safeguard documents such as **Initial Environment Assessment Reports (IEARs), Compensation Plan for Temporary Damages (CPTDs) and Final Environment Assessment Reports (FEARs)** etc. are prepared/being prepared and publically disclosed. The present Semi-Annual Safeguard Monitoring report enlisting details of compliance of various E & S safeguard measures for period January-June, 2019 is being submitted to Bank as part project agreement agreed with the Bank.

The Project components include construction of about 1401 km of new 220 kV/132 kV EHV lines & 34 nos. of associated 220 kV/132/66/33 kV substation, 2051 km of 33 kV distribution lines & 85 nos. associated 33/11 substations along with various augmentation/extension of existing substations and reconductoring of line works spread across all six States i.e. Assam, Meghalaya, Manipur, Tripura, Mizoram & Nagaland. The total project cost is Rs. 5111 Crore with financing from both GoI and Bank on 50:50 basis. The Bank is providing financial support to the tune of Rs $ 470 million (Rs 2511.165 crores) under the Loan No.-8631-IN which was signed on 28th November, 2016 and became effective from 20th February, 2017. The loan closing date is 31st March, 2023.

POWERGRID has been implementing the above project conforming to all applicable environmental and social legislations of the country as well as various conditions agreed with Bank under project & loan agreements. NER being a biodiversity rich area with very high tree density cover, routing of line and locating substation without involvement of forest and other ecologically sensitive areas posed a great challenge. However, inspite of best efforts, a total of 417.885 ha. (approx. 149.90 km) of forest in Tripura, Meghalaya, Mizoram and Manipur and 0.55 ha. Trishna Wildlife Sanctuary area in Tripura couldn't be avoided. As per regulatory requirement, clearance/permission for diversion of forest and wildlife area being obtained from Ministry of Environment, Forest & Climate Change (MoEFCC) under Forest (Conservation) Act, 1980 and Wildlife (Protection) Act, 1972 respectively.

As regard land for substation, all lands are secured either through purchase on willing-seller willing- buyer basis or already in possession of State Utilities. Since no involuntary acquisition is involved, social issues such as physical displacement, R & R etc. not envisaged in the instant project. However, for transmission line no land is acquired as per law of land but damages are compensated as per provisions of Electricity Act, 2003 and Indian Telegraph Act, 1885. POWERGRID is taking all possible efforts to avoid damage to standing crops and trees during construction of transmission lines, But in case of any damages , compensation is being paid to affected land owners/farmers for damage to standing crops/tree after due assessment of revenue authority/competent authority. Accordingly, a total of 85 persons were issued notices against crop area/tree damaged for which total compensation of Rs. 4.274 million were paid to affected farmers/land owners till reporting period. Similarly, a total amount of Rs. 71.821 million has already been paid to 439 affected persons towards land compensation for tower base in Assam Meghalaya and Nagaland.

The Project doesn't envisage significant impact on environmental attributes like air, water, soil etc. As anticipated, some impact like loss of vegetation due to clearing of the Right-of-Way (RoW) for lines and temporary impacts due to small scale construction activities in substation during construction period can never been avoided completely. The project specific mitigation measures enlisted in EMP, which is also part of contract documents are being applied appropriately in different stages of project and regularly monitored for proper implementation. In addition to implementation of EMP provisions, some site specific measures related to slope protection/stabilization (viz.retaining wall, toe wall, revetment wall, stone pitching, guard wall, bio-engineering measures etc), drainage (such as cross drainage, culverts), approach road and other protection measures etc are being undertaken/have been planned as per the site requirement/conditions and subsequent technical approval through committee.

As regard Safety, all required measures are in place including due precautions/ awareness programs as well as ensuring use of PPEs and regular monitoring which is evident from the fact that no accidents (fatal or non-fatal) including major/minor injuries were reported during the reporting period from any of the construction sites.

The two-tier grievance redress mechanism has been addressing/resolving the concerns and grievances of the complainant effectively. All concerns/grievances of affected persons/public including minor ones are also recorded and regularly tracked for early resolution within stipulated timeframe. It has been observed that most of these compliants are minor in nature which were also resolved instantly and there have been no court case or major complaints registered till date.

Public consultation & information dissemination is an indispensable part of project cycle. As stated in ESPPF, public consultation using different technique like Public Meeting, Small Group Meeting, informal Meeting are being carried out during different activities starting from planning to implementation stage. In case of Autonomous District Council (ADC) area, consultations are also being held with the respective village councils for identification of the landowner and obtaining their consent for the RoW. Besides, gender issues have also been addressed to the extent possible during such consultation process. Till reporting period, a total of 3271 persons participated in safeguard consultation process including 769 female participants, which is approx. 23.50% of total participants.

POWERGRID approach of project implementation in close co-ordination with respective State Utilities involving selection of optimum route before design stage, proper implementation of EMP and monitoring mechanism throughout project life cycle supported by strong institutional arrangement has considerably nullified the adverse impacts arising out of project activities. Besides, direct or indirect benefits of the Projects like the employment opportunity, improved & uninterrupted power supply, improvement in infrastructure facilities, improved business opportunity outweigh the negligible impacts of the project.

SECTION-1: INTRODUCTION

1.1 Introduction

The North Eastern Region (NER) in India is endowed with rich energy resources but faces significant bottlenecks in its access and availability. The per capita power consumption of NER is one third of the national average. To create/augment proper infrastructure/network of Transmission & Distribution (T&D) in the region, Government of India (GoI) with the financial assistance of the World Bank (WB) has planned a composite scheme viz. **"North Eastern Region Power System Improvement Project" (NERPSIP).** The scheme covers six North Eastern States (Assam, Meghalaya, Manipur, Tripura, Nagaland & Mizoram) to create a robust power network by improving the intra-state transmission & distribution (33kV and above) network with required capacity building initiatives for effective utilization of assets. The GoI appointed **Power Grid Corporation of India Limited (POWERGRID),** the Central Transmission Utility of the country as the "Implementing Agency" (IA) to implement the project under Tranche-1 in close coordination with the respective State Governments/Utilities. However, the ownership of the assets shall be with the respective State Governments/ State Utilities, who will be responsible for operation and maintenance of assets once they are handed over to them upon progressive commissioning. POWERGRID is also facilitating in building the institutional capacity of the state departments and utilities to continue managing the rehabilitated networks in an efficient manner.

The total project cost is Rs. 5111 Crore with financing from both GoI and Bank on 50:50 basis. The Bank is providing financial support to the tune of Rs $ 470 million (Rs 2511.165 crores) under the Loan No.-8631-IN which was signed on 28th November, 2016 and became effective from 20th February, 2017. The loan closing date is 31st March, 2023. The remaining financing including capacity building will be met through Govt. of India funding. Details of State wise funding is placed below;

State	World Bank	Government of India		Total
	Project Cost (Rs in Cr.)	Project Cost (Rs in Cr.)	Capacity Building (Rs in Cr.)	
Assam	729.485	729.485	14.83	**1473.803**
Manipur	213.690	213.690	14.83	**442.213**
Meghalaya	381.050	381.050	14.83	**776.933**
Mizoram	150.965	150.965	14.83	**316.763**
Nagaland	357.290	357.290	14.83	**729.413**
Tripura	678.685	678.685	14.83	**1372.203**
Sub Total	2511.165	2511.165	89	**5111.33**
Total	**2511.165**	**2600.165**		

In order to ensure Environmental and Social (E&S) sustainability of the project, POWERGRID assisted all State Utilities in preparation and adoption of state specific **Environment and Social Policy & Procedures Framework (ESPPF)** based on the key principles of **Avoidance, Minimization & Mitigation,** that will serve as management framework for identification, assessment and management of environmental and social concerns at both organizational as well as project levels. In line with the ESPPF and Loan agreement with Bank, various E & S safeguard

documents such as **Initial Environment Assessment Reports (IEARs), Compensation Plan for Temporary Damages (CPTDs) and Final Environment Assessment Reports (FEARs) etc.** are prepared/being prepared and publically disclosed. The present Semi-Annual Safeguard Monitoring report covering the detail status of compliance of various E & S safeguard indicators for period January-June 2019 is being submitted to Bank as per agreed framework.

1.2 Project Description

The state wise scope of works proposed under Tranche-1 transmission scheme is given below:

	Transmission/ Sub-transmission (132kV & above)			Distribution (33kV)		
	Line (Km)	**New S/s (No.)**	**Total MVA (New & Aug.)**	**Line (Km)**	**New S/s (No.)**	**Total MVA (New & Aug.)**
Assam	233	11	1644	479	16	240
Manipur	254	2	160	131	13	229.4
Meghalaya	225	4	940	263	11	135
Mizoram	143	3	125	5	1	6.3
Nagaland	285	5	245	76.5	10	190
Tripura	261	9	1306.5	1096	34	450.5
Total	**1401**	**34**	**4420.5**	**2051**	**85**	**1251.2**

1.3 Progress and Implementation Schedule

The details of package wise award status and physical progress of project implementation till June'19 as well as completion schedule is provided below:

Sl. No	Package No.[1]	Lines/Substations Scope covered under Pkg.	Date of Award	Schedule Completion as per NOA	Physical Progress (in %) as on 30 June'19
ASSAM					
1	TW 02	1 no. 220 kV Line (55 km)	10 Oct' 17	Apr'20	37%
2	TW 04	1 no. 132 kV line (36 km)	8 Sept'17	Mar'20	30%
3	TW 05	1 no. 132 kV line (53 km)	1 Sept'17	Mar'20	40%
4	TW 07	1 no. 220 kV (33 km) & 7 nos. 132kV line (53 km)	30 May'18	Nov'20	6%
5	P 01	Pile foundations	18 Sept'17	Mar'20	35%
6	SS 01	2 nos. new 132/33 kV, 2 nos. Ext. & 1 no. Aug of 132/33 kV substation	12 Aug'16	Aug'19	52%
7	SS 02	1 no. new 220/132 kV & 3 nos. of new 132/33 kV and 2 nos. Ext. of substation.	12 Aug'16	Aug'19	47%
8	SS 03	2 nos. new 132/33 kV, 2 nos. Ext. & 1 no. Aug of 132/33 kV substation.	12 Aug'16	Aug'19	40%

[1] Other three packages i.e. OPGW live line stringing (OPGW 01), Transformer (TR1) and Tele Equipment have also been awarded but not included in the above list as these are not directly relevant.

9	SS 04	3 nos. new substations (1no. 220/132/33kV & 2 nos132/33kV) and 1 no. Extn. of 132/33 kV substation	6 May'16	Mar'19	31%
10	DMS 01	4 nos. new 33/11kV substation & 7 nos. 33 kV lines (119 km).	8 Sept'16	Jun'19	50%
11	DMS 02	3 nos. new 33/11kV substation & 11 nos. 33 kV lines (146 km)	20 Oct'16	Jul'19	35%
12	DMS 03	5 nos. new 33/11kV substation & 9 nos. 33 kV lines (134 km)	23 Dec'16	Sept.'19	38%
13	DMS 04	4 nos. new 33/11kV substation & 11 nos. 33 kV Underground cable lines (80 km)	23 Dec'16	Sept'19	42%
MANIPUR					
14	TW 06	4 nos. 132 kV line (85 km) & renovation of 1 no. existing 132 kV line (91 km) and stringing of 2nd circuit in existing 132 kV line (78 km)	31 May'18	Nov'20	10%
15	SS 01	1 no. new 132/33 kV & 2 nos. Ext./Aug. of substations.	3 Jan'18	July'20	10%
16	SS 02	4 nos. Ext. & 1 no. Aug. of 132/33 kV substation.	8 Dec'17	Jun'20	13%
17	SS03	1 no. new 132/33 kV & 1 no. Ext & 1 no. Aug. of 132/33 kV substation.	3 Jan'18	July'20	9%
18	DMS 01	7 nos. new 33/11kV substation & 7 nos. 33 kV lines (68 km)	3 Mar'17	Aug'19	48%
19	DMS 02	2 nos. new 33/11kV substation & 2 nos. 33 kV lines (20 km)	16 Dec'16	Sep'19	60%
20	DMS 03	2 nos. new 33/11kV substation & 2 nos. 33 kV lines (23 km)	18 Mar'16	Dec'18	85%
21	DMS 04	2 nos. new 33/11kV substation & 2 nos. 33 kV lines (20 km)	18 Mar'16	Dec'18	80%
MEGHALAYA					
22	TW 01	1 no. 220kV line (122 km)	29 Jun'16	Jun'19	38%
23	TW 02	2 nos. 132kV line (103 km)	29 Jun'16	Jun'19	68%
24	SS 01	2 nos. new & 1 no. Ext. of 132/33 kV substation.	12 Aug'16	Aug'19	50%
25	SS 02	2 nos. new 1 no. Ext. of 220/132 kV substation	6 Jun''16	Apr'19	55%
26	DMS 01	4 nos. new 33/11kV substation & 4 nos. 33 kV lines (56 km)	13 July'16	Apr'19	63%
27	DMS 02	3 nos. new 33/11kV substation & 6 nos. 33 kV lines (63 km)	27 May'16	Feb'19	62%
28	DMS 03	4 nos. new 33/11kV substation & 7 nos. 33 kV lines (79 km)	17 May'16	Feb'19	65%
TRIPURA					
29	TW 01	4 nos.132 kV lines (87 km)	12 June'17	Feb'20	7%
30	TW 02	5 nos.132 kV lines(112 km)	12 June'17	Feb'20	6%
31	TW 03	5 nos.132 kV lines (62 km)	12 June'17	Feb'20	6%
32	SS 01	4 nos. new 132/33 kV	4 Nov'16	Nov'19	50%

		substation.			
33	SS 02	2 nos. new & 1 each Ext. and Aug. of 132/33 kV substation.	4 Nov'16	Nov'19	50%
34	SS03	3 nos. new & 1 no. Ext. & 3 nos. Aug. of 132/33 kV substation.	4 Nov'16	Nov'19	45%
35	DMS 01	7 nos. new 33/11kV substation & 9 nos. 33 kV lines (121 km)	20 Feb'17	Nov'19	33%
36	DMS 02	6 nos. new 33/11kV substation & 11 nos. 33 kV lines (181 km)	20 Jan'17	Oct'19	33%
37	DMS 03	5 nos. new 33/11kV substation & 11 nos. 33 kV lines (137 km)	20 Feb'17	Nov'19	28%
38	DMS 04	10 nos. new 33/11kV substation & 17 nos. 33 kV lines (198 km)	20 Jan'17	Oct'19	36%
39	DMS 05	6 nos. new 33/11kV substation & 9 nos. 33 kV lines (128 km)	20 Feb'17	Nov'19	35%
MIZORAM					
40	TW 01	3 nos.132kV lines (84 km)	20 Sept'17	Mar'20	11%
41	SS 01	1 no. new & 1 no. Ext. of 132/33 kV substation.	2 Nov'17	May'20	10%
42	SS 02	3 nos. new 132/33kV & 1 no. new 33/11 of substation. 1 no. 132kV line (50 km) & 1 no 33kV line (5 km)	13 Oct'17	Apr'20	10%
NAGALAND					
43	TW 01	1 no. 220kV line (92 km)	20 Sept'17	Mar'20	13%
44	TW 05	1 no. 132kV line (28 km)	21 Sept'17	Mar'20	10%
45	TW 06	5 nos. 132kV lines(165 km)	31 May'18	Nov'20	7%
46	SS 01	2 nos. new 132/33 kV substation.	5 Dec'17	Jun'20	5%
47	SS 02	1 no. new 132/33 kV & 3 nos. ext. of substation.	30 Nov'17	May'20	8%
48	SS 03	1 no. new 132/33 kV & 1 no. ext.(220/132 kV) of substation	14 Dec'17	Jun'20	8%
49	SS 04	1 no. new & 1 no. ext. of 132/33 kV substation	13 Dec-17	Jun'20	8%
50	DMS 01	2 nos. new 33/11kV substation & 2 nos. 33 kV lines (2.5 km)	12 Feb'18	Nov'20	8%
51	DMS 02	3 nos. new 33/11kV substation & 6 nos. 33 kV lines (59 km)	11 Jan'18	Oct'20	8%
52	DMS 03	3 nos. new 33/11kV substation & 2 nos. 33 kV lines (5 km)	22 Sep'16	Jun'19	65%
53	DMS 04	2 nos. new 33/11kV substation & 1 no. 33 kV lines (10 km)	22 Sep'16	Jun'19	58%

SECTION-2: COMPLIANCE TO E & S COVENANTS OF LOAN AGREEMENTS

The various safeguard covenants specified in the agreed Loan Agreement and Project Agreement under the subject loan has been complied and detail of compliance status against such covenants is presented in below;

Description of Covenants	Reference	Status of Compliance
Loan Agreement (LA)		
The Borrower shall make its best efforts to ensure that the Participating States: (a) carry out the their responsibilities under the SS-ESPPFs, IEARs, RAPs, EMPs, CPTDs and/or TPDPs (the "Safeguards Documents") prepared, and/or to be prepared and publicly disclosed, as required, by the Project Implementing Entity and/or the Respective Power Utilities/ Departments, as the case may be, pursuant to paragraph 2 of Section I.E. of the Schedule to the Project Agreement, in each case in a manner and in substance satisfactory to the Bank; (b) ensure that the Respective Power Utility/Department complies with the applicable Safeguard Documents as well as any related obligations set forth in the respective Implementation/ Participation Agreement; and (c) refrain from taking any action which would prevent or interfere with the Project Implementing Entity's and/or the Respective Power Utility/Department's, implementation of the Safeguard Documents, including any amendment, suspension, waiver, annulment and/or voidance of any provision of such documents, whether in whole or in part, without the prior written agreement of the Bank.	LA, Schedule-2, Section-I (D)	These covenants are being complied as part of Project Agreement and Separate Agreements with IA & State Utilities
Project Agreement (PA)		
The Project Implementing Entity shall: (a) carry out the Project in accordance with the SS-ESPPFs, IEARs, EMPs, the RAPs, CPTDs and TPDPs prepared, and/or to be prepared in form and substance satisfactory the Bank, pursuant to paragraph 2 of	PA, (Schedule), Section- I, E, Para 1	Complied/Being Complied. RAPs and TPDPs not applicable. All others safeguard documents prepared/being prepared. For details refer **Table-1**.

Description of Covenants	Reference	Status of Compliance
this sub-section, in accordance with the objectives, policies, procedures, time schedules, compensation arrangements and other provisions set forth in the SS-ESPPFs (together, the "Safeguard Documents"), in each case in a manner and in substance agreed with the Bank; (b) make its best efforts to ensure that the Participating States and their respective Power Utilities/ Departments carry out their responsibilities under their respective Implementation/ Participation Agreements in accordance with the objectives, policies, procedures, time schedules, compensation arrangements and other provisions set forth in their respective SS-ESPPFs, IARs, EMPs, RAPs, CPTDs and TPDPs; and (c) refrain from taking any action which would prevent or interfere with the implementation of the Safeguard Documents by any of the Participating States, their Respective Power Utilities /Departments and/or the Project Implementing Entity itself, including any amendment, stay, suspension, waiver, annulment and/or voidance of any provision of the Safeguard Documents, whether in whole or in part, without the prior written agreement of the Bank.		Being complied. No such safeguard issues encountered till reporting period. Will be complied if such situation warrants.
With respect to each transmission line, substation or distribution network to erected/built be or augmented under Component A of the Project, the Project Implementing Entity shall refrain from commencing any civil works or undertaking any activities ancillary thereto, until and unless: (a) the proposed activities/civil works have been screened by the Project Implementing Entity (in coordination with the respective SPCU), in accordance with the guidelines, standards and procedures set forth in the SS-ESPPF of the Participating State in which the asset will be located;		Complied/ Being complied.

Description of Covenants	Reference	Status of Compliance
(b) the respective IEAR(s), EMP(s), RAP(s), CPTD(s) and/or TPDP(s), as required for such transmission line, substation or distribution network, pursuant to the applicable SS-ESPPF has/have been prepared and submitted to the Bank for review; and the Bank has notified the Project Implementing Entity and/or the Participating States in writing of its no objection thereto; and (c) the foregoing Safeguard Documents have been publicly disclosed by the Project Implementing Entity and the Participating States (through it Respective Power Utility /Department), in local language(s) at the relevant Project's sites, at least thirty (30) days prior to the award of the contract for the related works	PA, (Schedule), Section- I, E, Para 2	Complied/Being Complied. For details refer **Table-1**. Complied/Being Complied. All approved safeguard reports stand disclosed publically on website of POWERGRID & State Utilities. Below is the link to access such reports; https://www.powergridindia.com/ner-agreements-and-mous
Prior to commencing any civil works for any transmission line, substation or distribution network under Component A of the Project, the Project Implementing Entity shall ensure that: (a) all necessary governmental permits and clearances for such civil works for such transmission line, substation or distribution network shall have been obtained from the competent governmental authority lies and submitted to the Bank; (b) all pre-construction conditions imposed by the governmental authority lies under such permit(s) or clearance(s) shall have been complied with/fulfilled; and (c) all resettlement measures for the respective transmission/distribution substation, set forth in the applicable RAP shall have been fully executed, including the full payment of compensation for the land prior to displacement and/or the provision of relocation assistance to all APs, as per the entitlements provided in the SS-ESPPF and/or the applicable RAP.	PA, (Schedule), Section- I, E, Para 3	Complied/ Being complied. Refer in **Table- 2** for details of forest/ wildlife clearances along with their present status
Prior to commencing any civil works under a transmission line, the respective CPTD plan including the compensation and payment schedule thereunder shall have been agreed with the Bank.	PA, (Schedule), Section- I, E, Para 4	Complied/ Being complied. Total 10 nos. CPTD stand submitted to Bank. Remaining CPTDs are being prepared matching with completion of detail survey of TLs. For details refer **Table-1.**

Description of Covenants	Reference	Status of Compliance
The Project Implementing Entity shall ensure that each contract for civil works under the Project includes the obligation of the relevant contractor to comply with the relevant Safeguard Documents applicable to such civil works commissioned/awarded pursuant to said contract.	PA, (Schedule), Section- I, E, Para 5	Complied/Being complied.
The Project Implementing Entity shall: (a) maintain monitoring and evaluation protocols and record keeping procedures agreed with the Bank and adequate to enable the Project Implementing Entity and the Bank to supervise and assess, on an ongoing basis, the implementation of/compliance with the Safeguards Documents, as well as the achievement of the objectives thereof; (b) furnish to the Bank, throughout the period of Project implementation quarterly reports, assessing compliance with the Safeguard Documents, monitoring the efficacy of the social and environmental management measures, and evaluating the results of the mitigation or benefit enhancing measures applied; and (c) unless otherwise agreed with the Bank, engage independent consultants with qualification and experience, and under terms of reference agreed with the Bank, in order to: (i) carry out by no later than: (A) one hundred twenty (120) days as of completion of stage I clearances under the Forest (Conservation) Act, 1980 if the activities involve designated forest land; or (B) six (6) months after the contractors' completion of the detailed survey for final placement/route alignment for any civil works, in the case of activities not involving designated forest land, a final environmental assessment report ("FEAR") setting forth the actual impact of Project activities, the results of stakeholders	PA, (Schedule), Section- I, E, Para 6	Complied/ Being complied. Quarterly Progress Reports including updates on safeguards indicators & forest clearances being submitted to the Bank on a regular basis. The instant report is a comprehensive report exclusively on E & S safeguard issues which has been prepared at every six months and submitted to Bank as per agreed framework. Being Complied. Independent Consultants for FEAR already appointed for Meghalaya, Assam Tripura & Mizoram States. For remaining States, the identification/ appointment of consultant is under progress matching with agreed timeline. For details refer **Table-1**

Description of Covenants	Reference	Status of Compliance
consultations, the clearances obtained and status of compliance with any conditions attached therewith, and the mitigation processes/measures taken or set in place to minimize or avoid any negative environmental impact of Project activities, all in accordance with the processes and requirements set forth in the respective SS-ESPPF(s) and IEAR(s); and (ii) thereafter, within fifteen (15) days of completion of each such FEAR: (A) submit such reports to the Bank for consideration and disclosure by the Bank, and (B) thereafter publicly disclose such reports in a similar fashion as the disclosure of the Safeguard Documents		Draft FEAR report for Garo Hills Districts, Meghalaya revised by Consultant as per Joint meeting held on 7 May 2019 at Guwahati and submitted to Bank on 6 June 2019 for review. As per observations of Bank, report is being revised and to be submitted shortly by Consultant. As regard FEAR for Assam & Tripura, a joint meeting was held at Bank Office on 10 June 19 with the Consultant M/s Green Circle to discuss/ deliberate on methodology and progress of FEAR preparation. As per discussion, a detailed presentation on methodology adopted was shared with POWERGRID & Bank. Draft FEAR reports for Assam, Tripura under preparation and shall be shared in Sept.'19 by the Consultant.
The Project Implementing Entity shall make its best efforts to ensure that each participating State has established by no later than three (3) months after the Effective Date, and thereafter maintains and operates throughout the period Project of implementation, a grievance redress mechanism as incorporated in SSESPPF and agreed by the Bank for the handling of any stakeholder complaints arising out of the implementation of Project activities.	PA, (Schedule), Section- I, E, Para 7	Complied/ Being complied. HQ and Site Level GRC have been constituted by all State Utilities. However, representation from local administration & Panchayat /village council for Site Level GRC to be nominated by State Utilities except Mizoram and partly in case of Assam & Meghalaya.

In the event of any conflict between any of the provisions of any of the SSESPPFs, IEAR(s), EMP(s), RAP(s), CPTD(s) and/or TPDP(s), on the one hand, and any of the provisions of this Agreement or the Loan Agreement, on the other hand, the provisions of this Agreement and the Loan Agreement shall prevail.	PA, (Schedule), Section-I, E, Para 8	No such event occurred till reporting period. Will be complied if such situation warrants. .

Table – 1 : Status of preparation & disclosure of E & S Safeguard Documents

State	SS-ESPPF (Date of Disclosure)	Status of Safeguard Documents (Date of Approval/Disclosure)			
		Subprojects District & Brief Scope of works	IEAR	CPTD	FEAR
Assam	29th June 2015	**Dhemaji** 1 no. 132kV & 2 nos. 33kV line, 1 no. each 132/33kV & 33/11kV substation	13 May 2015	22 June 2018	M/s Green Circle Inc., Vadodara appointed as Independent Consultant for FEAR preparation on 31 Dec 2018. Consultant submitted first Draft reports on 10 May 2019. Since the quality of reports were not up to the mark and preliminary one POWERGRID suggested to revise the report as per ToR. Subsequently a joint meeting was oragnized with Consultant at Bank Office on 10 June 19 to discuss/ deliberate on methodology and progress of FEAR preparation. As per discussion, a detailed presentation on methodology adopted was shared with POWERGRID &
		Tinsukia & Dibrugarh 1 no. each 220kV & 132 kV and 4 nos. 33 kV line, 2 nos. 132/33kV & 3 nos. 33/11 kV substation	8 July 2015	3 Oct. 2018	

					Bank. Draft FEAR reports for Assam under preparation and expected to be submitted in Sept.'19 by the Consultant.
		Kamrup 2 nos. 132kV & 11 nos. 33 kV Underground line, 2 nos. 132/33 kV & 5 nos. 33/11 kV substation	20 July 2015	N.A. (UG lines only)	Identification/ finalization of Independent Agency under progress.
		Kamrup Rural, Udalguri & Sonitpur 1 no. 220 kV, 5 nos.132 kV & 12 nos. 33 kV line, 1 no. 220/132kV, 3 nos. 132/33 kV & 5 nos.33/11 kV substation	14 July 2015	CPTDs under preparation	
		Golaghat, Nagaon, Jorhat, Sibsagar & Karbi-Anglong 2 nos.132kV & 8 nos. 33kV line, 2 nos. each 132/33kV & 33/11 kV substation	27 July 2015		
Manipur	17th August 2015	**Imphal West, Senapati & Bishnupur** 2 nos.132kV & 5 nos. 33kV line, 1 no.132/33kV & 5 nos. 33/11kV substation	15 June 2015	CPTDs under preparation	Identification/finalization of Independent Agency under progress.
		Imphal East, Churachandpur, Thoubal & Tamenglong Strg. of 2 nos.132 kV & reno. 1 no.132kV & 7 nos.33kV line, and 5 nos. 33/11 kV substation	23 July 2015		
		Imphal West, Imphal East & Tamenglong 1 no. 132kV & 3 nos. 33kV line, 1 no. 132/33 kV, 3 nos. 33/11kV substation	8 Jan. 2015		
Meghalaya	29th June, 2015	**West Garo Hills & South West Garo Hills** 1 no. 132kV & 6 nos. 33kV line, 1 no. 132/33kV & 3 nos. 33/11kV substation	5 May 2015	22 June 2018	Draft FEAR report for Garo Hills Districts, Meghalaya revised by Consultant as per

		Ri-Bhoi and East Khasi Hills 1 no. 220kV & 5 nos. 33kV line, 1 no. 220/132/33kV & 4 nos. 33/11kV substation	7 July 2015	Draft Report submitted to Bank. However, report being revised incorpor-ating Bank's observa-tions	Joint meeting held on 7th May 2019 at Guwahati and report submitted to Bank on 6th June 2019 for review. As per observations of Bank, report is being revised and to be submitted shortly by Consultant.
		East Jaintia Hills (1 no. 132kV & 4 nos. 33kV line, 1 no. 132/33kV & 4 nos. 33/11kV substation)	15 June 2015	19 Oct 2018	
Tripura	17th June, 2015	**Gumti & South Tripura** (5 nos. 132kV & 4 nos. 132/33 kV substation)	15 Apr 2015	29 Dec. 2018	M/s Green Circle Inc., Vadodara appointed as Independent Consultant for FEAR preparation on 31 Dec 2018. Consultant submitted first Draft reports on 10 May 2019. Since the quality of reports were not up to the mark & preliminary one POWERGRID suggested to revise the report as per ToR. Subsequently a joint meeting was oragnized with Consultant at Bank Office on 10 June 19 to discuss/ deliberate on methodology and progress of FEAR preparation. As per discussion, a detailed presentation on methodology adopted was
		West Tripura, South Tripura, Sepahijala & Khowai (4 nos.132kV & 24 nos.33kV line, 3 nos. 132/33kV & 15 nos 33/11kV substation)	18 July 2015	3 Sept. 2018	
		Dhalai, North Tripura & Unakoti (2 nos.132kV & 8 nos. 33kV line, 1 no. 132/33kV & 6 nos. 33/11kV substation)	13 July 2015	15 Oct. 2018	
		Gumti & South Tripura (19 nos. 33kV line, 1 no. 132/33kV & 14 nos. 33/11kV substation)	27 July 2015	Draft Report submitted to Bank. However, report being revised incorpo-rating Bank's observa-tions.	

					shared with POWERGRID & Bank. Draft FEAR reports for Tripura under preparation and expected to be submitted in Sept.'19 by the Consultant.
Mizoram	7th July, 2015	**Lunglei & Lawngtlai** (2 nos. 132kV & 1 no. 33kV line, 1 no. each 132/33kV & 33/11kV substation)	17 June 2015	Draft Report submitted to Bank. However, report being revised incorporating Bank's observations	M/s Green Circle Inc., Vadodara appointed as Independent Consultant for FEAR in April' 2019. Consultant has already mobilized for Site Visit & Data Collection
		Mamit 1 no. 132kV & 33kV line, 2 nos. 132/33kV substation)	26 July 2017	Under Preparation	
Nagaland	10th July, 2015	**Tuensang & Longleng** (1 no. 132kV & 33kV line, 1 no. 132/33kV substation	13 May 2015	Under preparation	Identification/ finalization of Independent Agency is in advance stage.
		Mokokchung, Kohima, Dimapur, Phek, Wokha, Zunheboto, Mon 6 nos.132kV & 10 nos. 33kV line, 4 nos. 132/33kV & 9 nos. 33/11kV substation	27th July 2015	Detailed survey yet to be completed for all TLs	

SECTION-3: COMPLIANCE STATUS WITH ENVIRONMENT MANAGEMENT PLAN

3.1 Implementation of Environmental Management Plan

The instant project is being implemented as per approved Initial Environment Assessment Reports which have been prepared based on framework agreed under SS-ESPPFs and Bank Operational Policies (OP 4.01: Environmental Assessment). Accordingly, a total of 19 nos. of IEARs along with Environmental Management Plans (EMP) enlisting various mitigation measures were prepared and subsequently disclosed to ensure that all the identified/ possible environment impacts due to the instant project intervention are minimized to the extent possible. The EMP describes detailed site-specific mitigation measures including monitoring indicators with responsibility allocation in different stage of project cycle. i.e. pre-construction, construction, and operation & maintenance phase. For ensuring proper and effective implementation of various measures of EMP even by associated contractors, EMP has also been made part of contract condition/document. Additionally, budget provisions of Rs. 203.73 Crores has been included in cost estimate apart from additional requirement of Rs. 20 Crores proposed under Revised Cost Estimate (RCE) for site specific measures identified during course of project implementation. The total E & S management cost is approximately 4.45 % overall project cost.

Further, monitoring the implementation of environmental mitigation measures is required to ensure that these are undertaken in accordance with provisions of IEA/EMP and as per relevant contract conditions. A summary of the environmental and social mitigation measures and monitoring requirements vis-à-vis compliance status is given in **Appendix-1**.

3.1.1. Status of required clearances, permits and approvals

It is an established fact that power transmission projects activities are non-polluting in nature and do not involve disposal of any pollutant in land, air, water or any large scale excavation resulting in soil erosion and its contribution towards environmental pollution is minimal. Due to this transmission projects were kept out of the purview of different pollution laws as well as exempted from the requirement of environmental clearance under Environment Impact Assessment (EIA) Notification of 1994 and 2006. However, the major environment regulation applicable to instant project is prior approval under Forest (Conservation) Act, 1980 from Ministry of Environment, Forests and Climate Change (MoEFCC) wherever the line is passing through notified forest area. Similarly, permission of National Board for Wildlife (NBWL) is a statutory requirement under Wildlife (Protection) Act, 1972 for all non-forest activities in protected areas (National Parks, Wildlife Sanctuary etc.).

Accordingly, all necessary approval/permits in respect to above applicable environment laws and regulations are being complied. The status of forest and wildlife clearance for various subprojects till June'19 is presented below in **Table- 2**;

Table- 2: Details of Package Wise Forest/Wildlife Clearance Status

Pkg. No.	Name of the Line/Substation	Line Length (In km)	Forest (In Ha.)/ Type	Status/Remarks
	ASSAM			
TW02	220 kV D/c Tinsukia-Behiating	55	Nil	

Pkg. No.	Name of the Line/Substation	Line Length (In km)	Forest (In Ha.)/ Type	Status/Remarks
TW04	132 kV S/c Dhemaji-Silapathar	36	Nil	
TW05	132 kV S/c Rupai-Chapakhowa	53	Nil	
TW07	220 kV D/C Rangia-Amingaon	33	Nil	
	132 kV D/c Amingaon-Hazo	16		
	LILO 132 kV S/c Rangia-Rowta	10		
	LILO132kVS/c Kamalpur-S'gram	1		
	LILO132kVS/c K'pur-Khamakhya	1		
	LILO 132kV S/c Golaghat-Bokajan at Sarupathar	5		
	132 kV D/c Sonabil-Tezpur	15		
	LILO 132 kV S/c Jorhat-Nazira	5		
DMS01	33 kV Silapathar - Silapathar-II	35	Nil	
	33 kV Silapathar - Silapathar	5		
	33 kV Samaguri - Hathimurah-2	30		
	33 kV Tezpur - LGM Hospital	7		
	33 kV Tezpur- Parowa	7		
	33 kV Tezpur - Dolabari	5		
	33 kV Shankardeo Nagar-Mailo	30		
DMS02	33 kV Behiating - Bogibil	10	Nil	
	33 kV Behiating - Dibrugarh	15		
	33 kV Dibrugarh - Romai	17		
	33 kV Chapakhowa – C'khowa	10		
	33 kV Sarupathar -Barapathar	12		
	33 kV Sarupathar - Sarupathar	5		
	33 kV Sarupathar - Sariajhan	20		
	33 kV Teok -Teok	5		
	33kV Teok - Kakojaan	15		
	33kV Teok - Zangi	15		
	33kV Teok - Pragati	22		
DMS03	33kV Tangla - Harsingha	12	Nil	
	33kV Tangla - Paneri	20		
	33kV Tangla - Kalaigaon	20		
	33kV Tangla -Khairabari	10		
	33kV Tangla - Tangla	10		
	33kV Hazo - Sesa	15		
	33kV Hazo - Ramdiya	12		
	33kV Hazo -Domdoma-hazo	10		
	33kV Hazo - Mukalmuwa	25		
DMS04	33kV(UG Cable) GMC-GS Road	14	Nil	
	33kV (UG) GMC -GMC-2	10		
	33kV (UG) GMC-Tarun Nagar	10		
	33kV (UG) GMC- Arya College	12		
	33kV (UG) GMC- GMC	5		
	33kV (UG) GMC- Ullubari	10		
	33 kV (UG) P'bazar-Chabipool	4		
	33kV (UG) Paltanbazar-P'bazar	2		
	33kV (UG) Paltanbazar-J' field	5		
	33kV (UG)Paltanbazar-F'bazaar	4		
	33kV (UG) P'bazar - Ullubari	4		

Pkg. No.	Name of the Line/Substation	Line Length (In km)	Forest (In Ha.)/ Type	Status/Remarks
	MANIPUR			
TW06	Renovation of 132kVY'bam-Karong-Kohima	91	Nil	
	LILO132 kV S/c Y'bam -Karong	6		
	LILO of 132kV D/c Kongba-Kakching	16		
	Stringing (2nd Ckt.) of 132 kV D/c Yaingangpokpi – Kongba	45		
	Strg.132kV Kakching-Kongba	33		
	132 kV D/c Imphal – Nin'khong	34		
	132 kV S/c Rengpang-Tamenglong	29	56.833/ Un-classed Forest	Forest proposal submitted on 25.10.18. Proposal after formulation by Divisional Forest Officer (DFO), Tamenglong forwarded to Conservator of Forest (CF) on 27.05.19 & subsequently to Nodal Officer (NO) on 16.06.19. Presently proposal with Govt. of Manipur for further recommendation of to RMoEFCC.
SS3	132/33 kV Tamenglong		1.831/ Un-classed Forest	Forest proposal submitted on 29.05.19. Proposal forwarded to DFO, Tamenglong on 28.06.19 for formulation.
DMS01	33kV Andro-Yairipok	15	Nil	
	33kV M'sangei-Pishum(UG+OH)	10		
	33kV Mongsangei -Hiyangthang	4		
	33kV Iroisemba - Takyel	7		
	33kV Top Khongnangkhong-Porompat	7		
	33kV Iroisemba - Lamphel	10		
	33kV LILO Y'bam-Noney at Keithelmanbi	15		
	33/11kV Top Khongnangkhong substation		0.283 Reserve Forest (RF)	Forest proposal submitted on 20.02.18. Proposal forwarded to DFO on 19.10.18. Presently under formulation at DFO, Imphal.
DMS02	33kV Moirang- Kwakta	10	Nil	
	33kV Nambol - Leimapokpam	10		
DMS03	33kV Sanjenbam -Porompat	3	Nil	
	33kV Khoupom - Thangal	20		
	33/11kV Porompat substation		0.27 Reserve Forest (RF)	Stage-I & Stage-II (final) approval obtained on 18.02.17 & 30.05.17 respectively.
DMS04	33kV Napetpalli - Sanjenbam	10	Nil	
	33 kV LILO Copur-Singhat at Tuiliphai	10		

Pkg. No.	Name of the Line/Substation	Line Length (In km)	Forest (In Ha.)/ Type	Status/Remarks
	MEGHALAYA			
TW01	220 kV D/c Byrnihat-Mgap-New Shillong	122	45.09/ Forest as per dictionary meaning	No Reserve forest involved. However, requirement of forest clearance under Forest (Conservation) Act, 1980 was necessited based on tree density after completion of tree enumeration Accordingly, forest proposal submitted on 06.04.19. Proposal under formulation with DFO, Khasi Hills since 19.06.19.
TW02	LILO132kV MLHEP-Khliehriat at Mynkre	34	11.566/ Forest as per dictionary meaning	Forest proposal for Loop In (4.85 ha.) and Loop Out (6.716 ha.) section submitted on 22.01.19 & 23.01.19 respectively. After formulation DFO, Jaintia Hills forwarded the proposal to CF on 11.07.19.
	132 kV D/c Phulbari-Ampati	50.10	Nil	
DMS01	33kV Mynkre - Mynkre	6	Nil	
	33kV Mynkre - Rymbai	15		
	33kV Mynke - Lumshnong	10		
	33kV Mynkre - Latykre	25		
DMS02	33kV Phulbari-Rajballa Bhaitbari	10		
	33kV Phulbari - Chibinang	6		
	33kV Tikrila - Raksambre	35		
	33kV Phulbari-Phulbari	6		
	33kV LILO Tikrila-Phulbari	6		
DMS03	33kV New Shillong - Mawpat	25	Nil	
	33kV SE Falls - Mawpat	10		
	33kV New Shillong -N. Shillong	6		
	33kVN.Shillong- Mawryngkneng	26		
	33kV LILO Jowai-L'krem	4		
	33kV Jongksha-Mawkynrew	8		
	TRIPURA			
TW01	132 kV D/c Bagafa-Belonia	14	2.5118/ Un-classed	Stage-I approval obtained on 30.10.18.Working permission obtained on 07.05.19.
	132 kV D/c Belonia-Sabroom	42	25.5204 RF	Stage-I approval obtained on 28.06.18.Working permission obtained on 07.05.19.
	132 kV S/c Bagafa-Satchand	40	9.1503/ RF	Stage-I approval obtained on 12.10.18. Issue of working permission under progress.
	132kV S/c S'room-S'chand at S'room	1	Nil	
	132kV S/c S'room-S'chand at S'chand	1	Nil	

Pkg. No.	Name of the Line/Substation	Line Length (In km)	Forest (In Ha.)/ Type	Status/Remarks
TW02	132 kV D/c Udaipur-Bagafa	32	26.77/ RF	Stage-I approval obtained on 09.04.18.Working permission obtained on 07.05.19.
	132 kV D/c Rabindranagar-Belonia	40	74.9493 / RF	Stage-I approval obtained on 12.04.19. Issue of working permission under progress.
	132 kV D/c Rabindranagar-Rokhia	24	21.1896 / RF	Stage-I approval obtained on 28.06.18.Working permission obtained on 15.05.19.
	LILO 132kV S/c Sj'nagar-Rokhia at Gokulnagar	5	Nil	
TW03	LILO 132kV S/c Ambassa-P.K.Bari at Manu	4	Nil	
	132 kV D/c Kailashahar-Dharamnagar	24	14.3586 /RF	Stage-I approval obtained on 10.04.18.Working permission obtained on 16.05.19.
	LILO132kV 79 Tilla-Dhalabil at Mohanpur	2	Nil	
	132 kV D/c Udaipur-Amarpur	30	22.0482 /RF	Stage-I approval obtained on 10.04.18.Working permission obtained on 07.05.19.
	132 kV Manu-Manu	2	Nil	
DMS01	33kV LILO T'mukh-Silachari at Karbook	6	Nil	.
	33kV LILO Jolaibari- Bagafa at M'pur	16		
	33kV Dalak- Amarpur	15		
	33kV Dalak - Jatanbari	12		
	33kV Belonia - Chittamara	8		
	33kV Garjee to Chittamara	20		
	33kV Udaipur to Maharani	8		
	33kV Garjee-Maharani	20		
	33kV Amarpur-Chechua	16		
DMS02	33kV Sabroom - Manughat	10	Nil	.
	33kV Manughat - Srinagar	20		
	33kV Satchand - Srinagar	22		
	33kV Tapping point of Belonia-Hrishyamukh to Srinagar	25		
	33kV Rupaichari - Sabroom	12		
	33kV Satchand - Rupaichari	10		
	33kV Rajnagar - Ekinpur	20		
	33kV LILO S.Nagar-Takarjala at Gabardi	4		
	33kV LILO Belonia-Rajnagar at Barpathari	10		
	33kV Jolaibari - Silachari	30		
	33kV Jolaibari - Satchand	18		

Pkg. No.	Name of the Line/Substation	Line Length (In km)	Forest (In Ha.)/ Type	Status/Remarks
	33/11 kV Ekinpur Substation		0.1932 /RF	Forest proposal submitted on 08.09.18. Proposal forwarded to RMoEFCC, Shillong on 21.02.19. RMoEFCC raised query on 25.06.19 which is being complied by State Govt.
	33/11 kV Barpathari Substation		0.2209 (Forest & Trishna WL) / RF	Forest proposal submitted on 08.09.18. Proposal forwarded to RMoEFCC, Shillong on 21.02.19. However, RMoEFCC raised certain queries on 07.03.19 which are being clarified by State Govt. Wildlife proposal resubmitted on 10.01.19. Chief Wildlife Warden (CWW) forwarded proposal to State Govt on 17.05.19 for consideration in the next State Board of Wildlife (SBWL) meeting.
DMS03	33kV Gokul Nagar-Golaghati	15	Nil	No Forest involved
	33kV Gokul Nagar-Durganagar	15		
	33kV G'Nagar-Tapping at Madhupur-Jangalia	1		
	33kV Rajnagar-Nidaya	20		
	33kV Takarjala- Golaghati	15		
	33kV Madhupur-Durganagar	14		
	33kV Kathalia-Nidaya	12		
	33kV Melagarh-Nalchar	10		
	33kV Bishramganj-Nalchar	10		
	33kV Bishramganj-Jangalia	15		
	LILO B'ghat-Jangalia at S'kote			
	33/11 kV Nidaya Substation		0.3299 (Forest & Trishna WL) /RF	Forest proposal submitted on 18.12.18. Proposal forwarded to RMoEFCC, Shillong on 01.03.19. However, RMoEFCC raised certain queries on 14.03.19 which are being clarified by State Govt. Wildlife proposal submitted on 19.12.18. Chief Wildlife Warden (CWW) forwarded proposal to State Govt on 17.05.19 for consideration in the next SBWL meeting.
	33kV Mohanpur -Barkathal	14	Nil	

Pkg. No.	Name of the Line/Substation	Line Length (In km)	Forest (In Ha.)/ Type	Status/Remarks
DMS04	33kV Lembucherra -Bamutia	6		
	33kV Champak Nagar-ADC HQ	9		
	33kV Dhalabil –Khowai	8		
	333kV Jirania -ADC HQ	5		
	33kV Hezamara -Simna	22		
	33kV Hezamara -Barkathal	12		
	33kV Durjoynagar -Bamutia	14		
	33kV Hezamara -Dhalabill	22		
	33kV Ampura - Khowai	16		
	33kV Mohanpur -Hezamara	16		
	33kV Jirania -Champak Nagar	8		
	33kV Teliamura - Taidu	12		
	Chechua to Taidu	20		
	LILO Agartala -Mohanpur at Lembucherra	4		
	LILO Khayerpur -Jirania at Ranirbazar	8		
	LILO Ambassa-Teliamura at Mungiakami	2		
DMS05	33kV Manu - Dhumachhera	25	Nil	
	33kV Manu - 82 mile	21		
	33kV Manu-Tapping of C. Manu-Manu	4		
	33kV J'Nagar-Dhumachhera	20		
	33kV P.K.Bari - 82 mile	13		
	33kV Kalaisahar-Tilla Bazar	14		
	33kV Ambassa-Jawhar Nagar	13		
	LILO C'manu-Manu at Chailengta	8		
	LILO Salema-Kamalpur at D. Chowmohani	14		
	MIZORAM			
TW02	132kV S/c Lungsen-Chawngte	39		No forest involved. However, verification/confirmation of the same from Forest department is in progress.
	132kVS/c Chawngte-S.Bungtlang	45		
	132kV S/C Lunglei-Lungsen	0.5	Nil	
SS02	132kV S/c West Phaileng-Marpara	50	104.77 / Forest as per dictionary meaning/ RF	Forest proposal (104.77 ha.) submitted on 07.03.19. Proposal forwarded to DFO, Mamit on 31.05.19. Presently under formulation. Wildlife proposal (104.77 ha.) Proposal has been submitted on 03.04.19. Proposal was discussed and agreed in-principle during 7th Meeting of SBWL Mizoram held on 04.06.2019.

Pkg. No.	Name of the Line/Substation	Line Length (In km)	Forest (In Ha.)/ Type	Status/Remarks
DMS01	33kV Lungsen-Lungsen	5	Nil	
	33kV West Phaileng- W.Phaileng	0.1		
	NAGALAND			
TW01	220 kV S/c N. Kohima-Wokha-M.chung	92	Nil	
TW05	132 kV D/c Kohima- New Secretariat Complex	28	Nil	
TW06	132 kV S/c Wokha-Zunheboto-M'chung	97	Nil	Detail survey under progress. Forest involvement not anticipated
	132 kV S/c Tuensang-Longleng	36	Nil	
	LILO of 132 kV S/c Kohima-Workha at New Kohima	15	Nil	
	LILO of 132 kV S/c Mo'chung-Mariani at Longnak	1	Nil	
	LILO 132 kV D/c Kohima-Meluri at Pfutsero	16	Nil	
DMS01	33kV M'chung-Mariani to Longtho	0.5	Nil	Detail survey under progress. Forest involvement not anticipated
	LILO M'chung-Mariani at Longnak	2		
	33kV Longleng -Longleng Town	5		
DMS02	33kV M'chung-M'chung Town PH	12	Nil	Detail survey under progress. Forest involvement not anticipated
	33kV M'chung-M'chung TH Area	16		
	33kV Zu'boto- Zunheboto South	4		
	33kV Suruhuto -Akuloto	18		
	33kV Pughoboto -Torogonyu	4		
DMS03	33 kV New Kohima -Zhadima	1	Nil	
	33 kV Pfutsero - Pfutsero	4		
DMS04	33 kV Nagarjan-Padam Pukhri.	10	Nil	
Total			**417.885**	

3.1.2. Status of corrective actions/agreed milestones from previous missions/field visits

Till reporting period (up to June 2019), Bank has completed three implementation support missions. During 3rd mission (from October 22 to November 30, 2018), the Bank team including environment and social specialists undertook field visits to selected sites in Assam, Meghalaya and Tripura (Site visits photographs placed as **Plate-1**). Based on the above sites visit and subsequent discussion/ meeting with IA, six participating States, Ministry of Power (MoP), Central Electricity Authority etc. Bank has proposed some corrective actions/ milestones agreed in their Aide Memoire issued on 12th Dec., 2018. The status of agreed actions pertaining to E & S aspects are summarized below in **Table- 3**.

Table- 3: Status of agreed actions related to E & S Safeguard

S.N	Actions	Responsible	Present Status
1.	CPTD: Making land compensations in respect of those lands wherein towers have been erected	POWERGRID	Disbursement of land compensation has been expedited. Till reporting period , a total of Rs 71.821 million compensation paid to 439 APs.
2	CPTD: Making land	POWERGRID	

	compensations in respect of those lands wherein only the foundations have been laid		Further, compensation process for 140 cases under progress. For details refer **Table- 9**.
3.	Compensation Payment: Sharing details of the payment made not only for lands but also for other crop/structure compensations	POWERGRID	For details refer **Table- 8 & 9**.
4	Expediting identification & handing over of alt. land:		
	- Tarun Nagar and Amingaon EHV S/S (Assam)	APDCL/AEGCL	Amingaon land already handed over to POWERGRID & presently work going on. Tarun Nagar land under identification stage.
	- Phisum and Takyel DMS S/S (Manipur)	MSPCL	Takyel land handed over but work could not be started due to local hindrance. Alternate land yet to be handed over by MSPCL. Pishum land yet to be handed over.
	- Manughat, Dhalak and Ranirbazar (Tripura)	TSECL	Alternate land for Manughat & Dhalak handed over to POWERGRID. TSECL confirmed that there is no change in land for Ranirbazar.
	Wokha (Nagaland)	DPN	Wokha land finalized but yet to be handed over by DoP, Nagaland
	Review site location at Romai and Bogibil DMS S/S (Assam) to address sub-lease issue	APDCL	Matter being taken up with APDCL.
5	Diversion of existing TL in Belonia, Kailasahar, Udaipur and Ambassa (Tripura)	TSECL	Completed for Belonia & Ambasa. However, partially completed in case of Kailasahar and Udaipur.
6	Forest and/ or Wildlife clearance proposals for 33 kV S/S at Nidaya, Barpathari and Ekinpur (Tripura)	POWERGRID, TSECL	Regular follow up/persuasion with concerned forest/wildlife /state govt. authorities to expedite the clearance process. For updated status refer **Table-1.**
7	Addressing observations from field visit	POWERGRID	Being complied.
8	Sharing revised draft for Final Environmental Assessment Report for Meghalaya	POWERGRID/ Consultants	Complied/Being Complied. (refer **Table-1**)

9	Finalization of independent agency for conducting Final Environmental Assessment (FEA) and preparation of FEA Report	POWERGRID	Complied / Being Complied Till reporting period, Independent Agencies for FEAR have been appointed for Meghalaya, Assam Tripura & Mizoram States. For remaining States, the identification/ finalization of appointment of consultant is under progress. For details refer **Table-1**
10	Filling up vacancies for field officer (ESM) in Manipur and Meghalaya	POWERGRID	Selection process for appointment of EOs has been completed and they are likely to be deputed at respective site by end Sept. 2019.
11	Sharing first six-monthly safeguard monitoring report	POWERGRID	The first such report for period up to Dec.' 2018 already shared with Bank and disclosed on website after clearance.
12	Project/ Site level GRC – Nominations from Local Administration	All States (except Mizoram)	No progress so far. Support from Bank is required for expediting notification of same by the State Utilities.

Plate 1 : Mission Team Visit to Sites during 3rd Implementation Support Mission

Visit to 132/33 kV Mohanpur Substation Site on 22.10.18 (Tripura)

Visit to 33/11 kV Barpathari Substation Site on 23.10.18 (Tripura)

Visit to 220/132kV New Shillong substation Site on 24.10.18 (Meghalaya)

Visit to 33/11 kV New Shillong substation Site on 24.10.18 (Meghalaya)

During reporting period, a technical team of World Bank comprising of environment and social safeguard specialists visited Nagaland from January 6-9, 2019. Subsequently, findings of the field visit were shared with POWERGRID management during wrap-up meeting held on January 11, 2019 at POWERGRID office in Gurugram.

Visit to 33/11 Padampukhri & Botsa (Aug.) substation on 8 Jan 19

It is also worth mentioning that most of the observations made by the Bank in their 2nd & 3rd implementation support mission such as sharing first six-monthly safeguard monitoring report, site specific management and mitigation measures for substations, finalization of independent agency for conducting FEAR, uploading the Land Registry of substations, expediting Forest and/ or Wildlife clearance proposals, expediting compensation payment for tree, crop, land, filling up vacancies for field officer (ESM) in Manipur and Meghalaya etc. were either complied and/or being complied, wherever such

actions are of continuous nature. However, certain action such as nominations from Local Administration for Site Level GRC is still not complied fully by State Utilities/Govt inspite of repeated reminders.

3.1.3. Status of implementation of site-specific mitigation measures

As already explained, the subprojects are being implemented as per provisions enlisted in Environment Management Plans (EMP) to minimize/mitigate the identified impacts associated with each subproject component to the extent possible. The EMP contains mitigation measures including monitoring indicators with responsibility allocation in different stages of project cycle. For ensuring proper and effective implementation of various measures by contractors/sub-contractors engaged in construction, it has also been made part of contract condition/bidding document. The summarized status of EMP compliance is presented in **Appendix-1**.

In addition to implementation of EMP provisions, some site specific measures related to slope protection/stabilization (viz.retaining wall, toe wall, revetment wall, stone pitching, guard wall, bio-engineering measures etc), drainage (such as cross drainage, culverts), approach road and other protection measures etc. are being undertaken/have been planned as per the site requirement/conditions and subsequent technical approval through committee. Further, rain water harvesting system which is an integral part of substation design will also be implemented based on the site condition/requirement. The details of such measures which are already under implementation/ approved for implementation are presented in **Table-4**. Some photographs of site specific measures implemented in different sites are placed as **Plate -2**. For others sites also similar procedure shall be followed and status of site specific measures will be updated as per work progress.

It may be noted that to implement such site specific measures at appropriate time, adequate budgetary provisions has been made through Revised Cost Estimate (RCE) or as additional quantity against Bill of Quantity (BoQ). Accordingly, requirement of approach road has already been worked out for various substations and provision of Rs. 20 crore has been included in the RCE. Similarly, apart from implementation of retaining wall/revetment wall, other slope protection measures like stone pitching, bio-engineering measures etc. are also being explored & will be executed as per the site requirement.

Table-4 : Status of implementation of Site Specific Mitigation Measures

Sl. No	Name of Substation /Site	Required Approach Road (length in meter)	Type of Slope Protection/ Stabilization / bio-engineering Measures	Other measures (rainwater harvesting/ cross/ outer drainage etc.
		**** Planned, ** Under Implementation,*** Completed***		
ASSAM				
1	132/33 kV GMC	100*		Outer peripheral drain & box culvert*
2	132/33 kV Silapather	128*		
3	132/33 kV Sarupathar	10*		

Plate 2 : Implementation of Site Specific Measures

RRM Wall at 33/11 kV New Shillong, Meghalaya

RRM Wall at 33/11 kV Raksambre, Meghalaya

Revetment Wall provided for Tower Protection in 220 kV D/c Byrnihat-Mawngap-New Shillong & LILO of 132kV MLHEP-Khliehriat Line in Meghalaya

RRM Wall at 33/11kV Ando, Manipur

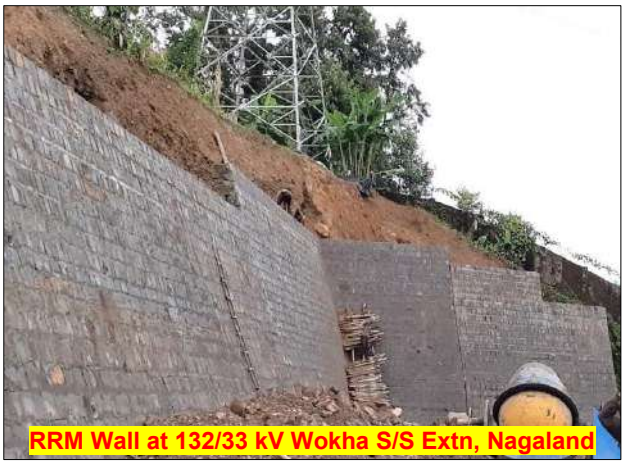
Outer Drainage at 33/11 kV Porompat, Manipur

RRM Wall at 33/11 kV Ukhrul, Manipur

Retaining Wall at 132/33 kV Gokulnagar, Tripura

RRM Wall at 33/11 kV Golaghati, Tripura

Sl. No	Name of Substation /Site	Required Approach Road (length in meter)	Type of Slope Protection/ Stabilization / bio-engineering Measures	Other measures (rainwater harvesting/ cross/ outer drainage etc.
		* Planned, ** Under Implementation,*** Completed		
4	220/132 kV Amingaon	200*		
5	132/33kV Chapakhowa	20*		
6	132/33 kV Hazo	500*	RRM Wall***	
7	132/33 kV Tangla	33*		
8	132/33 kV Tezpur New	100*	RRM Wall**	Outer drainage*
9	132/33 kV Teok	17*	RRM Wall**	
10	33/11 kV Harsingha	62*	RRM Wall**	
11	33/11 kV GS Road		RRM Wall**	
12	33/11 kV Mailo	105*		
13	33/11 kV Chabipool		RRM Retaining Wall**	Box culvert***
14	33/11 kV Dibrugarh Electrical SD-3		RRM Wall**	
15	33/11 kV Silapathar II	15*	RRM Wall**	
16	33/11 kV Sesa		RRM Wall***	
17	33/11 kV Ramdiya		RRM Wall***	
18	33/11kV D'doma- hazo		RRM Wall***	
19	33/11 kV Arya College			Box culvert***
MANIPUR				
20	132/33kV Tamenglong	550*		
21	33/11 kV Takyel	140*		
22	33/11 kV Lamphel	05*		
23	33/11 kV Top Khongnankhong	05*	RRM Wall**	
24	33/11 kV Porompat			Outer drainage***
25	33/11 kV Andro	15*	RRM Wall**	
26	33/11 kV Hiyangthang	73*	RRM Wall***	
27	33/11kV Kaithelmanbi	290*		
28	33/11 kV Kwata	05*		
29	Aug.of 33/11 kV Ukhrul		Retaining Wall**	
MEGHALAYA				
30	220/132kV N. Shillong	20*	Retaining Wall* Stone Pitching*& Grass with bamboo grids*	
31	132/33 kV Mynkre	25*	RRM Wall*	
32	132/33 kV Phulbari	10*	Revetment & RRM Wall**& Grass with bamboo grids*	
33	33/11 kV Rymbai		RRM Wall*	



RRM Wall at 132/33 kV Wokha S/S Extn, Nagaland

RRM wall at 132/33kV Mokokchung (Extn),Nagaland

RCC Retaining wall at New Secretariat Complex, Nagaland

Retaining Wall at 33/11 kV Chakabhama (Aug.), Nagaland

RRM Wall at 33/11 kV Chabipool, Assam

RRM Wall at 33/11 kV Domdoma, Assam

RRM Wall at 33/11 kV Ramdiya, Assam

RRM Wall at 33/11 kV Hazo, Assam

Sl. No	Name of Substation /Site	Required Approach Road (length in meter)	Type of Slope Protection/ Stabilization / bio-engineering Measures	Other measures (rainwater harvesting/ cross/ outer drainage etc.
		* Planned, ** Under Implementation,*** Completed		
34	33/11 kV Latyrke		RRM Wall***	
35	33/11 kV Rajballa Bhaitbari		Revetment, RRM Wall*& Grass with bamboo grids*	
36	33/11 kV Chibinang		RRM Wall*	
37	33/11 kV Raksambre		RRM Wall***	
38	33/11 kV Mawpat		RRM Wall***	
39	33/11 kV New Shillong		RRM Wall***	
40	33/11 kV Maw'kneng		RRM Wall***	
41	33/11 kV Mawkynrew		Stone Pitching*	
42	LILO132kV MLHEP-Khliehriat Line at Mynkre		Revetment wall for tower protection (approx.10 locations)**	
43	220 kV D/c Byrnihat-Mawngap-New Shillong line		Revetment wall for tower protection (approx. 40 locations)**	
TRIPURA				
44	132/33 kV Gokulnagar		Retaining Wall*	
45	132/33 kV Belonia		Retaining Wall*	
46	132/33 kV Sabroom			
47	132/33 kV Satchand			
48	132/33 kV Manu			
49	132/33 kV Mohonpur	5*	Retaining Wall*	
50	33/11 kV Golaghati		RRM***	
NAGALAND				
51	132/33kV Secretariat Complex Kohima	80**	RRM & Retaining Wall***	
52	132/33 kV Longnak		Retaining Wall**	
53	132/33 kV Longleng	500**		
54	132/33 kV Pfutsero	100*	Retaining Wall**	
55	132/33 kV Zunheboto	80*	Retaining Wall*	
56	Ext. of 132/66/33 kV Mokokchung		RRM & Retaining Wall**	
57	Ext.of 132/33kV Wokha		RRM & Retaining Wall***	
58	33/11 kV Longtho	700*		
59	33/11 kV Longleng		RRM Wall*	
60	33/11kV Pfutsero	55*	RRM Wall**	
61	Aug. of 33/11kV Bosta		Retaining Wall***	
62	Aug. of 33/11kV Chakabhama		Retaining Wall***	

Sl. No	Name of Substation /Site	Required Approach Road (length in meter)	Type of Slope Protection/ Stabilization / bio-engineering Measures	Other measures (rainwater harvesting/ cross/ outer drainage etc.
		* Planned, ** Under Implementation,*** Completed		
63	Aug. of 33/11kV Torogonyu		Retaining Wall*	
64	Aug. of 33/11kV Tseminyu		Retaining Wall*	
MIZORAM				
65	132/33 kV Lungsen		Stone Pitching* Grass with bamboo grids*	Cross drainage* Outer drainage*
66	132/33 kV West Phaileng	80*	Retaining Wall* Grass with bamboo grids*	Cross drainage**
67	132/33 kV Marpara	130*	Retaining Wall* Grass with bamboo grids*	Cross drainage*
68	33/11kV S. Bungtlang	200*	Retaining Wall*	Cross drainage*
69	Aug. of 132/33 kV Lunglei		Retaining Wall* Stone Pitching*	Cross drainage*

3.1.4. Occupational Health and Safety

Safety of workers as well as of residents of areas close to the project activities is always a challenge mostly during project execution stage. In the instant project also occupational health & safety has been given top priority and all health and safety issues and their management aspects have made integral part of project through contract conditions/contract specific safety plan. All the subprojects are being executed as per the approved safety plan and regularly monitored by dedicated Safety personnel. Further, strict compliance of various contractual aspects to work and safety regulations, workmen's compensation, insurance, safety standard/plan etc by the contractor(s) are ensured.

The compliance of safety guidelines/checklists including work permits, height pass, Use of PPEs and other safety precautions are regularly monitored by site in-charge. Mock drill such as fire safety, victim rescue/Cardio-Pulmonary Resuscitation, first aid etc are conducted periodically to enhance the preparedness level of the workforce. Availability of First aid facilities and/or ambulance at work site is ensured to face any eventuality. Safety induction & awareness programme including HIV/AID are also conducted at every active site. Safety film for transmission project developed by POWERGRID have been translated in local languages[2] like Assamese, Manipuri, Bengali, Khasi & Nagamese, Mizo apart from English & Hindi and is shown to workers regularly. Additionally, every day before start of work tool box talk is held which also include safety aspects/instruction. Photographs/ documents related to safe work practices including safety awareness are placed as **Plate- 3**. It is heartening to note that till June'19 no accidents (fatal or non-fatal) including major/minor injuries were reported from any of the construction sites.

[2] Also available on POWERGRID's website http://www.powergridindia.com/ner-agreements-and-mous

Plate-3 : Safe Work Practices at Site

Training on Height work at 33/11 kV Chakabhama, Nagaland

Tool Box Talk at 132/33 kV Lungsen, Mizoram

Safety Awareness at Various Sites

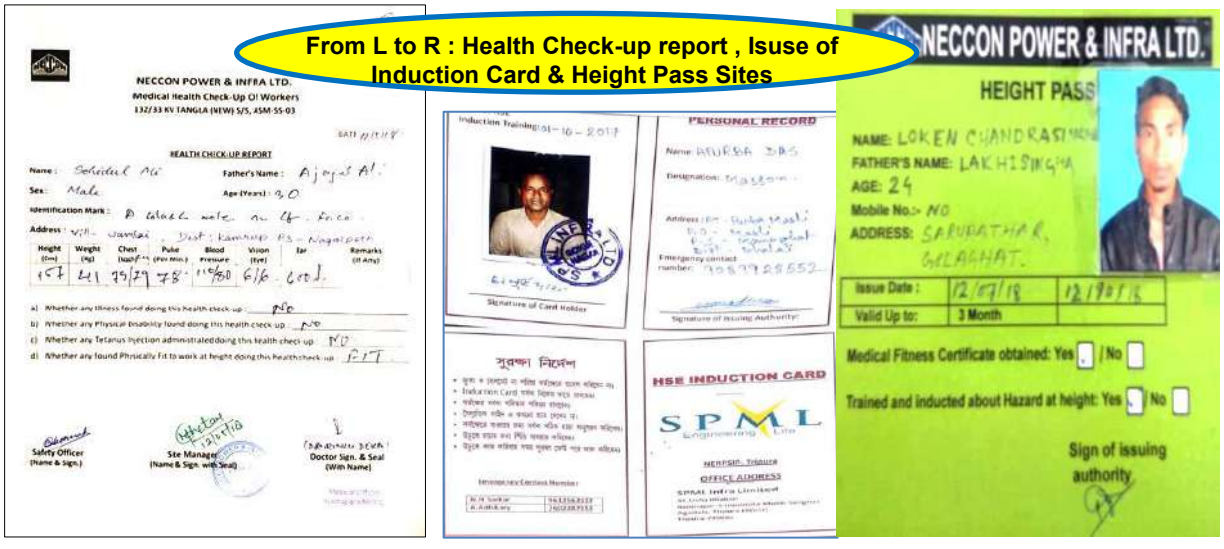
Safety Awareness at Yurenbum Site, Manipur

First Aid Training conducted at 33kV Rajnagar-Nidaya Line, Tripura

General Safety Awareness at 132/33 kV Paltanbazar, Assam

CPR (Cardio-Pulmonary Resuscitation) Training at 132/33 kV Mynkre

From L to R : Health Check-up report , Isuse of Induction Card & Height Pass Sites



Training on basic Safety Rules in the workplace and certificate of appreciation worker at 220/132 kV Mawngap, Meghalaya

Mock Drill on Fire Fighting, Training on Safe Material Handling and Use of PPEs at 33/11kV Lalmati, Nagaland

Temporary Barricading of Excavation area and Entry Gate with security personnel at 132/33 kV Marpara , Mizoram

Display of Safety Sign, Emergency Contact Number

First Aid Box

From L to R : Above - Health Check-up at 33/11 kV Andro (Manipur) & 132/33 kV Marpara (Mizoram)
Below : Health Check-up at 33/11 kV Hiyangthang (Manipur) & 33/11 kV Bosta (Nagaland)

HIV/AIDS Awareness at 132/33kV Satchand (Tripura) & Tezpur (Assam

Screening of Safety Film in Local Language to Workers at each active site

DG set installed with proper platform & roof

Safety Check List Const – 02, Revision-1(May, 2014)

POWER GRID CORPORATION OF INDIA LTD.,
(CORPORATE OPERATION SERVICES)

SITE SAFETY INSPECTION / AUDIT CHECK LIST

EXCAVATION & FOUNDATION

DATE OF INSPECTION: 30-05-2019 NAME OF DMS SS: 33/11KV Sarhu Lubra (Const) SS New

LOCATION : Lalmadi CLASSIFICATION OF SOIL

NAME OF THE AGENCY: Sterling & Wilson Pvt Ltd

SITE ENGINEER / SUPERVISOR OF THE AGENCY: Jibesh Roy

SAFETY OFFICER OF THE AGENCY: Anant Kumar

S.NO:	CHECK LIST	YES / NO	REMARKS, IF ANY
1	Check List to be verified by the Agency's Site supervisor / Gang leader is available at Site and updated.	Yes	
2	Safe Work Procedures / Instructions in the language understood by the workers available with Site supervisor / Gang leader and workers are aware of the safe work procedures.	Yes	
3	Pep talk on safety issues to the workers being done by the Safety Stewards / Supervisor / Engineer / Safety Officer of the Agency.	Yes	
4	Appropriate safety messages / warnings are displayed at site to caution the workers	Yes	posters not available
5	Adequate warning / protection to public / children moving nearby ensured (RED FLAGS / CAUTION TAPE / ROPE / BOARDS).	Yes	
6	Sufficient Angle of Repose / slope provided to prevent collapse of soil at vulnerable locations.	Yes	
7	Adequate shoring and shuttering provided in colapsible soil conditions.	Yes	
8	(a) Drilling and Blasting, if any, carried out with adequate precautions. (b) Whether the blaster is a valid license holder?	N/A	Not Applicable in DMS Constructio
9	Dewatering of the pits is being done, wherever required.	Yes	
10	Clear edges to prevent fall of objects inside the pit – the excavated earth, stones and tools dumped atleast half of the depth of the pit away from the pit edges.	Yes	
11	Machines like concrete mixer, vibrator, etc, placed away atleast half of the depth of the pit from the pit to avoid collapse of the pit due to vibrations produced by these machines.	Yes	

- 2 -

12	The steel plate (chute)used for pouring the concrete into the pit properly anchored to prevent the same from falling into the pit, endangering the persons inside the pit.	Not Required	
13	Jacks used for supporting the template are properly positioned / anchored to avoid sliding down of the template from the jacks and endangering the workers .	Not Required	
14	All ladders used are of sound construction, appropriate height and free from any defect.	Yes	Using Bamboo Handmade Ladders
15	All the workers are provided with good quality SAFETY HELMETS confirming to BIS Standard IS:2925.	Yes	Not Sufficient
16	All the workers engaged in steel work are provided with LEATHER SAFETY GLOVES.	Yes	Not sufficient
17	The workers engaged in concreting work inside the pit are provided with GUMBOOTS.	Yes	But not for all workers.
18	The workers engaged in handling cement are provided with appropriate DUST MASKS.	No	
19	Appropriate SAFETY BELT / fall protection provided to workers working on form box to pour concrete into the form box / ramming in form box.	Yes.	
20	(a) First aid box with listed items as per BOCW Act, 1996 available.	Yes	
	(b) Number of First Aid Trained persons and their names.	NO	
	(c) First Aid Register is available at site.	NO	
	(d) Nearby medical facilities for use during exigencies identified (Location / Phone No.)	Yes	
21	Atleast one vehicle (four wheeler) is available for use in case of emergencies.	Yes.	

Ratan Kumar Jana (FOLESM) 30.05.19
SIGNATURE / NAME / DESIGNATION OF POWERGRID REPRESENTATIVE

Jibesh Roy Civil Engg. 30/5/19
SIGNATURE / NAME / DESIGNATION OF AGENCY'S REPRESENTATIVE

Copy To:

(5) Regional In-charge / POWERGRID / ______

(6) Projects In-charge (Region) / POWERGRID / ______

✓

✓

Strict Adherence of Safety Checklists

The amenities for worker's including occupational health, safety and hygiene at work site is the responsibility of contractors/sub-contractor(s), who is also abide by various provisions related to worker welfares in contractual agreements and EMP. Moreover, as per contract agreement contractor and his sub-contractors shall abide at all times by all applicable existing labour enactments and rules made thereunder, regulations notifications and byelaws of the State or Central Government or local authority and any other labour law (including rules), regulations bye laws that may be passed or notification that may be issued under any labour law. Accordingly it is ensured that all contractors employed are operating with valid labor license as per provision under section – 12(1) of the Contract Labour (Regulation & Abolition) Act, 1970 and also certified under Section- 7(3) of the Building and Other Construction Workers (Regulation of Employment and Condition of Service) Act, 1996 from Ministry of Labour & Employment. Besides, the contractors have obtained requisite insurance policy as per provisions of Employee Compensation Act, 1923 for its employed workforce.

It is pertinent to mention that actual number of manpower employed at each site/package varies significantly from time to time depending upon the work requirements as well as availability of contract labour. The detail of state wise approved manpower obtained by different contractors along with maximum no. of workers employed on any day during the reporting period is provided in the table below;

State	Name of Contractor	Package	Approved Worked force	Worked force(max.) Employed
Assam	M/s Neccon Power & Infra Ltd	SS-01-03, DMS-01	340	210
	M/s JV Techno & Seiyuan	SS-04	100	60
	M/s T & R (India) Ltd	TW-01	100	42
	M/s Meher Foundation & Civil Engg. Pvt. Ltd	P - 01	30	20
	M/s Power Mech Projects Ltd	TW-02 & 05	110	60
	M/s Teems India Pvt. Ltd	TW-04	60	37
	M/s Simplex Infra. Ltd.	TW-07	100	60
	M/s Sterling & Wilson Pvt. Ltd.	DMS-02 & 03	300	90
Meghalaya	M/s Neccon Power & Infra Ltd	DMS-01 to 03, SS-02	215	171
	M/s Techno Electric & Engg Co. Ltd	SS-02	100	70
	M/s Unique Structures & Towers Ltd.	TW-01 & 02	400	240
Tripura	M/s SPML	SS-01 to 03	300	53
	M/s EMC Limited	TW- 01 to 03	NA	18
	M/s Technofab	DMS 01 to 05	500	122
Manipur	M/s Win Power Infra Pvt. Ltd	DMS -01 & 02	60	30
	M/s Siddhartha Engg. Ltd.	DMS -03 & 04	50	36
	M/s Sterling & Wilson Pvt. Ltd.	SS-01 & 03	360	80
	M/s Shyama Power India Ltd.	SS-02 & TW-06	200	100
Mizoram	M/s KSA Powerinfra Pvt. Ltd	SS-01, TW-01	100	15
	M/s Sterling & Wilson Pvt. Ltd	SS-02	119	35
Nagaland	M/s Sterling & Wilson Pvt. Ltd.	DMS-03 & 04	200	31
	M/s Shyama Power India Ltd.	TW-01,05,06 &SS-03	400	110
	M/s Techno Power Ente. Ltd	DMS-01 & 02	75	23
	M/s Power Mech. Projects Ltd.	SS-02 & 04	100	33
	M/s Techno Electric & Engineering Co. Ltd	SS-01	100	12

Further in every active site, it is ensured that the construction contractor engaged provides accommodation arrangements along with uncontaminated water for drinking, sanitation, cooking washing & health care arrangements through regular monitoring and their compliance as per provisions of contract agreement and EMP. Some photographs of worker facilities provided at different sites are placed as **Plate- 4.** Besides, the workforce are regularly instructed to respect local people, tradition, culture and not to indulge in any activities with local through strictly controlling entry of outsiders in non-working hours is ensured to avoid any conflict with the local people.

Plate - 4 : Worker Facilities at Construction Sites

From L to R : Worker Camp at Chapakhowa (Assam) ,New Shillong (Meghalaya) & Dibrugarh (Assam)

Worker Facilities From L to R Top : 132/33kV Udaipur (Tripura), 33/11 kV Porompat (Manipur) & 33/11 kV Padampukhri, Nagaland

Above: Toilet & Sanitation Facilities
Below L to R: Drinking Water, Garbage Bin & Kitchen

3.1.5. Environmental awareness and training

Knowledge about environmental problem in general and environmental issues associated with project in particular not only enhances the environmental sensitivity of the project staff but also helps in compliance with safeguard issues associated with the project. Accordingly, Environmental and Social Management trainings have been made an integral part of the Capacity Building & Institutional Strengthening (CBIS) Framework.

Till reporting period, specialized E & S training programme one each for Nagaland, Mizoram Assam and Tripura State has been conducted under CBIS and the same has been planned in other remaining States in near future. In additional to above, a three days training programme exclusively for its project personnel associated with construction and safeguard management at site under NERPSIP was organised at PAL Manesar, Gurgaon on 11-13 December, 2018**.** During such programmes subject experts from leading organizations like the World Bank, ADB, MoEFCC and domain experts from university/research institutes interacted with the participants and gave them a clear insight about the relevant environmental and social issues. Apart from project specific E & S safeguard matters these trainings also covered topics like engagement with indigenous people & gender issues with special reference to NER and best international practices. Some photographs and training modules for such programmes are placed as **Plate- 5.** Details of training programmes conducted till June'19 is provided below in **Table-5**.

Table-5: Details of Training Programme under NERPSIP Capacity Building

Sl.	Topic of Training Programme	Place & Date	Participants Level	Total Mandays
1	E & S aspects of projects and System Planning & STU Management under NERPSIP	Conference Hall DPN, Kohima, Nagaland 23 & 24 April' 18	Middle Management	42
2.	E & S aspects of T and Distribution Projects under NERPSIP	Aijal Club, Aizawl, Mizoram 23 & 24th May'18,	-Do-	36
3	Env. & Soc. aspects of T & D Projects under NERPSIP	Pragna Bhavan, Agartala, Tripura 4 & 5th Sept'18	All levels	54
4	E & S Safeguard Management of NERPSIP	PAL Manesar, Gurgaon 11-13th Dec' 2018	Middle management	69
5	Environment Safeguard Management in T& D Projects	Employee Development Centre (EDC), Misa (Assam) 6 & 7th May 2019	Manager and Jr. Engg. level of AEGCL/APDCL	60
6	Environmental and Social Aspects in Project Management	Guwahati, Assam 6 & 7th May 2019	Middle Management including Site Officials	48
7	Environment Safeguard Management in T& D Projects	EDC, Misa (Assam) 23rd May 2019	Technician of MePTCL	15
8	Environment Safeguard Management in T& D Projects	EDC, Misa (Assam) 12 & 13th June 2019	Technician of AEGCL/APDCL	40

Plate 5 : E & S Training Programme

E & S Aspects of Projects and System Planning & STU Management under NERPSIP, 23-24th April' 2018, Conference Hall, DPN Kohima, Nagaland

E & S aspects of T & D Projects under NERPSIP, 23-24 May'18, Aijal Club, Aizawl, Mizoram

Training program on "Environment and Social aspects of Transmission and Distribution Projects under NERPSIP"
Date : 4th & 5th September, 2018
Venue : Pragna Bhawan, Agartala

Day/ Date	9.15 9.30 Hrs.	9.30 Hrs. -11.00 Hrs.	TEA BREAK	11.15 Hrs.-12.45 Hrs.	LUNCH BREAK	13.45 Hrs. – 15.15 Hrs.	TEA BREAK	15.30-17.00 Hrs.
Day 1 04.09.18	Inauguration & Keynote Address	Environmental and Social Policy & Procedures Framework (ESPPF) - A Recap **S.K. Kar POWERGRID**		World Bank E & S Safeguard Requirements for T & D Projects **K. Khumujam World Bank**		Ensuring EHS compliance as per Environment Management Plan (EMP) **K. Khumujam World Bank**		Environmental Laws vis-a-vis Transmission Line Projects with special emphasis to Forest and Wildlife Clearance process **Suvendu Kar POWERGRID**
Day 2 05.09.18		Forest & Bio-diversity issues in Developmental Projects and their Management **Dr. Sabyasachi Dasgupta, Tripura University**		Forest & Bio-diversity issues in Developmental Projects and their Management **Dr. Sabyasachi Dasgupta, Tripura University**		RoW Compensation and Diminution of Land Value due to placing of Transmission Line/Tower **R. Ranjan POWERGRID**		Discussion & Feedback

Training Modules

TRAINING PROGRAMME ON ENVIRONMENT & SOCIAL SAFEGUARD MANAGEMENT OF NERPSIP
Venue: POWERGRID Academy of Leadership (PAL), Manesar, Gurugram
Date: 11th -13th December, 2018

DATE/ TIME	9.30-9.45	9.45 -11.30	TEA BREAK	11.45 -13.00	LUNCH BREAK	14.00 - 1530	TEA BREAK	15.45 - 17.00
Day-1	Registration	Program Inauguration/ Light of Lamp and Inaugural Address by Chief Guest *Sh. H. S. Sohal, IFS PCCF & CVO, EIL*		WB Policies vis-a-vis E & S Management in Transmission Projects *Sh. G. Joshi Sr. Env. Specialist, World Bank*		Global Best practices in managing E & S issuses in T & D Projects & Case Study *Sh. K. Khumujam Env. Consultant World Bank*		Gender Issues and Policy Framework of WB *Ms. Sangeeta Kumari Sr. Soc. Specialist & Gender Expert, WB*
Day-2	10.00 -11.30			11.45 -13.00		14.00 - 1530		15.45 - 17.00
	Engaging with Indigenous People (Tribal) & aaddressing Gender Issues with special reference to NER States *Sh. R. Swarankar, Former Sr. Social Specialist ADB*			Environmental laws of India vis-à-vis Forest & Wildlife Clearance *Sh. S.S.Singh General Manager (ESM)*		Engineering/Design Measures to meet safeguard e.g. - Slope stabilization including bio-engg measures - Bird Guards - Innovative Towers - Wildlife/Elephant protection *Sh. Vinay General Manager (Engg.)*		RoW Compensation and Diminution of Land Value due to placing of Transmission Line/Tower *Sh. R. Ranjan Manager (ESM)*
Day-3	10.00 -11.00			11.15-12.30		13.30- 14.30		
	Environmental and Social Policy & Procedures Framework (ESPPF) - An Overview *Sh. S.K. Kar Manager (ESM)*			EMP Implementation, Monitoring & Reporting Frameworks as per WB requirements e.g. Preparation of E & S Safeguard Documents e.g. IEAR/ FEAR/ CPTD Report *Sh. S.K. Kar Manager (ESM)*		Panel Discussion, Valedictory & feedback		


Env. & Soc. aspects of T & D Projects under NERPSIP, 4 & 5th Sept'18, Pragna Bhavan, Agartala Tripura


E & S Safeguard Management of NERPSIP, 11-13th Dec' 2018, PAL Manesar (Gurgaon)




E & S Safeguard Management of NERPSIP Guwahati, Assam 6 & 7th May 2019

3.1.6 Non-compliance notices issued to contractors/subcontractors

Contractors/subcontractors play a significant role in ensuring compliance with safety and environment provisions applicable to project, considering their role in actual implementation of the project activities at ground level. Additionally, most of the workforce assigned at sites are also directly under the control of contractors/subcontractors. In view of this, they have also been made accountable to compliance with safety and environment provisions by incorporating the project EMP and other contract clauses specifically aiming at safeguard compliance including safety as part of the contract documents.

POWERGRID's site officials ensure that these contract clauses are always complied by the site contractors/ subcontractors. Any incidence of deviation/non-compliance of the applicable contract conditions result in issuance of notice/letter to concerned contractor/ subcontractor for necessary compliance and further improvement. Besides, POWERGRID Regional Safety, Shillong conducts periodic safety check/audit in all active sites and strict compliance of observations made during audit is ensured from respective contractor/sub-contractor. Sample copy of such notice/memo issued and corresponding compliance submitted by the respective contractor/ subcontractor is placed as **Appendix-2.** It may be noted that most of these notices/memoes are related to inadequate worker facilities like labor camp, toilet, drinking water etc., non-availability/use of PPEs, compliance to safety audits, slow progress of EMP/other protection measures like boundary/ retaining/ revetment wall, drainage etc, deployment of designated safety officer and lapses in renewal of insurance under workmen compensation policies. However, repeated violations may result in penalties, termination of contractor and debarment from future association with POWERGRID. Details of state- wise memo/notice issued related to compliance of health, safety and environment measure till June' 19 is given in **Table- 6.**

Table-6: State wise nos. memo/notice/penalties issued to contractors/ subcontractors related to health, safety and environment measures

State	Nos. Obs./ Notice issued by Regional Safety	Obs./Notice issued by Site Officials	Penalties, if any
Assam	7	14	Nil
Meghalaya	6	17	Nil
Tripura	7	30	Nil
Manipur	6	20	Nil
Nagaland	4	7	Nil
Mizoram	Nil	24	Nil

SECTION-4: SOCIAL SAFEGUARD

4.1 Social Compliance

4.1.1 Substation Land:

The land requirement for construction of substation generally varies from 0.3 acres (for 33 kV) to 10 acres (220 kV) depending upon voltage levels and no. of bays. As per provisions in ESPPF, land for substation can be secured through adoption of following three methods;

i) Purchase of land on willing buyer & Willing Seller basis on negotiated rate;
ii) Voluntary Donation; and
iii) Involuntary Acquisition.

Moreover, all land donations and direct purchases will be subject to a review/ approval by a broad based committee comprising representatives of different sections including those from the IA and State Utilities. It may be noted that in the instant case land for all the proposed substations are secured either through purchase on willing-seller willing-buyer basis or already in possession of State Utilities. Wherever required, consent from ADC/VDC is also obtained, In the instant case, no land is secured through Involuntary Acquisition. Hence, no social issues such as physical displacement; R & R are envisaged in the instant project. Details of land secured for transmission and distribution substations (220/132/33 kV or 33/11 kV) including area, number of owners, compensation thereof are provided in **Table-7**.

Table-7 : Details of Land Secured for proposed substations

Sl. No	Name of Substation	Area (acres)	Type of Land (Govt./ Pvt.)	No. of Land Owner	Total Cost of Land (Rs Million)	Method of Securing Land/ Remarks, if any
ASSAM						
1	220/132 kV Behiating	7.31	AEGCL Existing Land	N.A	N.A	N.A
2	132/33 kV GMC	0.83				
3	132/33 kV Silapathar	7.27				
4	132/33 kV Paltanbazar	0.63				
5	132/33 kV Sarupathar	7.27				
6	220/132 kV Amingaon	8.0				
7	132/33kV Chapakhowa	7.31	Pvt.	2	25.519	Direct Purchase through Willing Buyer Willing Seller basis on negotiated rate
8	132/33 kV Hazo	6.25	Pvt.	1	28.479	
9	132/33 kV Tangla	8.26	Pvt.	12	42.600	
10	132/33 kV Tezpur New	7.27	Pvt.	3	14.080	
11	132/33 kV Teok	7.27	Pvt.	2	52.979	
12	33/11 kV Harsingha	0.74	APDCL Land	N.A	N.A	N.A
13	33/11 kV Hathimurah-2	0.96				
14	33/11 kV Mailo	1.9				
15	33/11 kV GS Road (GIS	0.41				
16	33/11 kV GMC-2	0.83				

Sl. No	Name of Substation	Area (acres)	Type of Land (Govt./ Pvt.)	No. of Land Owner	Total Cost of Land (Rs Million)	Method of Securing Land/ Remarks, if any
17	33/11 kV Tarun Nagar					Govt. allotted land was not found suitable due to high cost involve in pile foundation. Alternate land being arranged by APDCL.
18	33/11 kV Arya College	0.13	Govt.	N.A.	0.969	
19	33/11 kV Chabipool	0.36	Govt.	N.A.	6.600	
20	33/11 kV Romai	0.66	Pvt.		0.024/yr	Land on long term lease of 20 years
21	33/11 kV Bogibil	0.66			0.024/yr	
22	33/11 kV Dibrugarh Electrical SD-3	0.66		N.A.	9.355	Direct Purchase on negotiated rate
23	33/11 kV Silapathar II	0.66		1	1.018	
24	33/11 kV Sesa	0.66		1	3.785	
25	33/11 kV Ramdiya	0.50		2	1.580	
26	33/11kV D'doma- hazo	0.50		1	2.399	
27	33/11 kV LGM hospital	0.33		1	1.950	
MANIPUR						
1	132/33 kV Gamphajol	2.96	Pvt.	1	2.790	Direct Purchase on negotiated rate
2	132/33 kV Tamenglong	4.44		1	1.900	
3	33/11 kV Takyel	0.59	Govt.	N.A.	****	Land handed over to POWERGRID but work could not be started due to local hindrance.
4	33/11 kV Lamphel	0.37	Govt.	N.A.	****	
5	33/11 kV Top Khongnankhong	1.97	Govt.	N.A.	****	
6	33/11 kV Porompat	1.97	Govt.	N.A.	0.197	
3	33/11 kV Andro	0.50	Pvt.	1	0.335	Direct Purchase on negotiated rate
5	33/11 kV Hiyangthang	0.73	Pvt.	1	4.424	
8	33/11kV Kaithelmanbi	0.74	Pvt.	1	0.697	
9	33/11 kV Kwata	0.31	Pvt.	1	1.008	
10	33/11 kV Leimapokam	0.63	Pvt.	1	0.955	
12	33/11 kV Thangal	0.612	Pvt.	1	0.522	
13	33/11 kV Sanjenbam	0.62	Pvt.	3	1.029	
14	33/11 kV Tuliaphai	0.494	Pvt.	1	0.465	
15	33/11 kV Pishum (GIS)	0.249	Govt.	N.A.	****	Land yet to be handed over to POWERGRID

Sl. No	Name of Substation	Area (acres)	Type of Land (Govt./ Pvt.)	No. of Land Owner	Total Cost of Land (Rs Million)	Method of Securing Land/ Remarks, if any
MEGHALAYA						
1	220/132kV Mawngap	10.77	MePTCL Land	N.A	N.A	N.A
2	220/132kV N. Shillong	6.214	Pvt.	2	30.148	Direct Purchase on negotiated rate
3	132/33 kV Mynkre	16.40		1	22.003	
4	132/33 kV Phulbari	12.5		1	32.877	
5	33/11 kV Mynkre	0.49		1	1.133	Direct Purchase on negotiated rate
6	33/11 kV Rymbai	1.26		1	0.981	
7	33/11 kV Lumshnong	0.36		1	1.248	
8	33/11 kV Latyrke	0.34		1	1.689	
9	33/11 kV Rajb'Bhaitbari	0.66		1	0.244	
10	33/11 kV Chibinang	1.65		1	0.612	
11	33/11 kV Raksambre	0.66		1	0.492	
12	33/11 kV Mawpat	0.30		1	5.993	
13	33/11 kV New Shillong	1.0		Community land	3.496	
14	33/11 kV Maw'kneng	0.61		1	0.220	
15	33/11 kV Mawkynrew	1.18		1	1.600	
TRIPURA						
1	132/33kV Rabin'nagar	2.5	TSECL Land	NA	NA	NA
2	132/33 kV Gokulnagar	3.5				
3	132/33 kV Belonia	3.0				
4	132/33 kV Bagafa	3.7				
5	132/33 kV Sabroom	1.64				
6	132/33 kV Mohonpur	4.0				
7	132/33 kV Satchand	2.02				
8	132/33 kV Manu	2.18				
9	132/33 kV Amarpur	3.34	Pvt.	1	5.936	Direct Purchase on negotiated rate
10	33/11 kV Khowai	0.49	TSECL Land	NA	NA	NA
11	33/11 kV Simna	0.59				
12	33/11 kV Barkathal	0.59				
13	33/11 kV Bamutia	0.59				
14	33/11 kV Lembucherra	0.74				
15	33/11kV Champaknagar	0.68				
16	33/11 kV Ranirbazar	0.74				
17	33/11 kV ADC H.Q.	1.18				
18	33/11 kV Chittamara					
19	33/11 kV Sekerkote	0.70				
20	33/11 kV Golaghati	0.49				
21	33/11 kV Durganagar	0.40				
22	33/11 kV Maharani	0.89				

Sl. No	Name of Substation	Area (acres)	Type of Land (Govt./ Pvt.)	No. of Land Owner	Total Cost of Land (Rs Million)	Method of Securing Land/ Remarks, if any
23	33/11 kV Nidaya	0.61				
24	33/11 kV Nalchar	0.46				
25	33/11kV Jawhar Nagar	1.97				
26	33/11 kV Chailengta	0.74				
27	33/11 kV Dhumacherra	1.38				
28	33/11 kV 82 Mile	0.74				
29	33/11 kV Tilla Bazar	1.58				
30	33/11 kV Srinagar	1.46				
31	33/11 kV Chechua	0.41				
32	33/11 kV Rupaichari	0.62				
33	33/11 kV Ekinpur	1.03				
34	33/11 kV Gabardi	0.67				
35	33/11 kV Barpathari	0.74				
36	33/11 kV Karbook	0.59				
37	33/11 kV Muhuripur	0.99				
38	33/11 kV Dalak	1.38				
39	33/11 kV Mungiakami	1.15				
40	33/11 kV Durga Chowmohani					
41	33/11 kV Garjee	0.79				
42	33/11 kV Taidu		Pvt.	1		Land willingly donated by owner
43	33/11 kV Manughat	0.80	Pvt.	1	0.657	
MIZORAM						
1	132/33 kV Lungsen	3.16	PEDM Land	N.A	N.A	N.A
2	132/33 kV W. Phaileng	3.92				
3	132/33 kV Marpara	4.34				
4	South Bungtlang	0.58				
NAGALAND						
1	132/33kV Secretariat Complex Kohima	3.4	DPN Land	N.A	N.A	N.A
2	132/33 kV Longnak	4.7	Pvt.	1	2.700	Direct Purchase on negotiated rate
3	132/33 kV Longleng	8.1	Pvt.	7	0.458	
4	132/33 kV Pfutsero	4.94	Pvt.	1	5.812	
5	132/33 kV Zunheboto	14.64	Pvt.	6	2.781	
6	33/11 kV Longtho	1.04	DPN Land	N.A	N.A	N.A
7	33/11kV Longleng Town	0.52				
8	33/11kV Mokokchung Power House	0.15				
9	33/11kV Mokochung Hospital Area	0.20				

Sl. No	Name of Substation	Area (acres)	Type of Land (Govt./ Pvt.)	No. of Land Owner	Total Cost of Land (Rs Million)	Method of Securing Land/ Remarks, if any
10	33/11kV Zunheboto South Point	0.76	DPN Land	N.A	N.A	N.A
11	33/11kV Sechu-Zubza (Lalmati)	0.33				
12	33/11kV Chiephobozou	0.37				
13	33/11kV Tizit	0.15				
14	33/11kV Pfutsero	0.19	Pvt.	1	0.757	Direct Purchase on negotiated rate
15	33/11kV Wokha	0.47	Pvt.	1	3.10	Direct Purchase on negotiated rate. Land yet to be handed over to POWERGRID
16	33/11kV Padampukhri	0.74	Pvt.	1	4.536	Direct Purchase on negotiated rate

4.1.2. CPTD Preparation and Implementation Status

As per existing law, land for tower/pole and right of way is not acquired and agricultural activities are allowed to continue after construction activity. However, the law[3] stipulates that the licensee shall have to pay full compensation to all interested for any damages sustained during the execution of work.

Moreover, land requirements for erecting tower/ poles for transmission/ distribution lines are just minimal. All it requires is to place the foot, four of which warrants an area of 4-6 sq. ft. Thus, the actual impact is restricted to 4 legs of the tower. Further, line alignments are done in such a way so as to avoid settlements and / or structures and hence no relocation of population on account of Transmission Line (TL)/ Distribution Line (DL) is envisaged. Most of the impacts are temporary in nature in terms of loss of standing crops/trees and other damages for which compensation is paid to the affected persons/land owner/ community for all damages including cost of land for tower base and/ or RoW corridor to its land owner without acquiring it. Thus, compensations are made for;

(i) standing crops;
(ii) trees, if any;
(iii) land cost of tower footings and RoW Corridor(if applicable) ;
(iv) other assets like well and
(v) any other damages/ effects.

[3] *As per the present provision in the Electricity Act, 2003 read with relevant provisions of Indian Telegraph Act, 1885 all the damages without acquisition of subject land) accrued to person while placing the tower and line are to be compensated.*

In order to capture such temporary damages likely to be caused during implementation of projects and payment of compensation thereof, project specific Compensation Plan for Temporary Damages (CPTD) have been prepared and subsequently disclosed after approval by the Bank for implementation. CPTD includes entitlement matrix, detailed procedure along with timeframe for compensation disbursement and responsibility with respect to various process/activities which will be implemented during the project execution. The project wise CPTDs are being prepared matching with completion of detailed survey of TLs/DLs corresponding to scope covered in respective IEARs. The status of CPTD preparation and its disclosure as of now is already presented in **Table- 1.**

4.1.3. Compensation for Tree/crop damages:

Following cardinal principles of avoidance, minimization of State- Specific ESPPF and Bank's Safeguard Policies, State Utilities/ POWERGRID has selected and finalized the routes of transmission line with due consideration of the avoidance or minimization of impacts toward temporary damages on crops/ trees/ structures, if any coming in the Right of Way (RoW) during construction. Similarly, the route of all the 33 kV distribution lines are mostly selected /finalized along the existing roads (PWD roads/Village roads etc.) involving minimum habitated areas and also through agricultural and barren lands wherever possible. Further field visits and public consultations helped in developing the measures towards minimizing negative social impacts, if any.

During project implementation also, due to inherent flexibility in phasing construction activity in lean period or rescheduling the construction activity in cropped area for some period to facilitate crop harvesting, temporary impacts associated with Transmission Lines are further minimized to a great extent. However, if it is unavoidable and is likely to affect project schedule, compensation is given at market rate for standing crops in consultation with revenue department and affected person based on assessment of actual damages. The process of tree/crop compensation is depicted in **Figure 1**. In the instant project also all possible measures are taken to avoid damages to crop/trees through taking up the construction activities during lean period or post-harvest season. As per the prevailing norms farming activity is allowed after the construction work is completed. However, compensation for the loss of crops/trees/any structure paid to Affected Persons (APs) for the area of damage to mitigate the impacts probably 3 times i.e. during foundation work, tower erection & stringing as per the prevailing situation. A sample case of compensation process including notice to AP, compensation assessment & payment to affected persons is placed as **Appendix-3** for better understanding. Details of line wise compensation paid for Tree & Crop damages till reporting period is given below in **Table- 8.**

Figure 1: Tree/Crop Compensation Process

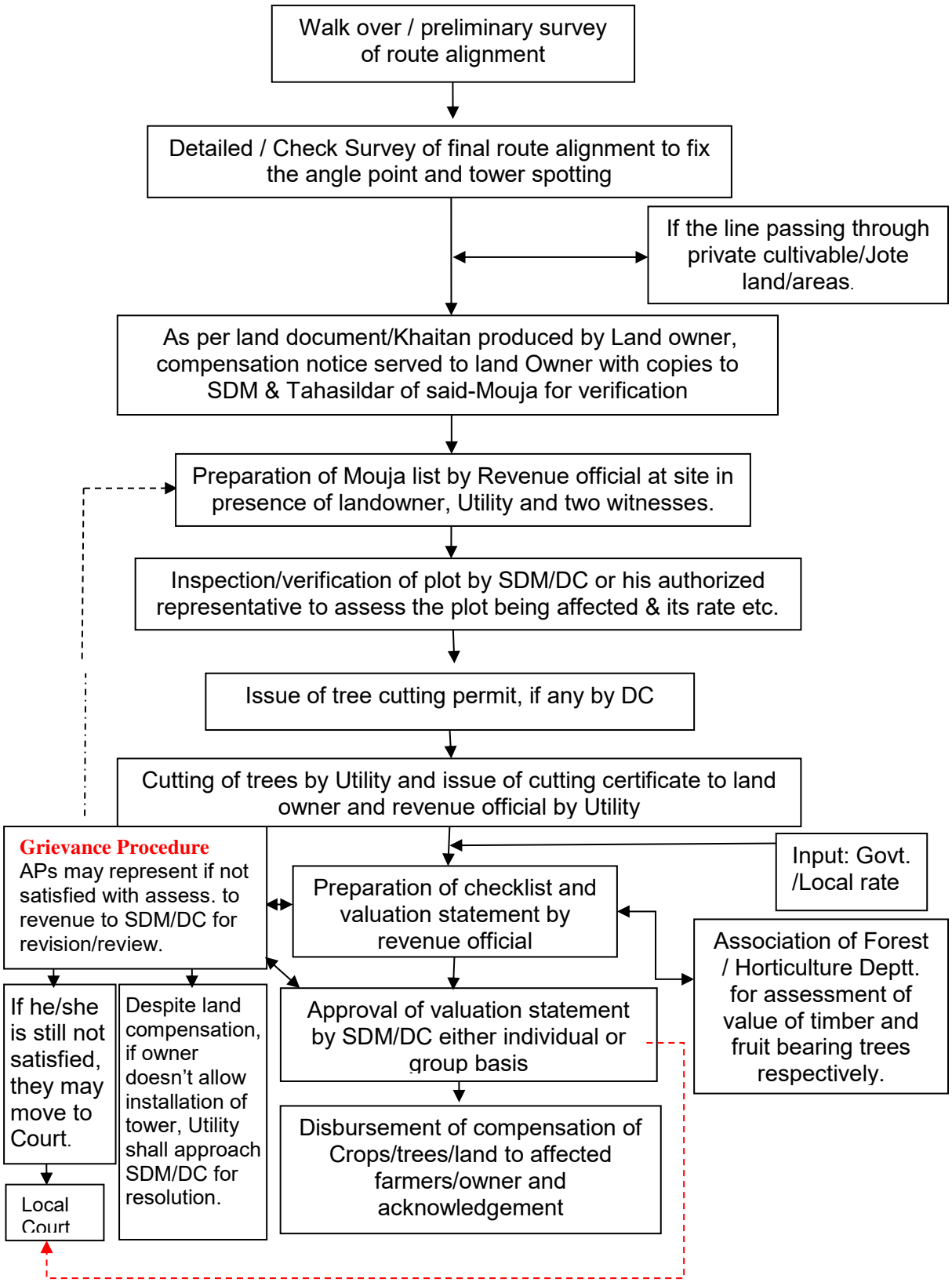


Table - 8: Details of Crop & Tree compensation

S. No.	Name of the Line	Nos. of Person issued notice	Affected Land Area (Ha.)	Nos. of Tree	Compensation Paid for crop damages(Rs. million)			Compensation Paid for Tree damages(Rs. million)		
					Fdn	Erection	Stringing	Fdn.	Erection	Stringing
A	**Assam**									
1	220 kV D/c Tinsukia-Behiating	20	0.76		0.862	Nil	Nil	Nil	Nil	Nil
2	132 kV S/c Dhemaji-Silapathar	Nil			NA	NA	NA	NA	NA	NA
3	132 kV S/c Rupai-Chapakhowa	47	1.82		2.380	Nil	Nil	Nil	Nil	Nil
4	220 kV D/C Rangia-Amingaon	Nil								
5	132 kV D/c Amingaon-Hazo	Nil								
6	LILO 132 kV S/c Rangia-Rowta	Nil								
7	LILO 132kVS/c Kamalpur-S'gram	Nil								
8	LILO132kVS/c K'pur-Khamakhya	Nil								
9	LILO 132kVS/c Golaghat-Bokajan at S'pathar	Nil								
10	132 kV D/c Sonabil-Tezpur	Nil								
11	LILO 132 kV S/c Jorhat-Nazira	Nil								
	Sub-total (A)	**67**	**2.58**	**Nil**	**4.078**	**Nil**	**NA**	**Nil**	**Nil**	**NA**
B	**Manipur**									
12	Reno132kV Y'bam-Karong-Kohima	Nil								
13	LILO132 kV S/c Y'bam -Karong	Nil								
14	LILO132kV D/c Kongba-Kakching	Nil								
15	Strg 132 kV D/c Yaingangpokpi – Kongba	Nil								
16	Strg.132kV Kakching-Kongba	Nil								
17	132 kV D/c Imphal – Nin'khong	Nil								
18	132 kV S/c Rengpang-Tamenglong	Nil								
	Sub-total (B)	**Nil**	**Nil**	**Nil**	**Nil**	**Nil**	**Nil**	**Nil**	**Nil**	**Nil**
C	**Meghalaya**									
19	220kV D/c Byrnihat-Mgap- Shillong	Nil								
20	LILO132kV MLHEP-Khliehriat at Mynkre	Nil								
21	132 kV D/c Phulbari-Ampati	09			0.148	Nil	Nil	Nil	Nil	Nil
	Sub-total (C)	**09**			**0.148**	**Nil**	**Nil**	**Nil**	**Nil**	**Nil**

D	**Tripura**									
22	132 kV D/c Bagafa-Belonia	Nil								
23	132 kV D/c Belonia-Sabroom	Nil								
24	132 kV S/c Bagafa-Satchand	Nil								
25	132kV S'room-S'chand at S'room	Nil								
26	132kV S'room-S'chand at S'chand	Nil								
27	132 kV D/c Udaipur-Bagafa	Nil								
28	132 kV D/c Rabindranagar-Belonia	Nil								
29	132 kV D/c -Rabindranagar-Rokhia	Nil								
30	LILO 132kV S/c Sj'nagar-Rokhia at G'nagar	Nil								
31	LILO132kV Ambassa-PKBari at Manu	Nil								
32	132 kV D/c K'shahar-Dharmanagar	Nil								
33	LILO132kV 79Tilla-Dhalabil at M'pur	Nil								
34	132 kV D/c Udaipur-Amarpur	Nil								
35	132 kV Manu-Manu	Nil								
	Sub-total (D)	**Nil**	**Nil**	**Nil**	**Nil**	**Nil**	**Nil**	**Nil**	**Nil**	**Nil**
E	**Mizoram**									
36	132kV S/c Lungsen-Chawngte	Civil work yet to be started								
37	132kVS/c Chawngte-S.Bungtlang									
38	132kV S/C Lunglei-Lungsen									
39	132kV S/c West Phaileng-Marpara									
	Sub-total (E)	**Nil**	**Nil**	**Nil**	**Nil**	**Nil**	**Nil**	**Nil**	**Nil**	**Nil**
F	**Nagaland**									
40	220 kV S/c N.Kohima-Wokha-M.chung									
41	132 kV D/c Kohima-New Sec. Complex	09		290				0.048		
42	132 kV S/c Wokha-Zunheboto-M'chung									
43	132 kV S/c Tuensang-Longleng									
44	LILO132kV S/c M'chung-Mariani at Longnak									
45	LILO 132kVS/c Kohima-Workha at N Kohima									
46	LILO 132 kV D/c Kohima-Meluri at Pfutsero									
	Sub-total (F)	**09**	**Nil**	**290**	**Nil**	**Nil**	**Nil**	**0.048**	**Nil**	**Nil**
	Grand Total (A+B+C+D+E+F)	**85**	**2.58**	**290**	**4.226**	**Nil**	**Nil**	**0.048**	**Nil**	**Nil**

4.1.4 Land Compensation for RoW:

Ministry of Power (MoP), Govt of India issued guidelines for payment of compensation towards damages in regard to Right of Way for transmission lines on October 15, 2015, stipulating payment of 85% of land value for tower base area (between four legs) and compensation towards diminution of land value in the width of Right of Way (RoW) corridor subject to a maximum of 15% of land value. However, these guidelines are subject to adoption by state governments for its implementation in respective states.

Out of six participating states, till date only Assam and Manipur States have adopted the MoP guidelines with same compensation provisions vide State Govt. notification dated 10th March 2017 and 28th March 2018 respectively. Accordingly, land compensation @85% for tower base and 15% towards line corridor shall be paid for the sub projects located in the state of Assam and Manipur. However, in the remaining States prevailing practice of 100% land cost for tower base shall only be implemented.

The process of land compensation begins with identification of land owners, verification of land records etc. However, actual process start only after fixation of land rates by the concerned DC/DM. Accordingly, payment of land compensation are made to the respective land owners to the extent of land area coming under tower/corridor as per the norms in addition to normal crop and tree damages. The status of land compensation paid till reporting period is given in **Table- 9**.

Table -9 : Status of Land Compensation

S. No.	Name of the Line	Total Fnd. Comp. / No. of eligible cases	Compensation already paid (No.)	Compensation under progress (No.)	Compensation paid for Tower Base (Rs. million)	Compensation paid for RoW Corridor (Rs. million)	Remark, if any
Assam							
1	220 kV D/c Tinsukia-Behiating	90/69	42	12	0.662	Not yet started	
2	132 kV S/c Dhemaji-Silapathar	27/27	8	10	0.247		
3	132 kV S/c Rupai-Chapakhowa	79/52	29	6	0.263		
4	220 kV D/C Rangia-Amingaon						
5	132 kV D/c Amingaon-Hazo						
6	LILO 132 kV S/c Rangia-Rowta						
7	LILO 132kVS/c Kamalpur-S'gram						
8	LILO132kVS/c K'pur-Khamakhya						
9	LILO 132kVS/c Golaghat-Bokajan at S'pathar						
10	132 kV D/c Sonabil-Tezpur						
11	LILO 132 kV S/c Jorhat-Nazira						
	Sub Total (A)	**196/148**	**79**	**28**	**1.173**	**Nil**	
Manipur							
12	Reno132kV Y'bam-Karong-Kohima						
13	LILO132 kV S/c Y'bam -Karong						
14	LILO132kV D/c Kongba-Kakching						
15	Strn132 kV D/c Yaingangpokpi – Kongba						
16	Strg.132kV Kakching-Kongba						
17	132 kV D/c Imphal – Nin'khong		Nil	32	Ni	Ni	
18	132 kV S/c Rengpang-Tamenglong						
	Sub Total (B)		**Nil**	**30**	**Ni**	**Ni**	
Meghalaya							
19	220 kV D/c Byrnihat-Mgap-N. Shillong	214/200	134	60	56.10	NA as State Govt has not adopted MoP guidelines	
20	LILO132kV MLHEP-Khliehriat at Mynkre	72/72	55	10	4.17		
21	132 kV D/c Phulbari-Ampati	175/171	162	00	9.61		
	Sub Total (C)	**461/443**	**351**	**70**	**69.88**	**NA**	

Tripura							
22	132 kV D/c Bagafa-Belonia					Not Applicable as Govt. of Tripura has not adopted the MoP Guidelines	.
23	132 kV D/c Belonia-Sabroom						
24	132 kV S/c Bagafa-Satchand						
25	132kV S/c S'room-S'chand at S'room						
26	132kV S/c S'room-S'chand at S'chand						
27	132 kV D/c Udaipur-Bagafa						
28	132 kV D/c Rabindranagar-Belonia						
29	132 kV D/c -Rabindranagar-Rokhia						
30	LILO 132kV S/c Sj'nagar-Rokhia at G'nagar						
31	LILO 132kV S/c Ambassa-P.K.Bari at Manu						
32	132 kV D/c Kailashahar-Dharamnagar						
33	LILO132kV 79Tilla-Dhalabil at Mohanpur						
34	132 kV D/c Udaipur-Amarpur						
35	132 kV Manu-Manu						
Sub Total (D)			**Nil**	**Nil**	**Nil**	**NA**	
Mizoram							
36	132kV S/c Lungsen-Chawngte					Not Applicable as State Govt has not adopted MoP guidelines	Civil work yet to be started.
37	132kVS/c Chawngte-S.Bungtlang						
38	132kV S/C Lunglei-Lungsen						
39	132kV S/c West Phaileng-Marpara						
Sub Total (E)			**Nil**	**Nil**	**Nil**	**NA**	
Nagaland							
40	220 kV S/c N. Kohima-Wokha-M.chung					Not Applicable as State Govt has not adopted MoP guidelines	
41	132 kV D/c Kohima- New Sec.Complex	21/21	9	12	0.768		
42	132 kV S/c Wokha-Zunheboto-M'chung						
43	132 kV S/c Tuensang-Longleng						
44	LILO 132 kV S/c M'chung-Mariani at Longnak						
45	LILO 132 kV S/c Kohima-Workha at N.Kohima						
46	LILO 132 kV D/c Kohima-Meluri at Pfutsero						
Sub Total (F)		**21/21**	**9**	**12**	**0.768**	**NA**	
Grand Total(A+B+C+D+E+F)		**678/612**	**439**	**140**	**71.821**	**Nil**	

4.1.5 Grievance Redressal Mechanism (GRM)

Grievance Redress Mechanism (GRM) is an important mechanism for addressing/ resolving the concerns and grievances in a transparent and swift manner. Moreover, addressing grievances within stipulated timeframe has also been included as one of the important result indicator agreed under subject loan. Accordingly, Grievance Redress Committees (GRC) have been constituted both at the project/scheme level and at Corporate/HQ level for all Six participating States/Utilities (Copy of notification enclosed as **Annexure-A**). . The site/project level GRCs constituted include members from State Utilities, POWERGRID, Local Administration, Village Panchayat Members, Affected Persons representative and reputed persons from the society and representative from the autonomous districts council in case of tribal districts selected/decided on nomination basis under the chairmanship of project head. This GRC is aimed to provide a trusted way to voice and resolve environment & social concerns of the project, and to address the concerns of the affected person/community in a time bound manner without impacting project implementation.

The Corporate/HQ level GRC have been constituted and notified by all States and are headed by Director Projects/Technical of Utilities including one representative from corporate Environment Social Management Cell conversant with the environment & social issues.

Apart from above, grievance redressal is in built in crop/tree compensation process where affected persons are given a chance to place their grievances after issuance of notice by revenue officials on the basis of assessment of actual damages. Grievances received towards compensation are generally addressed in open forum and in the presence of many witnesses. Process of spot verification and random checking by the district collector/ its authorized representative also provides forum for raising the grievance towards any irregularity/complain. Moreover, State Utility & POWERGRID officials also address to the complaints of affected farmers and the same are forwarded to revenue official for doing the needful, if required

It may also be noted that concerns of public are addressed regularly through public consultation process which started from project planning to construction and will be continued in operation and maintenance also. Besides, many concerns/grievances from affected persons/public both of verbal and written nature have been recorded by Site Offices which are also regularly tracked for early resolution. However, it has been observed that most of them were minor in nature and were resolved instantly and amicably by Site Officials after discussion & deliberation with affected person/ in consultation of revenue/district officials. Details of written & verbal complaints including court cases are presented below in **Table-10.**

Table - 10 : Details of Grievances/Complaints

SN	Name of the Subproject /State	Loc. No/ Village	Name of complainants	Date of complaints/ Court case	Main Issue of complaints	Status of complaint
A. Court Cases						
No Court Case has been registered so far against any subprojects under NERPSIP						
B. Written Complaints						
1.	LILO 132kV Rokhia-Surajmaninagar at Gokulnagar (Tripura)	AP-13 & 14	Villagers of Gokulnagar	05.06.18	Route diversion at location AP-13 & 14, infringing their land intended to be used for construction of houses by marginalized people	Resolved. Modification in route alignment avoiding such land has been achieved after due diligence to the satisfaction of complainants.
C. Verbal Complaints						
2.	132kV S/c West Phaileng-Marpara (Mizoram)	AP-168	Sh. Bosisto Moni	13.12.18	Compensation for crop/other damages during construction	Resolved. Compensation framework explained to complainant to his satisfaction
3	33/11 kV Botsa (Ext.) substation (Nagaland)	VillageBotsa	Dr. Ropfu Dolie (PHC)	01.03.18	Regarding Road Block due to construction materials	Resolved. Within 3 hours to complainant satisfaction
4.	33/11 kV Sechu-Zubza substation (Nagaland)	Village Zubza	Nearest Church authorities	04.06.18	Power cut due to substation construction work	Resolved through discussion
5.	33/11 kV Chiephobozou substation (Nagaland)	Village Chiephobozou	Visakuolie Kiewhuo (Villager)	06.06.18	Demand for road	Though matter is not under purview of POWERGRID, discussion are being held to find an amicable solution
6.	33/11 kV Padampukhri substation (Nagaland)	VillagePadampukhri	Nearby Residents	18.07.18	Unpleasant sound due to construction	Resolved. Noise reduction measures implemented & no further complaint received

7.	33/11 kV Botsa (Ext.) substation (Nagaland)	Village Botsa	Villagers	28.12.18	Fencing of the substation boundary	Discussion held with DoP & construction Agency to expedite the work
8.	132/33 kV Lunglei (Ext.) substation (Mizoram)	Khawiva	Officials of Khawiva Power Project,	06.03.19	Storage of soli near to Nala passes beside substation	Resolved, SDO PMD- I, Khawiva suggested alternative location for storage/disposal of excavated soil
9	132 kV D/c Kohima- New Sec. Complex Line	Village Zhadima	Neizolie Loueii (land owner)	13.01.19	Compensation related issue (for trees & Land Area)	Issue resolved through meeting/discussion
10			Concerned land owners of Loc. No. 01 to 28 of Zhadima village	06.06.19		Matter resolved through discussion. Compensation framework explained to complainant to their satisfaction.

4.1.6 Details of Stakeholder Consultation

Public consultation/ information dissemination is a continuous process starting with the project conception and continues during project implementation and even during O&M stage. As stated in ESPPF, public consultation using different technique like Public Meeting, Small Group Meeting, informal Meeting are being carried out during different activities of project cycle. In the instant project, many consultations with stakeholders and utility were organized during development of State- Specific ESPPFs, environment assessment & preparation of IEAR and land securing process. Both formal and informal consultations meeting were organized which is also integral part of IEARs. During survey also Utilities & POWERGRID site officials meet people and inform them about the routing of transmission and distribution lines.

During the construction every individual, on whose land tower is erected and people affected by RoW, are being consulted. Further, in case of Autonomous District Council areas consultations are being held with the respective village councils for identification of the landowner and obtaining their consent for the RoW (refer **Plate- 8**) . Besides, as per agreed framework, gender issues have also been addressed to the extent possible during such consultation process. Sample photographs depicting safeguard consultation at different stages of project cycle is placed as **Plate-6**. The state-wise details of public participation including percentage of females participated in the safeguard consultation meetings till June'19 is presented in **Table-11**.

Table -11: Details of Public Consultation & Gender Participation

Consultation Period	Person Attended			State-wise Details
	Total	Male	Female	
Till June 16	1548	1160	388	Assam: 169 (22 female), Manipur: 273 (86 female), Tripura: 461(178 female), Meghalaya: 259 (28 female), Nagaland: 182(27 female) & Mizoram: 204 (47 female)
July- Dec' 16	390	299	91	Assam: 88 (12 female), Manipur : 68 (30 female), Tripura: 80 (25 female), Meghalaya: 50 (5 female), Nagaland: 52 (15 female) & Mizoram: 52 (4 female)
Jan'-Jun'17	203	143	60	Assam: 88(37 female), Manipur: 59 (8 female), Meghalaya: 7 (4 female) & Mizoram: 49 (11 female)
July- Dec' 17	376	275	101	Assam: 281 (61 female), Tripura : 77 (38 female) & Nagaland: 18 (2 female)
Jan-June' 18	226	154	72	Manipur: 152 (63 female), Nagaland: 74 (9 female)
July- Dec' 18	272	244	28	Tripura : 50 (11 female) Manipur: 27 (12 female), Nagaland: 195 (5 female)
Jan- June'19	256	227	29	Manipur: 58 (14 female), Nagaland: 98 (1 female), Tripura 60(10 female), Meghalaya 40 (4 female)
Total	**3271**	**2502**	**769 = 23.50%**	

Plate 6: Stakeholders Consultation

Public Consultation during ESPPFs- Above - Hotel Imphal, Imphal, (Manipur) on 21st April 2015
Below- NEHU Complex, Shillong (Meghalaya) on 29th April 2015

Public Consultation during IEARs- Above – Bagafa, Tripura on 15st Sept' 2014
Below – Phulbari (Meghalaya) on 10th Dec. 2014

Public Consultation during IEARs- Above – Phuldungsei, Mammit, Mizoram on 18th May 2017
Below : Yurembam village in Imphal on 5th November, 2015 at West District

Consultation/Meeting with land owner during land securing for substation - 132kV Teok, Assam (Left) & 132/33kV Pfutsero Nagaland (Right)

Consultation during construction period
Above : At New Keithelmanbi and Napetpalli Village (Manipur)
Below : At f Teroguuvonou and Pongo Village (Nagaland)

Meeting with other Stakeholders
Above : Meeting with DC, Kohima, Nagaland (left) & DC East Jaintia Hills District (Meghalaya)
Below : Meeting with Village Headman of Mawkhar, Mawpynthih & Maweitnai (Megahalaya) & VDC Members Zadima (Nagaland)

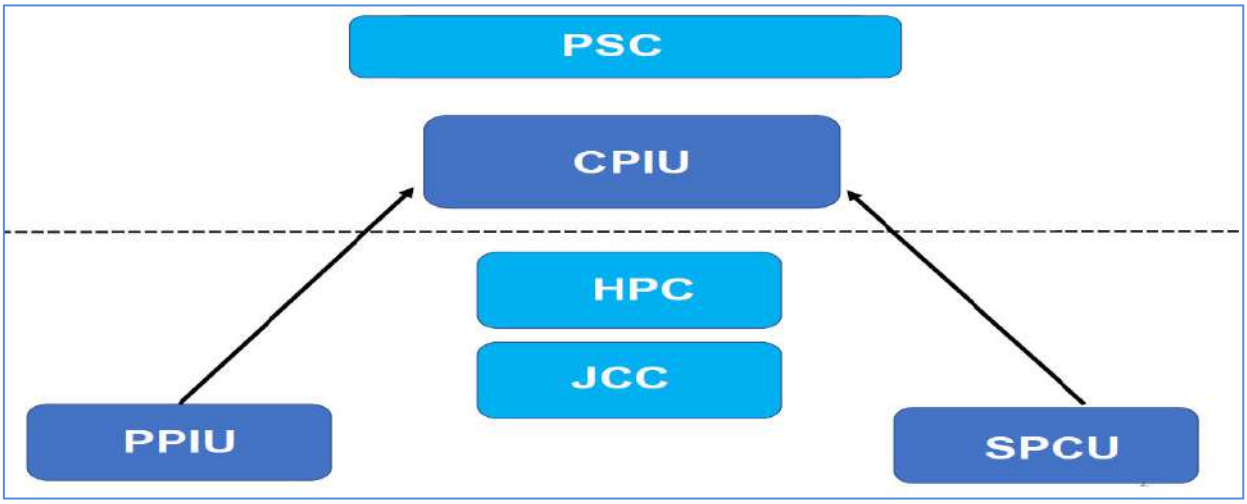

Consultation during Reporting Period
Above - Left : Phisumi Village, Mokokchung on 27th Mar'19 Right : Philimi Village, Mokokchung on 29th Mar'19
Below – Hriduk, Marpara on 24th Jan' 19



Consultation during Reporting Period
Above - South Bungtlang (Mizoram) on 20th Feb'19
Below – Left : Mawripih Village on 18th June '19 Right : Lamkyv village on 27th June'19 (East Khasi Hills, Meghalaya)


SECTION-5: ANY OTHER ISSUES (MANAGEMENT & MONITORING

Environmental monitoring is a continuous process throughout the Project life cycle starting from site selection to construction and maintenance state. As Implementing Agency (IA) POWERGRID endeavours to implement the project in close coordination with the respective state power utilities and departments. POWERGRID has been implementing the project based on the Implementation/Participation agreements that were signed separately between POWERGRID and the Power utilities. However, the ownership of the assets shall be with respective State government or State Utilities, which upon progressive commissioning shall be handed over to them for taking care of Operation and Maintenance of assets. The arrangement for monitoring and reviewing of project from the perspective of environment and social management forms part of overall arrangements for project management and implementation environment. Following implementation arrangement has been proposed at different levels for smooth implementation of this project; Flow chart showing institutional arrangement for ESPP implementation & monitoring is placed below.



The Field In-Charge reviews the progress on daily basis and periodic review by higher management including review by Heads of SPCU and CPIU undertaken wherein apart from construction issues the environmental aspects of the projects are discussed and remedial measures taken wherever required. Besides, Periodic Contractor's Review Meeting (CRM) are being held by officials of PIU with Contractors at field offices, State Head Quarters (PIU location) and with CPIU at Guwahati for better co-ordination and resolution any pending issues. The World Bank mission team also visits various sites every six months to review the progress status including ground level implementation of safeguard measures. Any observation/agreed action plan suggested by the Bank in the Aide Memoire is religiously complied in time bound manner. Additionally, review meeting among MoP, GoI, The Bank, State Governments., Utility and IA being held periodically to maintain oversight at the top level and also to debottleneck issues that require intervention at GoI/ State Government level. Due to such strong institutional support structure coupled with monitoring mechanism in place, no major non-compliance were observed/reported during the implementation of projects till date

SECTION-6: CONCLUSION

As it is vivid from the preceding sections that though the project has been classified as Category “A” in view of rich bio-diversity of North Eastern states of the country, through concerted efforts right from project planning stage itself major and significant environmental impacts have been avoided. Through careful route selection Forest involvement in the project has been limited to 417.885 ha or approx. 149.90 km, (which is just 4.34 % of total line length of 3,452km of proposed TL/DL), including 0.55 Ha of protected area i.e. Trishna Wildlife Sanctuary. Moreover, with the condition of raising the compensatory afforestation on double the area and measures like extended tower to reduce tree felling will further mitigate the likely loss of vegetation. Similarly, with the implementation of measures suggested in Biodiversity Impact Assessment Study for the Wildlife Area involved, the impacts on Dampa Wildlife Sanctuary will be negligible. However, some environmental impacts are anticipated, mostly during construction period which are being mitigated successfully by implementing the EMP and site specific measures as discussed in the previous sections. POWERGRID approach of project implementation involving selection of optimum route before design stage, regular consultation with local population, obtaining all applicable regulatory clearances/permissions, proper implementation of EMP and monitoring mechanism throughout project life cycle supported by strong institutional arrangement has considerably nullified the adverse environmental impacts arising out of project activities.

Similarly it is worth mentioning that all efforts have been made to minimize the social impacts associated with the project. The endeavor to minimize the social impacts started right from the selection of land for the proposed substations. Out of total 254.529 acres of land required for the proposed 129 substations, 120.619 acres of land is encroachment free Government land having no Project Affected persons (PAPs) and was handover to POWERGRID by State Utilities without creating any adverse social issues. The balance 133.91 acres of private land required for 44 nos. of substations was secured either through donation or was purchased through willing buyer- willing seller basis on negotiated rate without invoking land acquisition act, thus, there are no Project Affected Persons even for this private land. However, total 69 persons willing sell their land measuring 133.91 acres of private land without any undue pressure. Further, steps like constitution of a well-defined Grievance Redress Mechanism (GRM), regular consultation with local population, members of ADC/VDC (wherever applicable) and obtaining the prior consent of Affected Persons before starting the work not only ensured smooth execution of the project but also greatly reduced social risks associated with the project and improved the image of the organization.

In view of aforesaid, it may be noted that all possible measures have already been taken not only towards mitigation of adverse environmental and social impacts leftover after exhausting the options of avoidance and minimization but also to safeguard the interest of PAPs. Moreover, the state governments are also being persuaded for enhancing the compensation as per MoP guidelines on RoW compensation. Besides, direct or indirect benefits of the subprojects like the employment opportunity, improved & uninterrupted power supply, improvement in infrastructure facilities, improved commercial/economic activities will not only ensure the overall development of the project area but will also outweigh any leftover negative impacts (though unlikely) of the project.

Appendix -1: Compliance of Environment Management Plan (EMP)

Cla. No.	Project activity/stage	Potential impact	Proposed mitigation measures	Parameter to be monitored	Measurement & frequency	Institutional responsibility	Implementation schedule	Compliance Status
Pre-construction								
1	Location of overhead line towers/ poles/ underground distribution lines & alignment & design	Exposure to safety related risks	Setback of dwellings to overhead line route designed in accordance with permitted level of power frequency and the regulation of supervision at sites.	Tower location and overhead /underground alignment selection with respect to nearest dwellings	Setback distances to nearest houses – once	Implementing Agency (IA)/ Survey Agency *(Sec-III. 3.6, 3.8 & 4.1 of Contract Agreement)*	Part of overhead lines tower/ poles/ laying of underground cable sitting survey and detailed alignment survey and design	Complied/Being Complied Route alignment criterion is part of survey contract wherein all statutory Electrical clearance as stipulated under CEA's regulations, 2010 (Measures related to safety & electric supply) is considered/ensured.
2	Equipment specifications and design parameters	Release of chemicals and gases in receptors (air, water, land)	PCBs not used in substation transformers or other project facilities or equipment.	Transformer design	Exclusion of PCBs in transformers stated in tender specification - once	IA	Part of tender specifications for the equipment	Complied. As per technical specification of transformer, PCB is not used or non-detectable level (i.e. less than 2mg/kg) as per IEC 61619 or ASTM D4059
			Processes, equipment and systems not to use chlorofluorocarbons (CFCs), including halon, and their use, if any, in existing processes and systems should be phased out and to be disposed of in a manner consistent with the requirements of the Government	Process, equipment and system design	Exclusion of CFCs stated in tender specification – once	IA	Part of tender specifications for the equipment	Complied. CFC free equipments are being procured.
					Phase out schedule to be prepared in case still in use – once		Part of equipment and process design	Not Applicable

Cla. No.	Project activity/stage	Potential impact	Proposed mitigation measures	Parameter to be monitored	Measurement & frequency	Institutional responsibility	Implementation schedule	Compliance Status
3	Transmission /Distribution line design	Exposure to electro-magnetic interference	Line design to comply with the limits of electromagnetic interference from overhead power lines	Electromagnetic field strength for proposed line design	Line design compliance with relevant standards – once	IA	Part of design parameters	Complied. Designed as per guidelines of ICNIRP and ACGIH and checked by CPRI & M/s PTI, USA
4	Substation location and design	Exposure to noise	Design of plant enclosures to comply with noise regulations.	Expected noise emissions based on substation design	Compliance with regulations - once	IA	Part of detailed siting survey and design	Complied. Transformers with maximum noise emitting level of 75 dB and DG set with proper enclosures is specified in tender specification/ design criteria
		Social inequities	Careful selection of site to avoid encroachment of socially, culturally and archaeological sensitive areas (i. g. sacred groves, graveyard, religious worship place, monuments etc.)	Selection of substation location (distance to sensitive area).	Consultation with local authorities/ autonomous councils -once		Part of detailed siting survey and design	Complied/Being Complied. Part of substation site finalization/route alignment criteria
5	Location of overhead line towers/poles/ laying of underground distribution line & alignment and design	Impact on water bodies	Avoidance of such water bodies to the extent possible. Avoidance of placement of tower inside water bodies to the extent of possible	Tower/pole location and overhead/ underground line alignment selection (distance to water bodies)	Consultation with local authorities– once	IA/ Survey Agency *(Sec-II. 2.2 i of Contract agreement)*	Part of tower/pole sitting survey and detailed underground /overhead line alignment survey and design	All due care taken during survey to avoid placing of tower/pole on water bodies. However, in spite of best efforts, placing of some towers (approx. 11 nos.) on rivers couldn't be avoided in case of 132kV Rupai-Chapakhowa and Rangia-Amingaon line due to locational constraints/wide river crossing span.

Cla. No.	Project activity/stage	Potential impact	Proposed mitigation measures	Parameter to be monitored	Measurement & frequency	Institutional responsibility	Implementation schedule	Compliance Status
		Social inequities	Careful route selection to avoid existing settlements and sensitive locations	Tower/pole location and overhead/ underground line alignment selection (distance to nearest dwellings or social institutions)	Consultation with local authorities/ autonomous councils and land owners – once	IA/ Survey Agency *(Sec-II. 2.2 i of Contract agreement)*	Part of detailed tower/pole sitting and overhead/ underground alignment survey and design	All socially sensitive areas including habitated areas avoided for TLs (refer **Plate – 7**). However, distribution lines due to their functional mandate are bound to pass through habited areas.
			Minimise impact on agricultural land	Tower location and overhead/ underground line alignment selection (distance to agricultural land)	Consultation with local auth./ autonomous councils and land owners – once			Though major sections of proposed lines are routed through agricultural field in order to avoid impact on environmentally/socially sensitive areas, every efforts including consultation with local authorities/ autonomous councils and land owners (refer **Plate – 8**). undertaken to minimize impacts on agricultural land/produce to the extent possible.
			Careful selection of site and route alignment to avoid encroachment of socially, culturally and archaeological sensitive areas (i. g. sacred groves, graveyard, religious worship place, monuments etc.)	Tower/pole location and overhead/ underground line alignment selection (distance to sensitive area)	Consultation with local authorities/ autonomous councils -once			As explained in the precedinding section, all such areas avoided during survey stage itself following the cardinal principle of ESPPF.

Cla. No.	Project activity/stage	Potential impact	Proposed mitigation measures	Parameter to be monitored	Measurement & frequency	Institutional responsibility	Implementation schedule	Compliance Status
6	Involuntary acquisition or permanent land acquisition for substation.	Social inequities	Compensation and R&R measures as per provision of RFCTLARRA,2013[4]	Compensation and monetary R&R measures implementation before possession.	As per provisions of Act.	State Govt.	Prior to award/start of substation construction.	No involuntary acquisition of land involved in instant case. Please refer **Table-7** for details securing of substations land.
7	Line through protected area/ precious ecological area	Loss of precious ecological values/ damage to precious species	Avoid siting into such areas by careful site and alignment selection (National Parks, Wildlife Sanctuary, Biosphere Reserves/ Biodiversity Hotspots)	Tower/pole location & overhead/ underground line alignment selection (distance to nearest designated eco protected / sensitive areas)	Consultation with local forest authorities - once	IA/ Survey Agency *(Sec-II. 2.4, 2.1 (i) of Contract agreement)*	Part of detailed siting and alignment survey /design	Through careful route selection involvement of forest/protected areas avoided to the maximum extent. However, given the magnitude of project and peculiarity of terrain, minimum involvement of forest/protected area couldn't be avoided as per details provided in **Table- 2.**
			Minimize the need by using existing RoW wherever possible	Tower/pole location and overhead/ underground line alignment selection	Consultation with local authorities and design engineers - once		Part of detailed sitting and alignment survey /design	During survey, every efforts made to utilize already available corridor wherever, possible.
8	Line through identified Elephant corridor / Migratory bird	Damage to the Wildlife/ Birds and also to line	Study of earmarked elephant corridors to avoid such corridors, Adequate ground clearance, Fault clearing by Circuit Breaker, Barbed wire wrapping on towers, reduced spans etc., if applicable	Tower/pole location and overhead/ underground line alignment selection. Minimum/ maximum ground clearance	Consultation with local forest authorities – once. Monitoring – quarterly basis	IA/ Survey Agency *(Sec-II. 2.4, 2.1 (i) of Contract agreement)*	Part of detailed sitting and alignment survey /design and Operation	Through careful route selection, all known Elephant corridors have been avoided completely in consultation with forest authorities. However, during survey forest authority informed that Elephant sightings were reported in some section (AP60-AP75) of 132 kV Phulbari-Ampati line

[4] In the instant subproject no fresh land acquisition (permanent) is involved hence this clause shall not be applicable.

Cla. No.	Project activity/stage	Potential impact	Proposed mitigation measures	Parameter to be monitored	Measurement & frequency	Institutional responsibility	Implementation schedule	Compliance Status
								and therefore, provisions of tower extensions up to 9 m have been made so as to ensure unhindered passage of elephants.
			Avoidance of established/ identified migration path (Birds & Bats). Provision of flight diverter/reflectors, Bird guard, elevated perches, insulating jumper loops, obstructive perch deterrents, raptor hoods etc.[5], if applicable	Tower/pole location and overhead/ underground line alignment selection	Consultation with local forest authorities - once		Part of detailed sitting and alignment survey /design and Operation	All such identified/ established birds migratory path have been avoided completely through adopting careful route selection technique.
9	Line through forestland	Deforestation and loss of biodiversity, edge effect	Avoid siting of line by careful site and alignment selection	Tower/pole location and overhead/ underground line alignment selection (distance to nearest protected or reserved forest)	Consultation with local authorities – once	IA/ Survey Agency *(Sec-II. 2.4, 2.1 (i) of Contract agreement)*	Part of detailed sitting and alignment survey/design	As explained above, proposed line routes of TL/DL have been finalised by taking consideration of minimum impact on forest area after consultation with forest authorities and/or village councils in case of private /community forest. However, applicable forest clearance under Forest (Conservation) Act, 1980 have been obtained/ are presently under various stages of approval process at State Govt/ RMoEFCC level (for details
			Minimise the need by using existing towers, tall towers and RoW, wherever possible		Consultation with local authorities and design engineers – once			
			Measures to avoid invasion of alien species	Intrusion of invasive species	Consultation with local forest authorities - once			

[5] As per International/National best practices and in consultation with concerned forest/wildlife Authority

Cla. No.	Project activity/stage	Potential impact	Proposed mitigation measures	Parameter to be monitored	Measurement & frequency	Institutional responsibility	Implementation schedule	Compliance Status
			Obtain statutory clearances from the Government	Statutory approvals from Government	Compliance with regulations – once for each subproject			refer **Table-2**). As far as invasion of alien species is concern, it is noteworthy that actual damage/tree felling is minuscule and limited 3m strip below each conductor and not in whole RoW. Hence, chance of invasion of alien species is not envisaged. Moreover, afforestation scheme is prepared by forest authority taking local species into consideration which is also integral part of forest proposal. The afforestation activity in forest land is the sole responsibility of forest deptt and user agency has no role in selection of species /afforestation activity in forest except depositing compensatory cost levied by forest deptt. For details on forest clearance please visit: http://forestsclearance.nic.in/Online_Status.aspx
			Consultation with autonomous councils wherever required	Permission/ NOC from autonomous councils	Consultation with autonomous councils – once during tower placement			
10	Lines through farmland	Loss of agricultural production/ change in cropping pattern	Use existing tower or footings wherever possible	Tower/pole location and overhead/ underground line alignment selection	Consultation with local authorities and design engineers – once	IA/ Survey Agency *(Sec-II. 2.4, 2.1 (i) of Contract*	Part of detailed alignment survey and design	While passing through agricultural land construction activities are scheduled mostly during lean period so that damage to standing crop is avoided. However, full

Cla. No.	Project activity/stage	Potential impact	Proposed mitigation measures	Parameter to be monitored	Measurement & frequency	Institutional responsibility	Implementation schedule	Compliance Status
			Avoid sitting new towers on farmland wherever feasible	Tower/pole location and overhead/ underground line alignment selection	Consultation with local authorities and design engineers – once	*agreement)*	Part of detailed sitting and alignment survey /design	compensation as per assessment of revenue authorities is paid to land owner/farmer in case of inevitable damages.
11	Noise related	Nuisance to neighbouring properties	Substations sited and designed to ensure noise will not be a nuisance	Noise levels	Noise levels to be specified in tender documents – once	IA	Part of detailed equipment design	Most of the proposed substations are located away from habitated area. Moreover noise control measures already part of tender specification/ design criteria such as Transformers with maximum noise emitting level of 75 dB and DG set with proper enclosures.
12	Interference with drainage patterns/ Irrigation channels	Flooding hazards/ loss of agricultural production	Appropriate sitting of towers to avoid channel interference	Tower/pole location and overhead/ underground line alignment selection (distance to nearest flood zone)	Consultation with local authorities and design engineers – once	IA	Part of detailed alignment survey and design	The actual blockage of ground surface is limited to area covered by tower footing only and that also up to a maximum of 3m depth. Hence, chances of inference with drainage pattern/ irrigation channel are remote
13	Escape of polluting materials	Environmental pollution	Transformers designed with oil spill containment systems, and purpose-built oil, lubricant and fuel storage system, complete with spill cleanup equipment.	Equipment specifications with respect to potential pollutants	Tender document to mention specifications – once	IA	Part of detailed equipment design /drawings	Complied. Part of detailed equipment deign/drawing. As per approved design provision of pit (capacity of 130% of transformer oil volume) below each transformer and a sump of capacity of 200% of oil volume of largest transformer is provided.

Cla. No.	Project activity/stage	Potential impact	Proposed mitigation measures	Parameter to be monitored	Measurement & frequency	Institutional responsibility	Implementation schedule	Compliance Status
			Substations to include drainage and sewage disposal systems to avoid offsite land and water pollution.	Substation sewage design	Tender document to mention detailed specifications – once	IA	Part of detailed substation layout and design /drawings	Complied. Part of detailed substation layout and design/drawings
14	Equipments submerged under flood	Contamination of receptors	Substations constructed above the high flood level(HFL) by raising the foundation pad	Substation design to account for HFL (elevation with respect to HFL elevation)	Base height as per flood design- once	IA	Part of detailed substation layout and design /drawings	Complied. Part of detailed substation layout and design/drawings
15	Explosions /Fire	Hazards to life	Design of substations to include modern fire fighting equipment Provision of fire fighting equipment to be located close to transformers	Substation design compliance with fire prevention and control codes	Tender document to mention detailed specifications – once	IA	Part of detailed substation layout and design /drawings	Complied. Part of detailed substation layout and design/drawings.
Construction								
16	Equipment layout and installation	Noise and vibrations	Construction techniques and machinery selection seeking to minimize ground disturbance.	Construction techniques and machinery	Construction techniques & machinery creating minimal ground disturbance- once at the start of each construction phase	IA (Contractor through contract provisions) (Sec-IX. PC 22.4.3.5, 22.4.1 of *Contract agreement*)	Construction period	Complied/ Being Complied. Use of low noise producing equipments /machineries by construction contractor is ensured through compliance contract condition
17	Physical construction	Disturbed farming activity	Construction activities on cropping land timed to avoid disturbance of field crops (within one month of harvest	Timing of start of construction	Crop disturbance – Post harvest as soon as possible but before next	IA (Contractor through contract provisions) (Sec-II. 2.5 of	Construction period	As already explained, construction activities on farm/agricultural land are being undertaken mostly lean/post-harvest period so that damage to standing crop

Cla. No.	Project activity/stage	Potential impact	Proposed mitigation measures	Parameter to be monitored	Measurement & frequency	Institutional responsibility	Implementation schedule	Compliance Status
			wherever possible).		crop – once per site	*Contract agreement*)		is avoided. However, full compensation as per assessment of revenue authorities is paid to land owner/farmer in case of inevitable damages. (refer **Table – 8** for details).
18	Mechanized construction	Noise, vibration and operator safety, efficient operation	Construction equipment to be well maintained.	Construction equipment – estimated noise emissions	Complaints received by local authorities – every 2 weeks	IA (Contractor through contract provisions) (Sec-IX.PC 22.4.3.6)	Construction period	Complied/ Being Complied. Proper maintenance of construction equipments by construction contractor is ensured through compliance of referred contract condition. Noise levels are being monitored in all active sites regularly and all readings are found to be well within permissible limits (**refer Plate-9**). Till date, only one complained received from resident near Padampukhri substation site for which necessary measures were undertaken and no further complaint received (refer **Table-10**).
		Noise, vibration, equipment wear and tear	Turning off plant not in use.	Construction equipment – estimated noise emissions and operating schedules	Complaints received by local authorities – every 2 weeks	IA (Contractor through contract provisions)	Construction period	
19	Construction of roads for accessibility	Increase in airborne dust particles	Existing roads and tracks used for construction and maintenance access to the line wherever possible.	Access roads, routes (length and width of new access roads to be constructed)	Use of established roads wherever possible – every 2 weeks	IA (Contractor through contract provisions) (Sec-II. 2.8)	Construction period	Most of the sites are easily accessible and existing roads/paths are used for construction activities. However, at few sites, there was a need to strengthen

Cla. No.	Project activity/stage	Potential impact	Proposed mitigation measures	Parameter to be monitored	Measurement & frequency	Institutional responsibility	Implementation schedule	Compliance Status
		Increased land requirement for temporary accessibility	New access ways restricted to a single carriageway width within the RoW.	Access width (meters)	Access restricted to single carriage –way width within RoW – every 2 weeks	IA (Contractor through contract provisions) (Sec-II. 2.8)	Construction period	existing paths/construction of approach road (refer **Table-4** for details**)** in order to carry heavy equipments/ machineries.
20	Construction activities	Safety of local villagers	Coordination with local communities for construction schedules, Barricading the construction area and spreading awareness among locals	Periodic and regular reporting /supervision of safety arrangement	No. of incidents- once every week	IA (Contractor through contract provisions) (Sec-II. 2.2 iv, vi, vii & viii)	Construction period	Being complied. All requisite safety arrangement ensured through regular monitoring and compliance of contract conditions (refer **Plate- 10**). No accidents reported so far.
		Local traffic obstruction	Coordination with local authority/ requisite permission for smooth flow of traffic	Traffic flow (Interruption of traffic)	Frequency (time span)- on daily basis	IA (Contractor through contract provisions)	Construction period	Most of the tower/pole locations are in farm/barren land. Hence, the problem of traffic obstruction is not witnessed. In case of road/ rail crossing due precaution and required permission (refer **Plate-11**) are being obtained prior to start of work. Till date only one complaint received in case of Bosta substation site which was promptly resolved.(refer **Table- 10**)
21	Temporary blockage of utilities	Overflows, reduced discharge	Measure in place to avoid dumping of fill materials in sensitive drainage area	Temporary fill placement (m^3)	Absence of fill in sensitive drainage areas – every 4 weeks	IA (Contractor through contract provisions) (Sec-II. 2.6)	Construction period	Most of the fill materials are being utilized either in own premises for refilling/resurfacing or being utilized for useful purpose with due consent of the local communities.

Cla. No.	Project activity/stage	Potential impact	Proposed mitigation measures	Parameter to be monitored	Measurement & frequency	Institutional responsibility	Implementation schedule	Compliance Status
22	Site clearance	Vegetation	Marking of vegetation to be removed prior to clearance, and strict control on clearing activities to ensure minimal clearance. No use of herbicides and pesticides	Vegetation marking and clearance control (area in m^2)	Clearance strictly limited to target vegetation – every 2 weeks	IA (Contractor through contract provisions) (Sec-II. 2.2 ix, 2.5)	Construction period	Only controlled clearing of vegetation is being undertaken, if necessary and with the prior permission of competent authority
23	Trimming /cutting of trees within RoW	Fire hazards	Trees allowed growing up to a height within the RoW by maintaining adequate clearance between the top of tree and the conductor as per the regulations.	Species-specific tree retention as approved by statutory authorities (average and max. tree height at maturity, in meters)	Presence of target species in RoW following vegetation clearance – once per site	IA (Contractor through contract provisions)	Construction period	Regulated felling in RoW is being carried out with the permission of owner and revenue authorities keeping required electrical clearance as per applicable norms (CEA's regulations, 2010 (Measures related to safety & electric supply)
		Loss of vegetation and deforestation	Trees that can survive pruning to comply should be pruned instead of cleared.	Species-specific tree retention as approved by statutory authorities	Presence of target species in RoW following vegetation clearance - once per site	IA (Contractor through contract provisions) (Sec-II. 2.2 ix, 2.5)	Construction period	Actual damage/tree felling is minuscule and limited 3m strip below each conductor and not in entire RoW. However, after stringing natural vegetation is allowed to regrowth in all these cleared strips except for one strip which is kept clear of vegetation for maintenance purpose In remaining RoW area, only pruning/ pollarding is done to maintain electrical clearance.

Cla. No.	Project activity/stage	Potential impact	Proposed mitigation measures	Parameter to be monitored	Measurement & frequency	Institutional responsibility	Implementation schedule	Compliance Status
			Felled trees and other cleared or pruned vegetation to be disposed of as authorized by the statutory bodies.	Disposal of cleared vegetation as approved by the statutory authorities (area cleared in m^2)	Use or intended use of vegetation as approved by the statutory authorities – once per site	IA (Contractor through contract provisions)	Construction period	All felled trees are handed over to concerned author/owner for disposal. IA/State Utilities have no role in storage or disposal of felled trees/wood
24	Wood/ vegetation harvesting	Loss of vegetation and deforestation	Construction workers prohibited from harvesting wood in the project area during their employment, (apart from locally employed staff continuing current legal activities)	Illegal wood /vegetation harvesting (area in m^2, number of incidents reported)	Complaints by local people or other evidence of illegal harvesting – every 2 weeks	IA (Contractor through contract provisions) (Sec-II. 2.3)	Construction period	Compiled/Being complied. Regular monitoring is undertaken to ensure compliance of applicable contract provisions by contractor.
25	Surplus earthwork/ soil	Runoff to cause water pollution, solid waste disposal	Soil excavated from tower footings/ substation foundation disposed of by placement along roadsides, or at nearby house blocks if requested by landowners	Soil disposal locations and volume (m^3)	Acceptable soil disposal sites – every 2 weeks	IA (Contractor through contract provisions) (Sec-II, 2.6)	Construction period	Complied/Being Complied. Approx. 90-95% of excavated soil is used for refilling/ resurfacing and rest is being disposed off along with other debris at designated location as already explained in clause no 21.
26	Substation construction	Loss of soil	Loss of soil is not a major issue as excavated soil will be mostly reused for filling. However, in case of requirement of excess soil the same will be met from existing quarry or through deep excavation of existing	Borrow area sitting (area of site in m^2 and estimated volume in m^3)	Acceptable soil borrow areas that provide a benefit - every 2 weeks	IA (Contractor through contract provisions) (Sec-II, 2.9)	Construction period	Excess soil is not required in most of the proposed substations as excavated soil is normally sufficient for levelling and refilling work. For few substations where excess soil is required, the same has been managed from existing approved/ registered borrow/ quarry or private land/pond after taking

Cla. No.	Project activity/stage	Potential impact	Proposed mitigation measures	Parameter to be monitored	Measurement & frequency	Institutional responsibility	Implementation schedule	Compliance Status
			pond or other nearby barren land with agreement of local communities					due permission/ consent For details of borrowed earth utilized along with location co-ordinates & applicable consent/permission etc. is placed as **Appendix-4.**
		Water pollution	Construction activities involving significant ground disturbance (i.e. substation land forming) not undertaken during the monsoon season	Seasonal start &finish of major earthworks (P^H ,BOD/ COD, Suspended solids, others)	Timing of major disturbance activities – prior to start of construction activities	IA (Contractor through contract provisions)	Construction period	Complied/Being complied. No construction activities undertaken during monsoon period.
27	Site clearance	Vegetation	Tree clearances for easement establishment to only involve cutting trees off at ground level or pruning as appropriate, with tree stumps and roots left in place and ground cover left undisturbed	Ground disturbance during vegetation clearance (area, m^2)	Amount of ground disturbance – every 2 weeks	IA (Contractor through contract provisions) (Sec-VII, 9.3, 10.3)	Construction period	Complied/Being Complied. Already explained at clause no. 23.
				Statutory approvals	Statutory approvals for tree clearances – once for each site			
28	Substation foundation/ Tower erection disposal of surplus earthwork/fill	Waste disposal	Excess fill from substation/tower foundation excavation disposed of next to roads or around houses, in agreement with the local community or landowner	Location and amount (m^3)of fill disposal	Appropriate fill disposal locations – every 2 weeks	IA (Contractor through contract provisions) (Sec-II, 2.6)	Construction period	Complied/Being Complied. Already explained at clause no. 21.

Cla. No.	Project activity/stage	Potential impact	Proposed mitigation measures	Parameter to be monitored	Measurement & frequency	Institutional responsibility	Implementation schedule	Compliance Status
29	Storage of chemicals and materials	Contamination of receptors (land, water, air)	Fuel and other hazardous materials securely stored above high flood level.	Location of hazardous material storage; spill reports (type of material spilled, amount (kg or m^3) and action taken to control and clean up spill)	Fuel storage in appropriate locations and receptacles – every 2 weeks	IA (Contractor through contract provisions) (Sec-IX, PC 22.4.3.3)	Construction period	Complied/Being Complied. Regular monitoring is undertaken to ensure that such materials are stored securely at designated places only along with sufficient containment as part of compliance of applicable contract provisions by the contractor.
30	Construction schedules	Noise nuisance to neighbouring properties	Construction activities only undertaken during the day and local communities informed of the construction schedule.	Timing of construction (noise emissions, [dB(A)])	Daytime construction only – every 2 weeks	IA (Contractor through contract provisions) (Sec-IX, PC 22.4.1)	Construction period	Complied/Being Complied. Construction activities are restricted to day time only. Further, regular monitoring is undertaken to ensure compliance of applicable contract provisions by contractor. Noise level measured in various constructions sites were found to be well with in permissible standard. (refer **Plate - 9**)
31	Provision of facilities for construction workers	Contamination of receptors (land, water, air)	Construction workforce facilities to include proper sanitation, water supply and waste disposal facilities.	Amenities for Workforce facilities	Presence of proper sanitation, water supply and waste disposal facilities – once each new facility	IA (Contractor through contract provisions) (Sec-VIII, 22.2.1, 22.2.6, 22.2.11)	Construction period	Complied/Being Complied. Regular monitoring is undertaken to ensure compliance of applicable contract provisions by contractor. Refer Section 3.1.4 and Plate -4 for details on worker facilities in different work sites.

Cla. No.	Project activity/stage	Potential impact	Proposed mitigation measures	Parameter to be monitored	Measurement & frequency	Institutional responsibility	Implementation schedule	Compliance Status
32	Influx of migratory workers	Conflict with local population to share local resources	Using local workers for appropriate asks	Avoidance/reduction of conflict through enhancement/ augmentation of resource requirements	Observation & supervision– on weekly basis	IA (Contractor through contract provisions) {Sec-II, 2.2(iii)}	Construction period	Complied/Being Complied. Local workforces are being engaged by construction contractor based on skill in compliance to contract provisions. No incidents of conflict reported so far.
33	Lines through farmland	Loss of agricultural productivity	Use existing access roads wherever possible	Usage of existing utilities	Complaints received by local people /authorities - every 4 weeks	IA (Contractor through contract provisions) {Sec-II, 2.8 & Sec. IX, PC 22.4.2, (ii)}	Construction period	Complied/Being complied. Implementation of all proposed mitigation measures is being ensured including preservation of topsoil resulting in receipt of no compliants so far.
			Ensure existing irrigation facilities are maintained in working condition.	Status of existing facilities				
			Protect /preserve topsoil and reinstate after construction completed	Status of facilities (earthwork in m^3)				
			Repair /reinstate damaged bunds etc after construction completed	Status of facilities (earthwork in m^3)				

Cla. No.	Project activity/stage	Potential impact	Proposed mitigation measures	Parameter to be monitored	Measurement & frequency	Institutional responsibility	Implementation schedule	Compliance Status
		Social inequities	Land owners/ Farmers compensated for any temporary loss of productive land as per existing regulation.	Process of Crop/tree compensation in consultation with forest dept.(for timber yielding tree) and Horticulture deptt.(for fruit bearing tree)	Consultation with affected land owner prior to implementation and during execution.	IA	During construction	In case of unavoidable tree and crop damages, full compensation as per assessment done by revenue /forest authorities is paid to affected land owners/farmers. Accordingly, Rs. 4.226 million has been paid to 85 affected persons till reporting period. Besides, an amount of Rs 71.821 million has been paid to 439 affected persons towards diminishing land value. (for details of compensation paid refer **Table- 8 & Table-9**)
34	Uncontrolled erosion/silt runoff	Soil loss, downstream siltation	Need for access tracks minimised, use of existing roads. Limit site clearing to work areas Regeneration of vegetation to stabilise works areas on completion (where applicable) Avoidance of excavation in wet season Water courses protected from siltation through use of bunds and sediment ponds.	Design basis and construction procedures (suspended solids in receiving waters; area re-vegetated in m^2; amount of bunds constructed [length in meter, area in m^2, or volume in m^3])	Incorporating good design and construction management practices – once for each site	IA (Contractor through contract provisions) (Sec-II, 2.7)	Construction period	Complied/Being complied. Wherever needed appropriate slope protection measures such as RRM Wall, Retaining Wall, Revetment, Stone Pitching along with bio-engineering measures undertaken/being undertaken as per site requirements (for details of such measures refer **Table- 2 & Plate-4**) . Further as explained in clause no 19 & 22, adequate prudence has been practiced in site clearance and use of existing road/path.

Cla. No.	Project activity/stage	Potential impact	Proposed mitigation measures	Parameter to be monitored	Measurement & frequency	Institutional responsibility	Implementation schedule	Compliance Status
35	Nuisance to nearby properties	Losses to neighbouring land uses/ values	Contract clauses specifying careful construction practices.	Contract clauses	Incorporating good construction management practices – once for each site	IA (Contractor through contract provisions) {Sec-II, 2.8 & Sec. IX, PC 22.4.2, (ii)}	Construction period	Complied/Being complied. All such measures have been implemented as already explained at Clause no 17, 18, 19, 30 & 33.
			As much as possible existing access ways will be used	Design basis and layout	Incorporating good design engineering practices–			
			Productive land will be reinstated following completion of construction	Reinstatement of land status (area affected, m^2)	Consultation with affected parties – twice – immediately after completion of construction and after the first harvest			
		Social inequities	Compensation will be paid for loss of production, if any.	Implementation of Tree/Crop compensation (amount paid)	Consultation with affected parties – once in a quarter	IA	Prior to construction	Already explained at clause no.33. All applicable compensation to all eligible PAPs are being paid in consultation with revenue authority and affected persons.
36	Flooding hazards due to construction impediments of natural drainage	Flooding and loss of soils, contamination of receptors (land, water)	Avoid natural drainage pattern/ facilities being disturbed/blocked/ diverted by on-going construction activities	Contract clauses (e.g. suspended solids and BOD/COD in receiving water)	Incorporating good construction management practices-once for each site	IA (Contractor through contract provisions) (Sec-II, 2.7)	Construction period	Good construction management practices are being employed at sites to avoid blockage of natural drainage and resultant flooding.

Cla. No.	Project activity/stage	Potential impact	Proposed mitigation measures	Parameter to be monitored	Measurement & frequency	Institutional responsibility	Implementation schedule	Compliance Status
37	Equipment submerged under flood	Contamination of receptors (land, water)	Equipment stored at secure place above the high flood level(HFL)	Store room level to be above HFL (elevation difference in meters)	Store room level as per flood design-once	IA (Sec-II, 1.11)	Construction period	Complied. All equipment foundations are designed above in accordance with approved substation design/layout.
38	Inadequate siting of borrow areas (quarry areas)	Loss of land values	Existing borrow sites will be used to source aggregates, therefore, no need to develop new sources of aggregates	Contract clauses	Incorporating good construction management practices – once for each site	IA (Contractor through contract provisions) (Sec-II, 2.9)	Construction period	Complied/Being complied. Already explained at clause no. 26.
39	Health and safety	Injury and sickness of workers and members of the public	Safety equipment's (PPEs) for construction workers Contract provisions specifying minimum requirements for construction camps Contractor to prepare and implement a health and safety plan. Contractor to arrange for health and safety training sessions	Contract clauses (number of incidents and total lost-work days caused by injuries and sickness)	Contract clauses compliance – once every quarter	IA (Contractor through contract provisions) (Sec-II, 2.2 v, vii, viii & Sec-IX, PC 22.4.3.8, PC 22.4.3.24 and Safety Rules of PC 22.4.3.21)	Construction period	Complied/Being Complied with project specific safety plan and general conditions of contract which covers all applicable regulations. No major or minor accident reported till reporting period. Details on Health and Safety aspect provided in **Section 3.1.4**.
40	Inadequate construction stage monitoring	Likely to maximise damages	Training of environmental monitoring personnel	Training schedules	Number of programs attended by each person – once a year	IA	Routinely throughout construction period	All employees engaged in project execution including designated Environment Officers have been adequately trained. (refer **Section 3.1.5**).

Cla. No.	Project activity/stage	Potential impact	Proposed mitigation measures	Parameter to be monitored	Measurement & frequency	Institutional responsibility	Implementation schedule	Compliance Status
			Implementation of effective environmental monitoring and reporting system using checklist of all contractual environmental requirements.	Respective contract checklists and remedial actions taken thereof.	Submission of duly completed checklists of all contracts for each site - once			Appropriate clause incorporated in contract provisions for EMP implementation. Site manager monitor and review the implementation of EMP on daily basis. Further, each State covered under the projects has been provide with a dedicated designated Environment Officers for proper monitoring and implementation of safeguards measures. Recruitment process has been under way to fill the posts that have fallen vacant in two states i.e. Meghalaya & Manipur.
			Appropriate contact clauses to ensure satisfactory implementation of contractual environmental mitigation measures.	Compliance report related to environmental aspects for the contract	Submission of duly completed compliance report for each contract – once			In order to comply with such provisions and further improvement, site inspections /audits are being carried out periodically and memo/ observation/notice are issued to respective contractor for necessary compliance (refer **Section-3.1.6 &Appendix-2**.)
Operation and Maintenance								
41	Location of line towers/poles and overhead/ underground line	Exposure to safety related risks	Setback of dwellings to overhead line route designed in accordance with permitted level of power frequency and the regulation of	Compliance with setback distances ("as-built" diagrams)	Setback distances to nearest houses – once in quarter	State Utility	During operations	Not applicable currently. Will be complied during O & M stage

Cla. No.	Project activity/stage	Potential impact	Proposed mitigation measures	Parameter to be monitored	Measurement & frequency	Institutional responsibility	Implementation schedule	Compliance Status
	alignment & design		supervision at sites.					
42	Line through identified bird flyways, migratory path	Injury/ mortality to birds, bats etc due to collision and electrocution	Avoidance of established/ identified migration path (Birds & Bats). Provision of flight diverter/reflectors, elevated perches, insulating jumper loops, obstructive perch deterrents, raptor hoods etc., if applicable	Regular monitoring for any incident of injury/ mortality	No. of incidents- once every month	State Utility	Part of detailed siting and alignment survey /design and Operation	- do-
43	Equipment submerged under flood	Contamination of receptors (land, water)	Equipment installed above the high flood level (HFL) by raising the foundation pad.	Substation design to account for HFL ("as-built" diagrams)	Base height as per flood design – once	State Utility	During operations	- do-
44	Oil spillage	Contamination of land/nearby water bodies	Substation transformers located within secure and impervious sump areas with a storage capacity of at least 100% of the capacity of oil in transformers and associated reserve tanks.	Substation bunding (Oil sump) ("as-built" diagrams)	Bunding (Oil sump) capacity and permeability - once	State Utility	During operations	- do-
45	SF6 management	Emission of most potent GHG causing climate change	Reduction of SF6 emission through awareness, replacement of old seals, proper handling & storage by controlled inventory	Leakage and gas density/level	Continuous monitoring	State Utility	During Operations	- do-

Cla. No.	Project activity/stage	Potential impact	Proposed mitigation measures	Parameter to be monitored	Measurement & frequency	Institutional responsibility	Implementation schedule	Compliance Status
			and use, enhance recovery and applying new technologies to reduce leakage					
46	Inadequate provision of staff/workers health and safety during operations	Injury and sickness of staff /workers	Careful design using appropriate technologies to minimise hazards	Usage of appropriate technologies (lost work days due to illness and injuries)	Preparedness level for using these technologies in crisis – once each year	State Utility	Design and operation	- do-
			Safety awareness raising for staff.	Training/awareness programs and mock drills	Number of programs and percent of staff /workers covered – once each year			- do-
			Preparation of fire emergency action plan and training given to staff on implementing emergency action plan					- do-
			Provide adequate sanitation and water supply facilities	Provision of facilities	Complaints received from staff /workers			- do-
47	Electric Shock Hazards	Injury/ mortality to staff and public	Careful design using appropriate technologies to minimise hazards	Usage of appropriate technologies (no. of injury incidents, lost work days)	Preparedness level for using these technology in crisis – once a month	State Utility	Design and Operation	- do-
			Security fences around substations	Maintenance of fences	Report on maintenance – every 2 weeks			- do-
			Barriers to prevent climbing on/	Maintenance of barriers				- do-
			Appropriate warning signs on facilities	Maintenance of warning				- do-

Cla. No.	Project activity/stage	Potential impact	Proposed mitigation measures	Parameter to be monitored	Measurement & frequency	Institutional responsibility	Implementation schedule	Compliance Status
			Electricity safety awareness raising in project areas	Training /awareness programs and mock drills for all concerned parties	Number of programs and per cent of total persons covered –once each year			- do-
48	Operations and maintenance staff skills less than acceptable	Unnecessary environmental losses of various types	Adequate training in O&M to all relevant staff of substations & transmission/distribution line maintenance crews.	Training/awareness programs and mock drills for all relevant staff	Number of programs and per cent of staff covered – once each year	State Utility	Operation	- do-
			Preparation and training in the use of O&M manuals and standard operating practices					
49	Inadequate periodic environmental monitoring.	Diminished ecological and social values.	Staff to receive training in environmental monitoring of project operations and maintenance activities.	Training/awareness programs and mock drills for all relevant staff	Number of programs and per cent of staff covered – once each year	State Utility	Operation	- do-
50	Equipment specifications and design parameters	Release of chemicals and gases in receptors (air, water, land)	Processes, equipment and systems using cholofluorocarbons (CFCs), including halon, should be phased out and to be disposed of in a manner consistent with the requirements of the Govt.	Process, equipment and system design	Phase out schedule to be prepared in case still in use – once in a quarter	State Utility	Operations	- do-

Cla. No.	Project activity/stage	Potential impact	Proposed mitigation measures	Parameter to be monitored	Measurement & frequency	Institutional responsibility	Implementation schedule	Compliance Status
51	Transmission / distribution line maintenance	Exposure to electromagnetic interference	Transmission/ distribution line design to comply with the limits of electromagnetic interference from overhead power lines	Required ground clearance (meters)	Ground clearance - once	State Utility	Operations	- do-
52	Uncontrolled growth of vegetation	Fire hazard due to growth of tree/shrub /bamboo along RoW	Periodic pruning of vegetation to maintain requisite electrical clearance. No use of herbicides/pesticides	Requisite clearance (meters)	Assessment in consultation with forest authorities - once a year(pre-monsoon/post-monsoon	State Utility	Operations	- do-
53	Noise related	Nuisance to neighbouring properties	Substations sited and designed to ensure noise will not be a nuisance.	Noise levels {dB(A)}	Noise levels at boundary nearest to properties and consultation with affected parties if any - once	State Utility	Operations	- do-

ENCLOSURES

Appendix-2 : Sample copy of such notice/memo issued and compliance submitted by the respective contractor/ subcontractor

पावर ग्रिड कारपोरेशन आंफ इंडिया लिमिटेड़
(भारत सरकार का उध्धम)
POWER GRID CORPORATION OF INDIA LIMITED
(A Government of India Enterprise)
Dongtieh, Lower Nongrah, Lapalng, (Shillong)-793006
Phone: (0364) 2536178, Fax: (0364) 2536397, Email: nerts_os@yahoo.in
उत्तर-पूर्वी क्षेत्रीय मुख्यालय: प्रचालन सेवा; NERTS RHQ: Operation Services

REF: NESH/Safety/Audit/113/2019/ 462 Date. 25.02.2019

To,

The General Manager (Project)
M/s SPML INFRA Ltd.
Usha Bhavan, Near Mukti Sangha Club
Ramnagar-05, Tripura.
Pin: 799002

Sub: Safety Check / Audit.

Dear Sir,

Under signed has visited 132/33kV Udaypur sub-station (extension) construction site of NERPSIP projects under your jurisdiction on 20.02.19. The Safety check / Audit has been carried out along with your Safety officer / site Engineers. During the Safety Check / Audit, some lapses pertaining to safety related aspects have been observed. The observations are mentioned as under:

1. During audit it has been observed that medical health checkup of all the workers not done. Medical health checkup of all the workers must be ensured prior to engage them at work.
2. Sufficient safety poster / warning shall be displayed at working site.
3. It is to be ensured that the mixture m/c is operated by an authorized person.

Further, the following points to be comply prior to start the erection / stringing work:

1. The Agency shall ensure the availability of required PPEs / fall protection equipments like safety belt (double lanyard full body harness, Rope grab fall arrester, Retractable type fall arrester etc. prior to start the work at height.
2. Height pass shall be issued to all the fitters by the agency prior to engage them at work at height. The medical health check and induction training record of all fitters shall be maintained.
3. 3rd party load test certificate of all the lifting tools and tackles shall be submitted to POWERGRID site in-charge prior to use in construction work..

You are requested to look in to the matter seriously and comply the observations immediately. Failing of which, action shall be taken as per terms and condition of contract. The compliance report shall be submitted to the Regional Safety, Shillong through concern site in-charge /site engineer of POWERGRID. Further, it is requested to ensure the implementation of proper safety measures at working site to avoid any untoward incidence.

Thanking you,

Enclos: As above

25/2/19
(Pulakesh Roy)
Regional Safety officer, Shillong.

Copy to:

1. CGM (NERPSIP), Guwahati
2. Sr. GM, NERPSIP, Agartala
3. GM (ESMD / Safety), NERPSIP, Guwahati
4. GM, NERPSIP, Udaypur

पंजीकृत कार्यालय: बी- 19, कुतुब इन्स्टीटयुशनल एरिया, कटवरिया सराय, नई दिल्ली- 110016, इपिबीएक्स- 6560121, फैक्स- 011-6560039, ग्राम- 'नटग्रिड'
Registered Office: B-9, Qutub Institutional Area, Katwaria Sarai, New Delhi- 110016, EPBAX: 6560121, Fax: 011-6560039 Gram: "NATGRID"

पावर ग्रिड कारपोरेशन ऑफ इंडिया लिमिटेड
(भारत सरकार का उद्यम)
POWER GRID CORPORATION OF INDIA LIMITED
(A Government of India Enterprise)

पावरग्रिड

NERPSIP Mizoram, Tuivamit, B.P.O.-Tanhril, Aizawl-796009
Mail : nerpsip.mizoram@powergrid.co.in, Contact No. : 9449599072

REMINDER-II

Ref: NERPSIP/Mizoram/S&W/Safety/F-118/2019/297 Date: 22.01.2019

To
The Project Manager,
M/s Sterling & Wilson Pvt. Ltd,
Aizawl (Mizoram)

Attn: Shri Vinay Kr. Dubey

Sub: Pfa-reg:

Ref:

1. NOA Ref No: CC-CS/87-NER/SS-3558/1/G4/CA-I/7412 dated: 12.12.2017
2. NOA Ref No: CC-CS/87-NER/SS-3558/1/G4/CA-II/7413 dated: 12.12.2017
3. NERPSIP/Mizoram/S&W/F-105/2018/48 Dated: 22.03.2018
4. NERPSIP/Mizoram/S&W/F-105/2018/150 Dated: 05.09.2018
5. NERPSIP/Mizoram/S&W/F-105/2018/170 Dated: 29.09.2018
6. S&WPL/T&D/V/17/242/PGCIL/MIZ/64 Dated 18.09.2018
7. NERPSIP/Mizoram/S&W/Safety/F-118/2019/224 Date: 14.11.2018

Dear Sir,

Your attention is invited to the subject and reference mentioned above. It is noted that even after repeated correspondences, same of the documents are yet to be submitted by you. The details are furnished below.

1) Copy of all certificates available with your organization conforming to various ISO /IMS/OHSAS standards as applicable. If not available, the same may be intimated with action plan for submission, if any.
2) Workmen Compensation Insurance Policy required to be submitted by you. Endorsement for the specific contract awarded to you under NERPSIP, Mizoram shall be submitted as the WC Insurance policy furnished is for covering entire workers engaged by your organization for all projects together. If separate endorsement is not possible, the same shall be intimated. Also it is noted that some of the insurance policies as listed in Annexure-I not received at this office.
3) Updated status of T&P deployment plan (List/Test Certificates).
4) Updated status of Personal Protective Equipment's (PPE) list.
5) Module of Training Plan for the workers (Induction/On-site Training).
6) Availability of clean and hygienic Drinking water facilities at work place of all sites for your staff / labourers.
7) Availability of fuel/ LPG gas stove for cooking purpose of your staff/ labourers at work site.
8) Ensuring proper, disposal, treatment of garbage, hygienic conditions at work premises as well at site offices cum transit camp area.

पंजीकृत कार्यालय : बी-9, कुतब इस्टीट्यूशनल एरिया, कटवारिया सराय, नई दिल्ली-110016 दूरभाष: 26560121, फेक्स: 011-26560039, तार : नेटग्रिड
Registered Office : B-9, Qutab Institutional Area, Katwaria Sarai, New Delhi-110016, Tel. : 26560121, Fax : 011-26560039, Gram : 'NATGRID'

पावर ग्रिड कारपोरेशन ऑफ इंडिया लिमिटेड
(भारत सरकार का उद्यम)
POWER GRID CORPORATION OF INDIA LIMITED
(A Government of India Enterprise)

पावरग्रिड

NERPSIP Mizoram, Tuivamit, B.P.O.-Tanhril, Aizawl-796009
Mail : nerpsip.mizoram@powergrid.co.in, Contact No. : 9449599072

9) Providing clean and eco-friendly Toilets (Separate for female workers if engaged) and barricaded bathrooms.
10) Proper barricading of construction area at work site.
11) Engagement of site specific safety officer.
12) Timely submission of Monthly Safety management report.
13) Migration Labour certificate for labourers engaged outside of Mizoram state at work sites.

The documents applicable as per the above shall be submitted with due certification/ signature from your side or your representative mentioning the name and designation etc.

Compliance in this regard at the earliest is expected

Thanking you,

Yours Sincerely,

[T.V Rao]
DGM/NERPSIP(W. Phaileng)

Copy To: For kind information and necessary action:

1) Mr. Indrait Dasgupta, Project Head T&D East, S&W
2) Mr. Avijit Dutta, Planning & Project Mgmt., S&W

पंजीकृत कार्यालय : बी-9, कुतब इस्टीट्यूशनल एरिया, कटवारिया सराय, नई दिल्ली-110016 दूरभाष: 26560121, फैक्स: 011-26560039, तार : नेटग्रिड
Registered Office : B-9, Qutab Institutional Area, Katwaria Sarai, New Delhi-110016, Tel. : 26560121, Fax : 011-26560039, Gram : 'NATGRID'

STERLING AND WILSON PRIVATE LIMITED

ELECTRO MECHANICAL ENGINEERS
ASSOCIATES OF :
SHAPOORJI PALLONJI & CO. PVT. LTD.

STERLING AND WILSON PRIVATE LIMITED
Dentsh, IT Building, 31 G N Block, 3rd Floor
Sector - V, Salt Lake City, Kolkata - 700 091
Tele Fax: 033-3011 8249 / 3011 8200
Ph : 033-3011 8100

HEAD OFFICE
Sterling & Wilson Pvt. Ltd.
Associates of : Shapoorji Pallonji & Co. Pvt. Ltd.
9th Floor, Universal Majestic, P.L.
Lokhande Marg, Chembur (West),
Mumbai - 400 043.
Tel : 022 2548 5300 ● Fax : 022 2548 5031
Web : www.sterlingandwilson.com

Our Ref.: S&W/NAG-PGCIL/DMS-03/SITE- 130 Date :- 06.10.2018

TO,
The D.G.M (NERPSIP)
Power Gird Corporation of India Ltd.
Kohima, Nagaland.

NOA No. CC-CS/92-NER/REW-3070/1/G7/NOA-I/7008 Dtd-22/09/16
Sub: Submission of Compliance report of safety audit under DMS-03, Nagaland Project

Ref. :- NESH/Safety/Audit/113/2017

Dear Sir,

With reference to the above, please find the attachment of Compliance report Of Safety audit for the site Zubza and Chiephobozou, DMS-03, Nagaland Project.

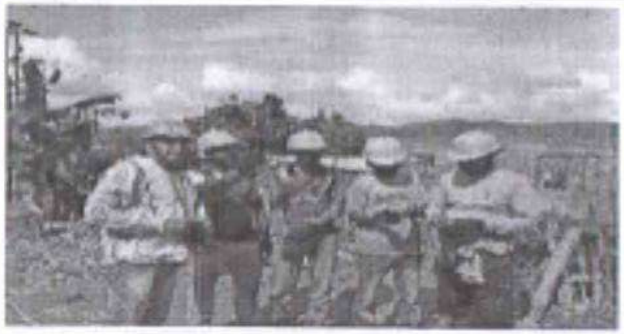
This is for your kind information.

Thanking you
Yours faithfully,
For sterling and Wilson Pvt. Ltd

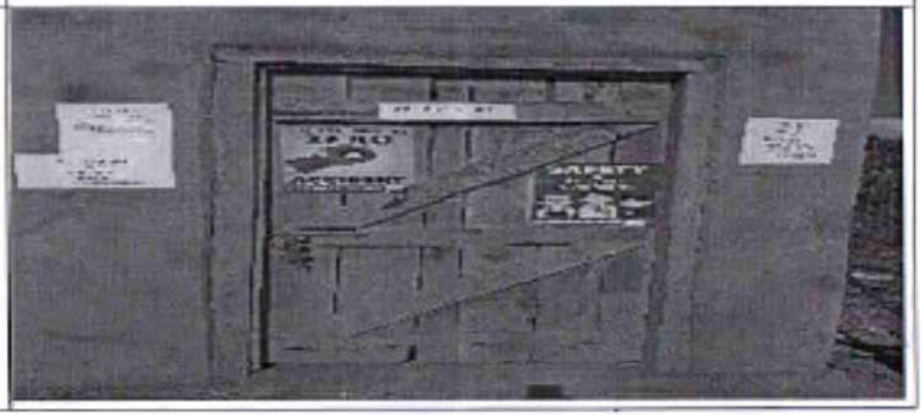
(ANANT KUMAR)
SAFETY OFFICER

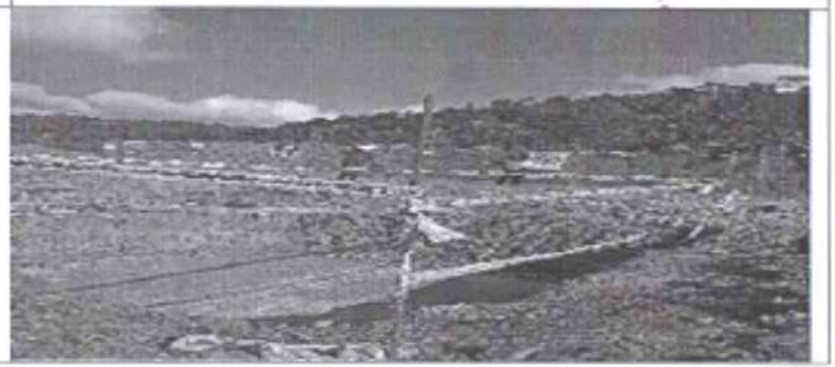
SAFETY COMPLIANCE REPORT

SITE :- ZUBZA(LALMATI)

SR. NO.	OBSERVATIONS	CORRECTIVE ACTION	STATUS	PHOTO	PHOTO	PHOTO
1	During audit it has been observed that PPE,s like dust mask,hand gloves etc. are not provided to the worker.	All required PPE,s has been provided to all workers.	Close			
2	Labour camp,proper sanitation,drinking water facility etc. shall be provided immediately at working site.	All lackness is fulfilled in working site which is related with labour welfare.	Close			 
3	Pep talk ,Tool Box Talk record is not available at site.	Now,everytime TBT record, daily observation file is available at site.	Close			

SR. NO	OBSERVATIONS	CORRECTIVE ACTION	STATUS	PHOTO	PHOTO	PHOTO
4	Safety posters/warning shall be displayed at prominent locations of the working site.	Safety posters and banners of warning and safety slogan is displayed at site.	Close			
5	Medical health checkup of the all workers to be done and proper record shall be maintained.	Medical health checkup of the all workers is done with medical fitness certificate and proper record is maintained.	Close			
6	Prior to engage fitters for work at height,medical health checkup of the fitters shall be ensured and height Pass shall be issued for the fitters.	We ensure that medical health checkup of all workers including fitters and availability of height Pass for fitters will be done prior to start the height work.	Prior to start the work, Required issue shall be closed			

SITE :- CHIEPHOBOZOU				
SR. NO.	OBSERVATIONS	CORRECTIVE ACTION	STATUS	PHOTO
1	During audit it has been observed that PPE,s like safety shoe,dust mask hand gloves etc. are not provided to the workers.	All required PPE,s has been provided to all workers.	Close	
2	Pep talk ,Tool Box Talk record is not available at site.	Now,everytime TBT record, daily observation file is available at site.	Close	
3	Safety posters/warning shall be displayed at prominent locations of the working site.	Safety posters and banners of warning and safety slogan is displayed at site.	Close	

SR. NO.	OBSERVATIONS	CORRECTIVE ACTION	STATUS	PHOTO
4	Medical health checkup of the all workers to be done and proper record shall be maintained.	Medical health checkup of the all workers is done with medical fitness certificate and proper record is maintained.	Close	
5	Prior to engage fitters for work at height,medical health checkup of the fitters shall be ensured and height Pass shall be issued for the fitters.	We ensure that medical health checkup of all workers including fitters and availability of height Pass for fitters will be done prior to start the height work.	Prior to start the work, Required issue shall be closed	
6	Emergency Contact numbers are not displayed at site.	Emergency Contact numbers are displayed near emergency assembling point at site.	Close	
7	First Aid materials available in the first Aid Box is not sufficient.	Sufficient First Aid materials(required medicines,cotton,bandage etc.) is availed in the First Aid Box.	Close	
8	Working site shall be barricaded properly with caution tape.	All dangerous places are barricaded in site as a routine work.	Close	

Appendix-3 : Sample Case of Compensation Process

DEPARTMENT OF POWER, GOVT. OF NAGALAND
Executing Agency : Power Grid Corporation of India Ltd.,
(A Govt of India Enterprise)
NOTICE CUM COMPENSATION CERTIFICATE FOR CROP AND TREE

पावरग्रिड

Sl. No.: ..... Sl. No. 097

To,

Date 28/08/2019

Shri/Ms. Thenlo Jasu S/W/o Khonkhu Jasu Village Tesoyungu

Tahsil ..... District Kohima State Nagaland

Subject : Construction of 220 kV Power Transmission System from New Kohima (Zhadima) To mokokchung Under NERPSIP.

Sir/Madam,

Under the power vested in The Electricity Act 2003,Section 68 and 164 read with part III of Indian Telegraph Act 1885 and The Central Electricity Authority(measures relating to Safety and Electric Supply) Regulation 2010, A Notice is hereby given that 220 kV New Kohima (Zhadima) to mokokchung Transmission Line will go through your property.

Certain minimum unavoidable damage of Crop / Tree is likely to take place during the Foundation / Erection / Stringing works of the aforesaid transmission line. The tree(s) or crop(s) so fell/Cut or dealt with will be handed over to you. You are therefore requested to remain present to receive the same personally. The compensation for yield component of the tree(s) so fall and the crop(s) actually/ damaged will be paid to you as assessed by the Executive Magistrate/ Revenue Department or any other Competent Authority specified by the appropriate Government in this behalf.

S.NO	LOCATION/ SPAN	DETAIL OF DAMAGES DURING CONSTRUCTION				
		LAND KHASARA/DAG/ PATTA NO	NAME OF THE CROP OR TREES	AREA OR NOS	*Size/Girth	REMARKS
	AP-69					Paddy field

* GIRTH OF THE TREE MEANS CIRCUMFERENCE AT CHEST LEVEL

Received Notice with consent for work.

For and On behalf of Department of Power Govt. of Nagaland

Owner's Signature

Sign of Witness I .....

Sign of Witness II ..... Chairman Village Council Henbema

Signature of POWERGRID

VERIFICATION BY REVENUE AUTHORITY

Certified that Land under Khasra / Dag / Patta no. ..... of Village ..... Tahsil .....
District ..... State ..... belongs to Sri / Smt ..... Son / Wife of .....
He / She is sole / shared owner of the above mentioned Land / property.

Seal & Signature of

Notice Served to Affected Person

Book no. DCP

DEPARTMENT OF POWER, GOVT. OF NAGALAND
Executing Agency : Power Grid Corporation of India Ltd.,
(A Govt of India Enterprise)
NOTICE CUM COMPENSATION CERTIFICATE FOR LAND

पावरग्रिड

Sl. No.: NK/132 kV NK-NS/ LAND/04 Sl. No. 004

Date 18/1/2019

To,

Shri/Ms. NEIZELIE S/W/o LT. SAZHU-O Village ZHADIMA

Tahsil ..... District KOHIMA State NAGALAND

Subject : Construction of 132 kV Power Transmission System from NEW KOHIMA To NEW SECRETARIAT Under NERPSIP.

Sir/Madam,

Under the power vested in The Electricity Act 2003,Section 68 and 164 read with part III of Indian Telegraph Act 1885 and The Central Electricity Authority(measures relating to Safety and Electric Supply) Regulation 2010, A Notice is hereby given that 132 kV New Kohima (Zhadima) - New Secretariat Transmission Line will go through your property.

The said line is passing through your area and transmission line tower no AP26 will be constructed on your land. The compensation of the land required for tower footing shall be paid to you by Powergrid Corporation of India Limited at the rates as fixed by the Deputy Commissioner Kohima as per the notification of the Govt. Of Nagaland for compensation of land for construction of EHV transmission line.

S.NO	LOCATION/ SPAN	DETAIL OF LAND AFFECTED AT TOWER FOOTING / ROW DURING CONSTRUCTION			
		LAND KHASARA/DAG/ PATTA NO	NAME OF THE CROP OR TREES	AREA OR NOS	REMARKS
1.	AP26	NA	Enclosed as ANNEXURE - IX	623.857 Sq. feet	Foundation work.

Received Notice with consent for work.

For and On behalf of Department of Power Govt. of Nagaland

Owner's Signature NEIZELIE

Sign of Witness I .....

Sign of Witness II ..... Chairman

Sub-Divisional Officer
Transmission Sub-Division
Kohima : Nagaland

Signature of POWERGRID

VERIFICATION BY REVENUE AUTHORITY

Certified that Land under Khasra / Dag / Patta no. ..... of Village ..... Tahsil .....
District ..... State ..... belongs to Sri / Smt ..... Son / Wife of .....
He / She is sole / shared owner of the above mentioned Land / property.

Seal & Signature of
Circle Officer

Circle Officer
Kohima Nagaland

POWERGRID CORPORATION OF INDIA LTD

COMPENSATION ASSESSMENT SHEET

Name of the Transmission Line: 132kV D/C New Kohima-New Secretariat Complex Tranmission Line

Part-A

Sl No.	Loc No/Span	Notice No./Date	Name of Cultivators with Father's name	Village,Tahsil, District	Area (sq ft)	Rate in Rs. Per Unit	Compensation Payable(Land) in Rs.	Compensation Payable(Crop/tree) in Rs.	TOTAL(in Rs)	Remarks
1	AP2	Notice No-NL/132kV NK-NS/LAND/26 Dated:20.02.2019	Landowner's name- PEZACHIILIE Father's Name- KHREHIE	Zhadima	1237.403	95	117553.285	4050	121603.285	
2	AP3	Notice No-NL/132kV NK-NS/LAND/27 Dated:20.02.2019	Landowner's Name-KESOVILHOU ANGAMI Father's Name-Lt.Mohie	Zhadima	623.837	95	59264.515	1025	60289.515	
3	AP12	Notice No-NL/132kV NK-NS/LAND/23 Dated:15.02.2019	Landowner's Name-THENUORIE-O KHOUBVE Father's Name-Lt. DELIEZHII	Zhadima	623.837	95	59264.515	4975	64239.515	
4	AP19	Notice No-NL/132kV NK-NS/LAND/02 Dated:18.01.2019	Lanowner's Name-KHRIESAMHALIE SORIINUO Father's Name-Lt. DONIELIE	Zhadima	1335.541	95	126876.395	6450	133326.395	
5	AP20	Notice No-NL/132kV NK-NS/LAND/03 Dated:18.01.2019	Landowner's Name-NIEZELIE Father's Name-Lt.SAZHU-O	Zhadima	737.968	95	70106.96	9750	79856.96	
6	AP21	Notice No-NL/132kV NK-NS/LAND/07 Dated:18.01.2019	Landowner's Name- VISAZOLIE ANGAMI Father's Name-Lt. LHOURELIE	Zhadima	623.837	95	59264.515	8100	67364.515	
7	AP22	Notice No-NL/132kV NK-NS/LAND/01 Dated:18.01.2019	Landowner's Name-THEKRUNEILHOU MERE Father's Name-Lt. KHRIEO	Zhadima	988.632	95	93920.04	6750	100670.04	
8	AP24	Notice No-NL/132kV NK-NS/LAND/28 Dated:23.04.2019	Landowner's Name-NIESAKHOTUO MEPFHOU Father's Name-LHUPULIE	Zhadima	1298.09	95	123318.55	4250	127568.55	
9	AP26	Notice No-NL/132kV NK-NS/LAND/04 Dated:18.01.2019	Landowner's Name-NEIZELIE Father's Name-Lt. LHOURELIE	Zhadima	623.857	95	59266.415	3000	62266.415	
							TOTAL		817185.19	

Part-B

I. Establishment & Administrative cost	8%	65374.82
II. Contingency charges	2%	16343.7
TOTAL I+II		81718.53
Grand Total (Part-A+Part-B)		898903.72

Rupees Eight Lakhs Ninety Eight Thousand Nine Hundred Three and Seventy Two Paise.

Seal and Signature of POWERGRID

एच. के चुतिया / H.K. Chutia
उप. प्रबंधक / Dy. Manager
एन. इ. आर. पी. एस. आई. पी. / (NERPSIP)
पावरग्रिड / POWERGRID
कोहिमा · नागालैन्ड / Kohima : Nagaland

Verified by

Seal and Signature of the Revenue Officer Kohima, Nagaland

Revenue Officer
Office of the Deputy Commissione
Kohima : Nagaland

Countersigned by

Seal and Signature of the Deputy Commissioner Kohima, Nagaland

Land Compensation Assessment duly certified by Revenue Authority & Dy. Commissioner

POWERGRID CORPORATION OF INDIA LTD

Crop and Tree COMPENSATION ASSESSMENT SHEET

Name of the Transmission Line: 132kV D/C New Kohima-New Secretariat Complex Tranmission Line

Sl No.	Loc No/Span	Notice No./Date	Name of Cultivators with Father's name	Village,Tahsil, District	Khasar/dag/ Patta No.	Detail of Damage Crop/tree	Girth(in feet)	Qty/Area( )	Rate in Rs. Per Unit	Compensation Payable in Rs.	Bank Details	Remarks
1	AP2	Notice No-NL/132kV NK-NS/LAND/26 Dated:20.02.2019	Landowner's name- PEZACHIILIE Father's Name- KHREHIE	Zhadima		Chiete	1.98	1	150	150		
						Chiezie	3.3	1	150	150		
						Chiezie	1.98	1	150	150		
						Jaga	0.99	2	150	300		
						Thepfii	2.64	1	200	200		
						Megu	1.8	2	200	400		
						Kerilnyii	4.29	1	75	75		
						paratha	0.9	5	75	375		
						paratha	1.8	2	75	150		
						Paratha	2.3	1	75	75		
						jaga	2.97	1	150	150		
						jaga	2.4	2	150	300		
						jaga	0.9	3	150	450		
						Thepfii Mecie	1.19	3	150	450		
						Thepfii Mecie	0.9	2	150	300		
						Thepfii Mecie	1.3	1	150	150		
						Pedo	1.9	1	150	150		
						Paratha	1.3	1	75	75		
						Total				4050		

Seal and Signature of POWERGRID

एच. के चुतिया / H.K. Chutia
उप. प्रबंधक / Dy. Manager
एन. इ. आर. पी. एस. आई. पी. / (NERPSIP)
पावरग्रिड / POWERGRID
कोहिमा · नागालैन्ड / Kohima : Nagaland

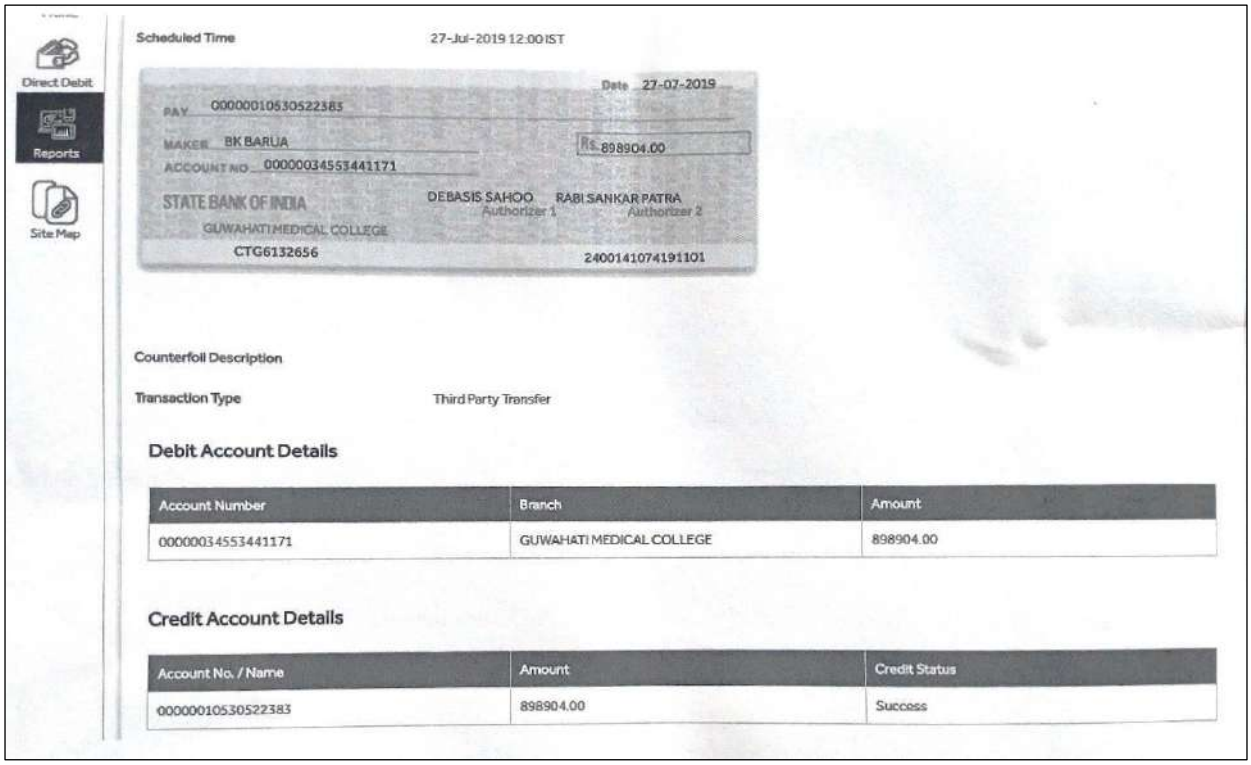
Seal and Signature of the Department of Power

Sub-Divisional Officer
Transmission Sub-Divisio
Kohima : Nagaland

Seal and Signature of Circle Officer/District Administration

Revenue
Office of the Deputy Commissioner
Kohima : Nagaland

Tree Compensation Assessment duly certified by Revenue Authority



Direct Debit
Reports
Site Map

Scheduled Time 27-Jul-2019 12:00 IST

Date 27-07-2019
PAY 0000010530522383
MAKER BK BARUA
Rs. 898904.00
ACCOUNT NO. 00000034553441171
STATE BANK OF INDIA
DEBASIS SAHOO Authorizer 1
RABI SANKAR PATRA Authorizer 2
GUWAHATI MEDICAL COLLEGE
CTG6132656
2400141074191101

Counterfoil Description

Transaction Type Third Party Transfer

Debit Account Details

Account Number	Branch	Amount
00000034553441171	GUWAHATI MEDICAL COLLEGE	898904.00

Credit Account Details

Account No. / Name	Amount	Credit Status
0000010530522383	898904.00	Success

Online Transfer of Compensation amount to Affected Person

GOVERNMENT OF NAGALAND
OFFICE OF THE DEPUTY COMMISSIONER
KOHIMA: NAGALAND

NO. REV/PWR/2014/____/// Dated Kohima the 14th March 2019

NOTIFICATION

The undersigned is pleased to notify the following rates of compensation for damage of trees /plantation / Land under Power Grid Project within Kohima District trees /plantation / Land within Kohima District.

- Land rates to be compensated in full (i.e 100%) as determined by the rates fixed.
- Damage around the RoW corridor to be compensated as per existing rates.
- For approach road, damage compensation will be given to the landowners

Table for RoW width for different voltage lines:

Transmission Voltage in kV	Width of Right of Way in metres
66 kV	18
132 kV	27
220kV	35
400 kV S/C	46
400kV D/C	46
765 S/C (With delta configuration)	64
765 D/C	67

NO. REV/PWR/2014/____/// Dated Kohima the 14th March 2019

Trees:-

Sl. No.	Items	Categories	Size	Rate
1.	Timber	Class A	Girth (1'-3') Above Girth 3'	₹. 200/ tree ₹.400/ tree
2.	Timber	Class 'B' & 'C'	Girth (1'-3') Above Girth 3'	₹. 160/tree ₹. 320/tree
3.	Firewood: (more than 1' girth only)	Good variety Common variety		₹. 150/tree ₹.75/tree
4.	Bamboo	Large variety Jatti variety		₹.60/plant ₹.50/plant

Fruit trees:-

Sl. No.	Fruit	Fruit bearing (₹) Fixed rate	Non-Fruit bearing (₹) Fixed rate
1.	Orange	1400 /tree	700/tree
2.	Pear	350 /tree	175/tree
3.	Banana	350/tree	175/tree
4.	Guava	350/tree	175/tree
5.	Pineapple	5200 per acre of ₹.5/- per sucker	Same rate as fruit bearing
6.	Mango	875/tree	350 /tree
7.	Jack Fruit	350/tree	175 /tree
8.	Peach	350/tree	175/tree
9.	Plum	350/tree	175/tree

Categories of land:

Sl. No.	Category	Rate per Sqft (₹)
1.	Terrace / Residential	₹. 150
2.	Developed Area	₹. 100
3.	Commercial Plantation	₹. 95
4.	Jhum	₹. 70

8% Establishment costs and 2% Contingency costs will be included.

(ANOOP KHINCHI)IAS
Deputy Commissioner
Kohima: Nagaland

NO. REV/PWR/2014/____/// Dated Kohima the 14th March 2019

Copy to:

1. The Commissioner, Nagaland: Kohima for information.
2. The Principal Chief Forest Conservator of Forest, Nagaland for information.
3. The Executive Engineer Transmission, Kohima Division for information.
4. The SDO (C), Sechü, Zubza for information.
5. The General Manager, Power Grid Corporation of India Limited, Dimapur for information.
6. All Village Chairman(s) and landowners concerned for information.
7. Office copy.

(ANOOP KHINCHI)IAS
Deputy Commissioner
Kohima: Nagaland

Notification/Fixation of Rate by Concerned authority

ASSAM ELECTRICITY GRID CORPORATION LIMITED

NOTICE

101

To, Haripad Taye
1 no. Tangani Majgaon

Dear Sir / Madam,

AEGCL has undertaken the construction of 132 kV S/c (on D/c tower) Dhemaji- Silapathar Transmission Line under the scope of NERPSIP funded by the Govt. of India and the World Bank. The Power Grid Corporation of India Limited (PGCIL) has been engaged as the implementing agency for the project by the GOI.

The said line is passing through your area and 1 no. (one) (Loc 20/1) nos. of towers will be constructed on your land. Compensation for the land required for tower footing will be paid to you by PGCIL at rates as fixed by the Deputy Commissioner, Dhemaji District vide Govt. of Assam notification no. PEL.219/2015/91 dtd. 10th March 2017.

Description

1. Name of village : 1 no. Tangani Majgaon
2. Name of Mauza : Sisi
3. Name of Post Office : Kulajan
4. Dag & Patta No. : Dag no. 300, patta no. 32
5. No. of tower footings : 4 nos.
6. Area of land : 302.244 sq. ft. (Foundation type : DA+0) (0.0210 bigha)

16.03.19

Sign. of PGCIL Official
बी.आर. आजाद/B.R. AZAD
महाप्रबंधक/GM (NERPSIP)
पावरग्रिड/POWERGRID
सिलापथार/Silapathar

Sign. of AEGCL Official
04/04/2018
Dy. Manager
132 KV. Grid Sub-Station
Hatigarh, Dhemaji AEGCL

Sign. of Revenue officials
Circle Officer
Sissiborgaon Rev. Circle

Received Notice
I have no objection in installation of above tower in my land.
Owner Signature

Name: Haripad Taye

Place: _____

Date: 05/04/19

ASSAM ELECTRICITY GRID CORPORATION LIMITED

NOTICE

102

To, ~~Kamala Taye~~
~~1 no. Tangani Majgaon~~

Dear Sir / Madam,

AEGCL has undertaken the construction of 132 kV S/c (on D/c tower) Dhemaji- Silapathar Transmission Line under the scope of NERPSIP funded by the Govt. of India and the World Bank. The Power Grid Corporation of India Limited (PGCIL) has been engaged as the implementing agency for the project by the GOI.

The said line is passing through your area and 1(one)no.(loc 20/2) nos. of towers will be constructed on your land. Compensation for the land required for tower footing will be paid to you by PGCIL at rates as fixed by the Deputy Commissioner, Dhemaji District vide Govt. of Assam notification no. PEL.219/2015/91 dtd. 10th March 2017.

Description

1. Name of village : 1 no. Tangani Majgaon
2. Name of Mauza : Sisi
3. Name of Post Office : Kulajan
4. Dag & Patta No. : Dag 303. Patta 34
5. No. of tower footings : 4 nos.
6. Area of land : 376.47 sq.ft. (Foundation type: DA+3) (0.0261 bigha)

बी.आर. आजाद/B.R. AZAD
महाप्रबंधक/GM (NERPSIP)
पावरग्रिड/POWERGRID
सिलापथार/Silapathar

Sign. of PGCIL Official

Sign. of AEGCL Official

04/04/2019
Dy. Manager
132 KV. Grid Sub-Station
Hatigarh, Dhemaji AEGCL

Sign. of Revenue officials

Circle Officer
Sissiborgaon Rev Circle

Received Notice
I have no objection in installation of above tower in my land.
Owner Signature

Name: Sri Kamala Taye

Place: _____

Date: 5/4/19

ASSAM ELECTRICITY GRID CORPORATION LIMITED

NOTICE

107

To, Basanta Pait
2no. Tangani Majgaon

Dear Sir / Madam,

AEGCL has undertaken the construction of 132 kV S/c (on D/c tower) Dhemaji- Silapathar Transmission Line under the scope of NERPSIP funded by the Govt. of India and the World Bank. The Power Grid Corporation of India Limited (PGCIL) has been engaged as the implementing agency for the project by the GOI.

The said line is passing through your area and 1(one). loc 19/4 nos. of towers will be constructed on your land. Compensation for the land required for tower footing will be paid to you by PGCIL at rates as fixed by the Deputy Commissioner, Dhemaji District vide Govt. of Assam notification no. PEL.219/2015/91 dtd. 10th March 2017.

Description

1. Name of village : 2no. Tangani Majgaon
2. Name of Mauza : Sisi
3. Name of Post Office : Kulajan
4. Dag & Patta No. : Dag no. 57, patta no. 4
5. No. of tower footings : 4 nos.
6. Area of land : 302.244 sq. ft. (Foundation type : DA+0) (0.0210 bigha)

Sign. of PGCIL Official
बी.आर. आजाद/B.R. AZAD
महाप्रबंधक/GM (NERPSIP)
पावरग्रिड/POWERGRID
सिलापथार/Silapathar

Sign. of AEGCL Official
04/06/2019
Dy. Manager
132 KV. Grid Sub-Station
Hatigarh, Bhemaji AEGCL

Sign. of Revenue officials
Circle Officer
Sissiborgaon Rev Circle

Received Notice
I have no objection in installation of above tower in my land.
Owner Signature

Name: বাসন্ত পাইত

Place: _____

Date: _____

Assessment sheet of 85% land value compensation of tower base area in respect of 132 kV S/c (on D/c tower) Dhemaji-Silapathar TL under TW04 pkg. of NERPSIP

Ref: Govt. of Assam notification no. PEL-219/2015/91 dated 10th March, 2017

								Calculation of area as per approved drawing								
Sl. No.	Notice No.	Location no.	Tower type	Name of land owner	Father's name and address	Dag no.	Patta no.	Length (m)	Breadth (m)	Area (sq. m)	Area in sq. ft	Area in bigha	Rate per bigha taken from Circle Office (INR)	Total amount (INR)	Amount of compensation @85%	Net amount to be paid (INR)
1	100	20/0	DC+6	Sashi Pait	S/o- Daba 1 no. Tangani Majgaon	301 (part)	33 (myadi)	9.686	9.686	93.819	1009.854	0.0701	1200000.00	84154.50	71531.32	71531.00
2	101	20/1	DA+0	Haripad Taye	S/o- Lakheswar 1 no. Tangani Majgaon	300 (part)	32 (myadi)	5.299	5.299	28.079	302.244	0.0210	1200000.00	25186.99	21408.94	21409.00
3	102	20/2	DA+3	Kamala Taye	S/o- Birman 1 no. Tangani Majgaon	303 (part)	34 (myadi)	5.914	5.914	34.975	376.472	0.0261	1200000.00	31372.64	26666.74	26667.00
4	109	20/3	DA+3	Bileswar Pait	S/o- Kumar 1 no. Tangani Majgaon	306 (part)	23 (eksona)	5.914	5.914	34.975	376.472	0.0261	1200000.00	31372.64	26666.74	26667.00
5	104	20/4	DA+3	Biseswar Kaman	S/o- Purnakanta 1 no. Tangani Majgaon	302 (part)	21 (eksona)	5.914	5.914	34.975	376.472	0.0261	1200000.00	31372.64	26666.74	26667.00
6	105	20/5	DA+3	Rekha Nath Misong	S/o- Anuram 1 no. Tangani Majgaon	223 (part)	govt.	5.914	5.914	34.975	376.472	0.0261	1200000.00	31372.64	26666.74	26667.00
7	107	19/4	DA+0	Basanta Pait	S/o-Rupchand 2 no. Tangani Majgaon	57 (part)	04 (myadi)	5.299	5.299	28.079	302.244	0.0210	1200000.00	25186.99	21408.94	21409.00
8	108	19/5	DA+3	Chandra Kanta Pait Dimbanath Pait	S/o- Jubakanta 2 no. Tangani Majgaon	69 (part)	05 (myadi)	5.914	5.914	34.975	376.472	0.0261	1200000.00	31372.64	26666.74	26667.00
															Total compensation amount payable (INR)=	247684.00

04/04/19
उज्जल नाथ/UJJAL NATH
अभियंता/ENGINEER
पावरग्रिड/POWERGRID (NERPSIP)
सिलापथार/SILAPATHAR

04.04.19
बी.आर. आजाद/B.R. AZAD
महाप्रबंधक/GM (NERPSIP)
पावरग्रिड/POWERGRID
सिलापथार/Silapathar

04/04/2019
Dy. Manager
132 KV. Grid Sub-Station
Hatigarh, Dhemaji AEGCL

04.04.19
Circle Officer
Sissiborgaon Rev. Circle

ASSESEMENT SHEET OF 85% LAND VALUE
COMPENSATION OF TOWER BASE AREA IN RESPECT
OF 132 kV S/c Dhemaji-Silapathar TL under TW04
pkg. of NERPSIP

Natu re

T/L 132 kV S/c Dhemaji-Silapathar TL under TW04 pkg. o

WBS CS-2014041-01-05-01

Cumula 247684

REF: GOVT OF ASSAM NOTIFICATION NO: PEL-219/2015/91 DATED: DISPUR 10TH MARCH, 2017

								Calculation of area as per approved drawing														
Sl. No.	Notice No.	Location n	Tower type	Name of la	Father's name and address	Dag no.	Patta no.	Length (m)	Breadth (m	Area (sq. m	Area in sq.	Area in big	Rate per bigha taken from Circle Office (INR)	Total amount (INR)	Amount of compensation @85%	Net amount to be paid (INR)	Document no	DATE	BPV NO	DATE	CHEQYE NO	PAYMENT DONE (Y/N)
1		20/0	DC+6	Shashi Pait (Shasidhar	S/o- Daba 1 no. Tangani	301 (part)	33 (myadi)	9.686	9.686	93.819	1009.854	0.0701	1200000.00	84154.50	71531.32	71531.00	1100096861	13.05.2019	2400055557	14.05.2019	CTF9703916	Y
2	101	20/1	DA+0	Haripad Taye	S/o- Lakhyswar 1 no.	300 (part)	32 (myadi)	5.299	5.299	28.079	302.244	0.0210	1200000.00	25186.99	21408.94	21409.00	1100096861	13.05.2019	2400055562	14.05.2019	CNAAQYCCR7/CI	Y
3	102	20/2	DA+3	Kamala Taye (Kamala	S/o- Birman 1 no.	303 (part)	34 (myadi)	5.914	5.914	34.975	376.472	0.0261	1200000.00	31372.64	26666.74	26667.00	1100096861	13.05.2019	2400055563	14.05.2019	CTF9704175	Y
4	109	20/3	DA+3	Bileswar Pait (Buleswar	S/o- Kumar 1 no.	306 (part)	23 (eksona)	5.914	5.914	34.975	376.472	0.0261	1200000.00	31372.64	26666.74	26667.00	1100096861	13.05.2019	2400055560	14.05.2019	CTF9704177	Y
5	104	20/4	DA+3	Biseswar Kaman	S/o- Purnakanta	302 (part)	21 (eksona)	5.914	5.914	34.975	376.472	0.0261	1200000.00	31372.64	26666.74	26667.00	1100096861	13.05.2019	2400055559	14.05.2019	CNAAQYCMX9	Y
6	105	20/5	DA+3	Rekha Nath Mishong	S/o- Tanuram 1 no.	223 (part)	govt.	5.914	5.914	34.975	376.472	0.0261	1200000.00	31372.64	26666.74	26667.00	1100096861	13.05.2019	2400055564	14.05.2019	CNAAQYCCR5	Y
7	107	19/4	DA+0	Basanta Pait	S/o- Rupson 2 no.	57 (part)	04 (myadi)	5.299	5.299	28.079	302.244	0.0210	1200000.00	25186.99	21408.94	21409.00	1100096861	13.05.2019	2400055558	14.05.2019	CNAAQYCDB8	Y
8	108	19/5	DA+3	Chandra Kanta Pait Dimbanat	S/o- Jubakanta 2 no.	69 (part)	05 (myadi)	5.914	5.914	34.975	376.472	0.0261	1200000.00	31372.64	26666.74	26667.00	1100096861	13.05.2019	2400055561	14.05.2019	CTF9704176	Y
															Total compensation amount payable (INR)=	**247684.00**						

MANIPUR STATE POWER COMPANY LIMITED

(Under Department of Power Manipur State
Executing Agency: Power Grid Corporation of India Ltd. (A Govt. of India Enterprise)
Office Address: Yurembam, Imphal 795113 Contact No: 7005810224

पावरग्रिड

070

NOTICE CUM COMPENSATION CERTIFICATE FOR LAND

Serial No.: State/Line/ Number

Date 13/07/2019

To,
Sri/Ms. Ahaibam Dabilo Singh S/W/o Ahaibam Kumar Singh Village Heikrujam
Tahsil .... District Imphal West State Manipur
Subject: Construction of 132 kV Power Transmission System from Imphal to Ningthoukhong under NERPSIP
Sir/Madam,

Under the power vested in the Electricity Act 2003, Section 68 and 164 read with part III of Indian Telegraph Act 1885 and The Central Electricity Authority (measures relating to Safety and Electric Supply) Regulation 2010. A notice is hereby given that ....kV D/c .... Transmission Line will go through your property.

Certain minimum unavoidable damage of Crop/Tree is likely to take place during the Foundation/ Erection/ Stringing works of the aforesaid transmission line. The tree(s) or crop(s) so fell/Cut or dealt with will be handed over to you. You are therefore requested to remain present to receive the same personally. The compensation for yield component of the tree (s) so fall and the crop(s) actually/ damaged will be paid to you as assessed by the Executive Magistrate/ Revenue Department or any other Competent Authority or any other Competent Authority specified by the appropriate Government in this behalf.

Sl. No.	LOCATION/ SPAN	LAND KHASARA/DAG/PATTA No.	DETAILS OF LAND AFFECTED AT TOWER FOOTING/ ROW DURING CONSTRUCTION		
			DIMENSION OF LAND	AREA OF LAND	REMARKS
	18/0 DC+0	Patta - 223 Dag - 2144	7.691 x 7.691 m	42.23 m² ≈ 454.58 ft²	Refer drawing no 18/0

*GIRTH OF TREE MEANS CIRCUMFERENCE AT CHEST LEVEL

Received Notice with consent for work.
Kh. Jomba

For and on behalf of MSPCL State Electricity Corporation Ltd.

Owner's Signature
Sign of Witness I........
Sign of Witness II........

8448 8415885409

Signature of POWERGRID

VERIFICATION BY REVENUE AUTHORITY

Certified that Land under Khasra / Dag / Patta No. ....of Village........
Tahsil........ District........ State........belongs
to Sri/ Smt........ Son/ Wife of........
He/ She is sole /shared owner of the above mentioned Land/ property

SUB-DEPUTY COLLECTOR

Seal & Signature of Circle Officer / Revenue Authority

POWER GRID CORPORATION OF INDIA LTD

103

LAND COMPENSATION ASSESSMENT SHEET

पावरग्रिड

NAME OF THE TRANSMISSION SYSTEM 132 KV Imphal - Ningthoukhong Line

Sl. No	Loc. No / Span	Notice No. / Date	Name of Cultivator with father's name	Village, Tahsil, District	Khasara/ Dag/ Patta No.	Affected Land size	Area	Rate in Rs. per Unit	Compensation Payable in Rs.	Bank Details	Remarks
53	18/0 DC+0	Notice no - 69 Date - 13/07/2019	[illegible]	[illegible] - Imphal West	Patta - 223 Dag - 2144	7.691 x 7.691 m	16.92 m² 182.13 ft²	[illegible] per sq ft	18180.97	A/c - [illegible] IFSC - [illegible]	Refer Drawing 18/0

Enclosure: Application Circle rate/ Guideline value/ Stamp Act rates list available with District Magistrate

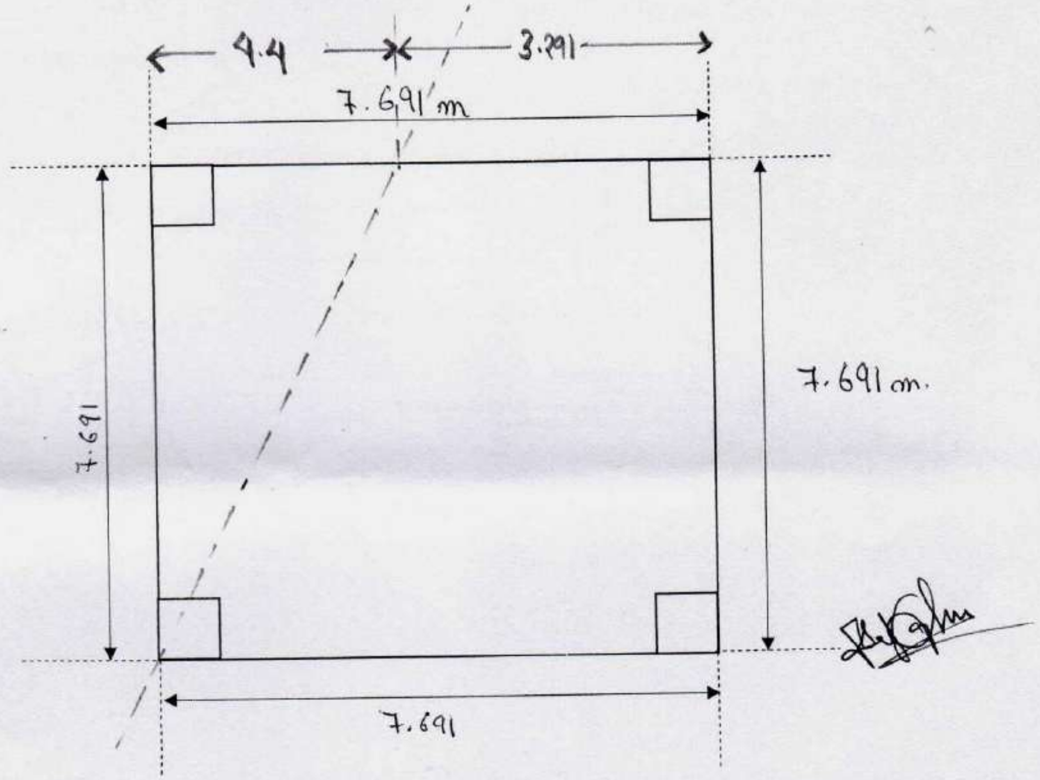
18/07/19

Seal and Signature of POWERGRID
[stamp:] RAJEN SINGH, S.M. (E), N.E.R.P.S.I.P., POWERGRID, Imphal

Seal and Signature of State Electricity Utility

Seal and Signature of Circle Office/Revenue Authority
[stamp:] SUB-DEPUTY COLLECTOR, KONTHOUJAM

LAND MEASUREMENT AGGREMENT BETWEEN THE LANDOWNER OF AFFECTED AREA BELONGING TO TOWER LOCATION ..18/0..



[illegible]

Sl. No.	Tower Type	Name of Landowner	Area (m^2)	Area (Ft^2)= 10.764*Area (m^2)	Signature
1	DC+0	Aheibam Dabila Singh S/O. Aheibam Kumar Singh	A_1 = Total area − A_2 i.e 59.151481−16.9202 = 42.231281	454.5775087	[illegible]
2		Nawrem Nimai Singh S/o - N. Khoidang Singh.	A_2 = $\frac{1}{2}$ × 7.691 × 4.4 = 16.9202.	182.1290328	N. Nimai Singh
Total Area			59.151481	636.7065415	

[illegible]
FE (N.E.R.P.S.I.P.)
Field Engineer
Power Grid Corporation of India Ltd.
Manipur

[illegible]
H. V... EN SINGH
Senior DGM (N.E.R.P.S.I.P.)
POWERGRID, Imphal

[illegible]
SUB-DEPUTY COLLECTOR
KONTHOUJAM

JAMABANDI

জমাবন্দি

জিলা Imphal সব-ডিভিসন Iw? থানা ________ ইউনিট 7 হল্কা মমিং অমসুং নম্বর [illegible]

মথং মমাও নং	অহিবা পাট্টা নং	অনৌবা পাট্টা নং	পাট্টাদারগী মমিং, মপাগী মমিং অমসুং লৈকম	মশানা দখল তৌরিবা দাগকী নং	লাম্যোন [illegible] দখলদা [illegible]		[illegible]			[illegible]
					দাগ নং	খতিয়ান নং	[illegible]	[illegible]	[illegible]	
১	২	৩	৪	৫	৬	৭	৮	৯	১০	১১
	২২১ অং /	২২৬ / ১৬৮৪ /	[illegible] মিংচ [illegible] [illegible] সিংহ সাং [illegible]	২১৮৪ / ২২৯১ /			০. [illegible] /	২৪৫ [illegible]	[illegible] (৩০৫১)	[illegible]
[illegible]	[illegible] সিংহ সাং [illegible]		[illegible] / [illegible] সিংহ [illegible] / [illegible] ১৫১০ / [illegible] সিংহ সাং [illegible] /				Certified [illegible] Supervisor [illegible] Imphal West [illegible]	Meet Case No [illegible] 161/5 [illegible] dt. 30-3-[illegible] N. [illegible] dt. 2-4-[illegible]	[illegible] 2005 [illegible] dt. 8/5/05	Dt. 8/6/05

Scanned by Cam

NATURE	COMPENSATION FOR LAND AREA TOWARDS CONSTRUCTION 132KV D/C IMPHAL - NINGT
T/L	132Kv D/C Imphal - Ningthoukhong TL
WBS	CS-2014043-02-04-01
Profit Center	3170023103
Cumulative Amount	2044565

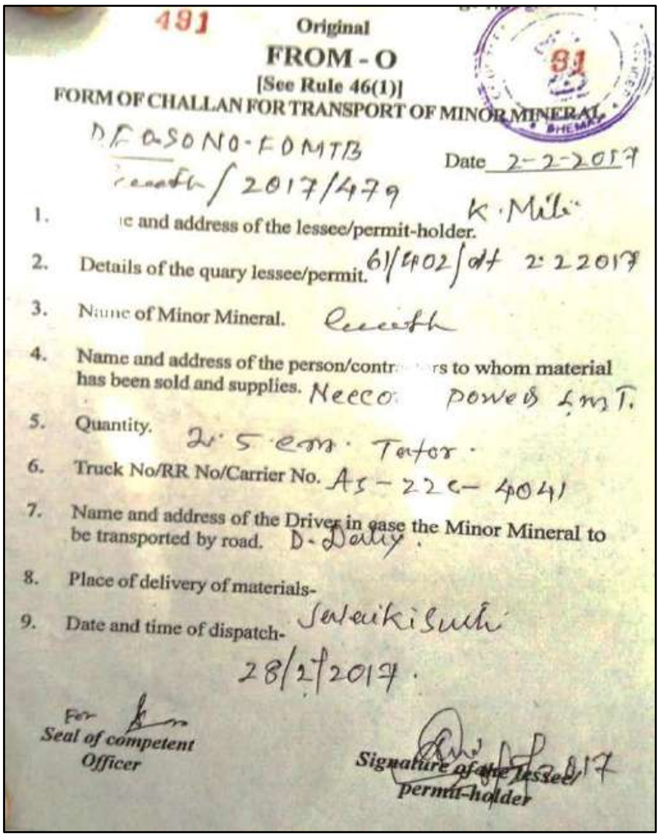
Sl No.	Lot NO	Tower Loc.	Type Of Tower	Dimension of affected land (in meter)		Affected land Area (m^2)	Area in sq.foot (1Sq.m=10.764 Sq.ft)	Name of Land Owner	Name of Landowner & Address/ Land Description	Patta/Dag No.	Class of land	Cost of Land per sqare foot	Cost of affected land in Rupees	Payable amount in Rupees (85% of cost of affected land)
				Length	Width		10.76							
23	Lot-3	3/0	DD+0	9.22	9.216	5.78	62.16	MUTUM JITEN SINGH S/O M. RAJO DEVI	PATTA NO. 80/126 DAG NO. 2154	PHOUREL	PATSOI	100	6216.21	5,283.78
24	Lot-3					79.16	852.08	IROM MANGI SINGH S/O IROM THOIBA SINGH	PATTA NO. 441/1543 DAG NO. 2363	PHOUREL	PATSOI	100	85207.824	72,426.65
25	Lot-3	4/0	DC+0	7.69	7.691	59.15	636.69	A.K. PIBA MEITEI. S/O A.K TOMBI MEITEI	PATTA NO. 298/925 DAG.NO. 63	NGANPHO	PATSOI	100	63669.06	54,118.70
26	Lot-3	10/3	DA+0	5.35	5.345	28.57	307.52	LAIMAYUM KUTUNAI SHARMA S/O L. NUNGSHI SHARMA	PATTA NO. 25 DAG NO. 2173	NGANPHO	8 BHAMDIA	100	30751.69851	26,138.94
27	Lot-3	16/0	DD+0	9.22	9.216	84.93	914.24	OINAM NARENDRAKUMAR SINGH S/O OINAM IBUNGOYAIMA SINGH	PATTA NO.18 DAG NO. 06	PHOUREL	87 KHABI	100	91423.66372	77,710.11
28	Lot-3	17/0	DB+3	8.26	8.264	68.29	735.11	NONGMAITHEM HEROJIT SINGH S/O NONGMAITHEM KUBER SINGH	PATTA NO. 305 DAG NO. 1039	HOMESTEAD LAND	- HEIKRUJA	400	294045.3375	2,49,938.54
29	Lot-3	17A/0	DD+0	9.22	9.216	84.93	914.24		PATTA NO. 305 DAG NO. 9033			400	365694.6549	3,10,840.46
30	Lot-3	17/3	DA+0	5.35	5.345	28.57	307.52	KHANGEMBAM NOMITA DEVI D/O KHANGEMBAM IBOTOMBI SINGH	PATTA NO. 179 DAG NO. 130	NGANPHO	- HEIKRUJA	100	30751.69851	26,138.94
31	Lot-3	18/0	DC+0	7.69	7.691	42.23	454.56	AHEIBAM DABILO SINGH S/O AHEIBAM KUMAR SINGH	PATTA NO. 223 DAG NO. 2144	NGANPHO	98 KAMONG	100	45456.372	38,637.92
32	Lot-3					16.92	182.13	NAOREM NIMAI SINGH S/O N KHOIDONG SINGH	PATTA NO. 223 DAG NO. 2144	NGANPHO	98 KAMONG	100	18212.688	15,480.78
33	Lot-3	18/3	DA+0	5.35	5.345	28.57	307.52	MAISNAM MEMTHOI DEVI D/O TH. KALACHANBI SINGH	PATTA NO. 559 DAG NO. 68	NGANPHO	98 KAMONG	100	30751.69851	26,138.94
34	Lot-3	18/4	DA+0	5.35	5.345	28.57	307.52	ARIBAM GOPENDRO SHARMA S/O A. MANGI SHARMA	PATTA NO. 199 DAG NO. 1190	PHOUREL	98 KAMONG	100	30751.69851	26,138.94
35	Lot-3	18/5	DA+0	5.35	5.345	28.57	307.52	CHONGTHAM MANI SINGH S/O CHONGTHAM SHAKMACHA SINGH	PATTA NO. 312 DAG NO. 1182	PHOUREL	98 KAMONG	100	30751.69851	26,138.94
36	Lot-3	19/0	DD+0	9.22	9.216	84.93	914.24	THOUNAOJAM ROSANTAJIT SINGH S/O T.IBOBI SINGH	PATTA NO.666 DAG NO.1246	PHOUREL	98 KAMONG	100	91423.66372	77,710.11
37	Lot-3	19/1	DA+3	5.96	5.96	35.52	382.35	IROM KAMESHOR SINGH S/O I. SHAMU SINGH	PATTA NO.507/1486 DAG NO.1400/1778	PHOUREL	98 KAMONG	100	38235.45024	32,500.13
38	Lot-3	19/2	DA+3	5.96	5.96	35.52	382.35	MOIRANGTHEM IBOMCHA SINGH S/O MOIRANGTHEM MANGLEM SINGH	PATTA NO. 950/1077 DAG NO.1410	PHOUREL	98 KAMONG	100	38235.45024	32,500.13
39	Lot-3	19/3	DA+3	5.96	5.96	35.52	382.35	MAISNAM KAMAL SINGH S/O MAISNAM THAMBALNGOU SINGH	PATTA NO.777 DAG NO.187	PHOUREL	98 KAMONG	100	38235.45024	32,500.13
Total amount													13,29,814.32	11,30,342.17

HOUKHONG TRANSMISSION LINE UNDER NERPSIP, MANIPUR.

Balance 15%	Jurisdiction	Bank A/c Details	IFSC CODE	JV NO	DATE	BPV NO	DATE	CHQ NO
932.43	PATSOI	23710100007900	BARB0YUREME	1100439260	27/08/2019	2400171604	27/08/2019	THROUGH BANK LETTER
12,781.17	PATSOI	30676119061	SBIN0000092	1100439260	27/08/2019	2400171597	27/08/2019	CTG8697473
9,550.36	PATSOI	23630100006893	BARB0CHANGA	1100439260	27/08/2019	2400171593	27/08/2019	THROUGH BANK LETTER
4,612.75	88 BHAMDIAR	34587407185	SBIN0004562	1100439260	27/08/2019	2400171600	27/08/2019	CTG8697216
13,713.55	87 KHABI	264301502069	ICIC0002643	1100439260	27/08/2019	2400171607	27/08/2019	THROUGH BANK LETTER
44,106.80	94- HEIKRUJAM	1018010102521	UTBI0ATLG62	1100439260	27/08/2019	2400171606	27/08/2019	THROUGH BANK LETTER
54,854.20				1100439260	27/08/2019	2400171606	27/08/2019	THROUGH BANK LETTER
4,612.75	94- HEIKRUJAM	30129865808	SBIN0001524	1100439260	27/08/2019	2400174559	27/08/2019	THROUGH BANK LETTER
6,818.46	98 KAMONG	30121213963	SBIN0004562	1100439260	27/08/2019	2400171594	27/08/2019	CTG8697391
2,731.90	98 KAMONG	23710100021076	BARB0YUREMI	1100439260	27/08/2019	2400171605	27/08/2019	THROUGH BANK LETTER
4,612.75	98 KAMONG	23630100004026	BARB0CHANGA	1100439260	27/08/2019	2400171602	27/08/2019	THROUGH BANK LETTER
4,612.75	98 KAMONG	246301000364	ICIC0002463	1100439260	27/08/2019	2400171595	27/08/2019	THROUGH BANK LETTER
4,612.75	98 KAMONG	9003013021448	UTBIORRBMRB	1100439260	27/08/2019	2400171596	27/08/2019	THROUGH BANK LETTER
13,713.55	98 KAMONG	38059355874	SBIN0018497	1100439260	27/08/2019	2400171608	27/08/2019	CTG8697219
5,735.32	98 KAMONG	23630100013953	BARB0CHANGA	1100439260	27/08/2019	2400171598	27/08/2019	THROUGH BANK LETTER
5,735.32	98 KAMONG	20367663905	SBIN0018497	1100439260	27/08/2019	2400171603	27/08/2019	CTG8697217
5,735.32	98 KAMONG	30596795107	SBIN0000009	1100439260	27/08/2019	2400171601	27/08/2019	CTG8697475
1,99,472.15								

Appendix- 4: Details of Borrow Area Management /Improvement

Sl No.	Name of Substation	Total Volume (m^3)	Coordinates	Source
Assam				
1	132/33 kV Tangla	7040	26°39'54.65"N 91°54'02.66"E	Site developed as pond after due consent/agreement with land owner.
2.	220/132 kV Behiating	20550	27°18' 44.57"N 94°53' 15.54"E	Existing/registered borrow site
3.	132/33 kV Sarupather	2990	26°13' 8.01"N 93°50' 57.4"E	Existing/registered borrow site
4.	132/33 kV Silapather	13396	27°32'18.67"N 94°42'39.49"E	Site developed as pond after due consent/agreement with land owner.
5.	132/33 kV Chapakhowa	10955	27°55'27.73"N 95°42'58.64"E	Site developed after due consent/agreement with land owner.
6	132/33 kV Tezpur	14186	26°45'02.9"N 92°50'04.2"E	Site developed as pond after due consent/agreement with land owner.
7	132/33 kV Teok	10405	26°43'37.98" N 94°37'08.88"E	Existing/registered borrow site
8	132/33 kV Hazo	13400		Existing/registered borrow site
9	132/33 kV GMC	9100		Existing/registered borrow site
10.	132/33 kV Paltan Bazaar	2265		Existing/registered borrow site
Meghalaya				
1	33 kV Mawkynrew	1068	25º24'47.89" N 91º59'52.16" E	Community land utilized for development of road in agreement with community.
Tripura				
1.	132/33kV Mohanpur	1344	23º57'0.57'' N 91º23'4.05'' E	Borrowed earth from private land with due consent from land owner.
2.	132/33kV Rabindranagar	814	23º27'35.76'' N 91º16'22.36'' E	
3	33/11kV Golaghati	3182	23º41'47.50'' N 91º21'59.80'' E	
3	132/33kV Jirania Ext.	450	23°48'32.40"N 91°26'09.60"E	
Manipur				
1.	Andro SS	7404	24°45' 58"N 94°14'26"E	Borrowed earth from private land with due consent from land owner
2.	33/11 kV Hiyangthang	4345	24°46'49.44"N 93°47'24.87"E	
3	Lamphel SS	3357	24°46'49.44"N 93°47'24.87"E	
4	Top-Khongnangkhong	2429	24°47'47.68"N 93°59'33.88"E	
5	Kwakta	571	24°46' 56.11"N 93°52' 11.47"E	
6	Sanjenbam 33/11	3894	24°49'38.43"N 94°21'18"E	



491 **Original**

FROM - O

[See Rule 46(1)]

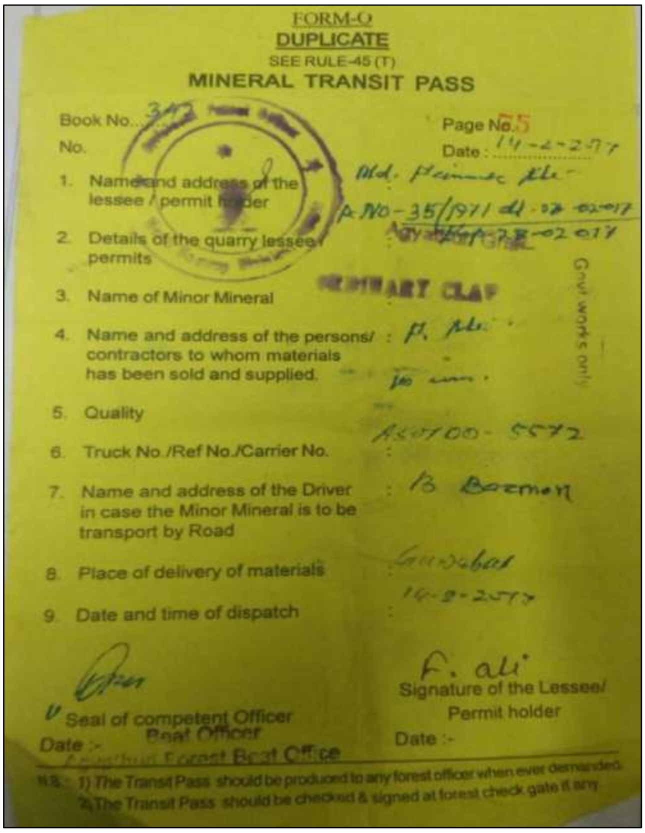
FORM OF CHALLAN FOR TRANSPORT OF MINOR MINERAL

Date 2-2-2017

1. Name and address of the lessee/permit-holder. K. Mili
2. Details of the quary lessee/permit. 61/402/dt 2.2.2017
3. Name of Minor Mineral.
4. Name and address of the person/contractors to whom material has been sold and supplies.
5. Quantity.
6. Truck No/RR No/Carrier No. AS-22C-4041
7. Name and address of the Driver in case the Minor Mineral to be transported by road.
8. Place of delivery of materials-
9. Date and time of dispatch- 28/2/2017.

Seal of competent Officer

Signature of the lessee/permit-holder



FORM-O

DUPLICATE

SEE RULE-45 (T)

MINERAL TRANSIT PASS

Book No.

No.

Page No.

Date : 14-2-2017

1. Name and address of the lessee / permit holder
2. Details of the quarry lessee / permits
3. Name of Minor Mineral
4. Name and address of the persons/ contractors to whom materials has been sold and supplied.
5. Quality
6. Truck No./Ref No./Carrier No.
7. Name and address of the Driver in case the Minor Mineral is to be transport by Road
8. Place of delivery of materials
9. Date and time of dispatch

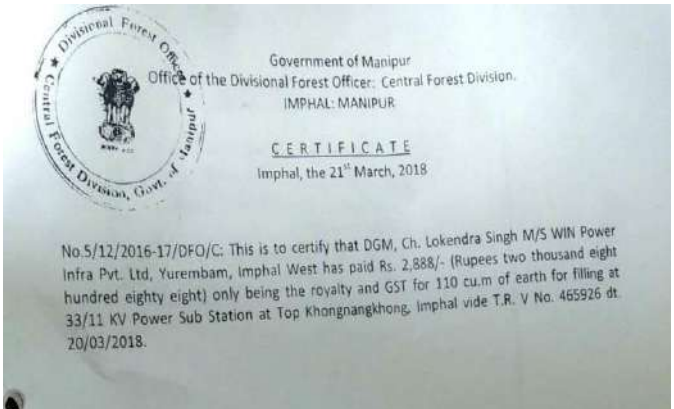
Seal of competent Officer

Date :-

Signature of the Lessee/ Permit holder

Date :-

N.B.: 1) The Transit Pass should be produced to any forest officer when ever demanded.
2) The Transit Pass should be checked & signed at forest check gate if any.



Government of Manipur

Office of the Divisional Forest Officer: Central Forest Division.

IMPHAL: MANIPUR

CERTIFICATE

Imphal, the 21st March, 2018

No.5/12/2016-17/DFO/C: This is to certify that DGM, Ch. Lokendra Singh M/S WIN Power Infra Pvt. Ltd, Yurembam, Imphal West has paid Rs. 2,888/- (Rupees two thousand eight hundred eighty eight) only being the royalty and GST for 110 cu.m of earth for filling at 33/11 KV Power Sub Station at Top Khongnangkhong, Imphal vide T.R. V No. 465926 dt. 20/03/2018.

(L. Joykumar Singh)

Divisional Forest Officer, Central Forest Division

Government of Manipur.

T.R. 5 No. V 465326

Received from DGM. Lokendro (Win power pvt. Ltd)

the sum of Rupees two thousand eight hundred eighty eight only.

In cash / By cheque / in payment of Transportation charge of Earth 110 cum.

Royalty Rs. 2750

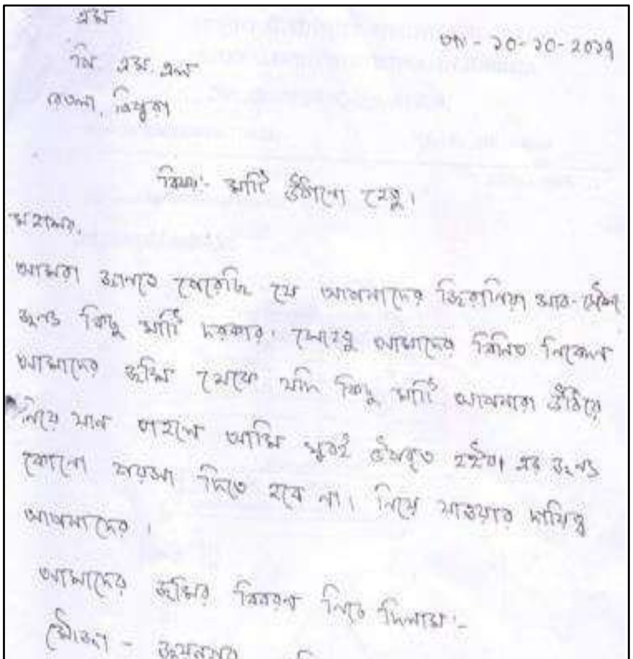
2.5% CGST Rs. 69

2.5% SGST Rs. 69

₹ 2888/-

Initial Designation

20/3/18

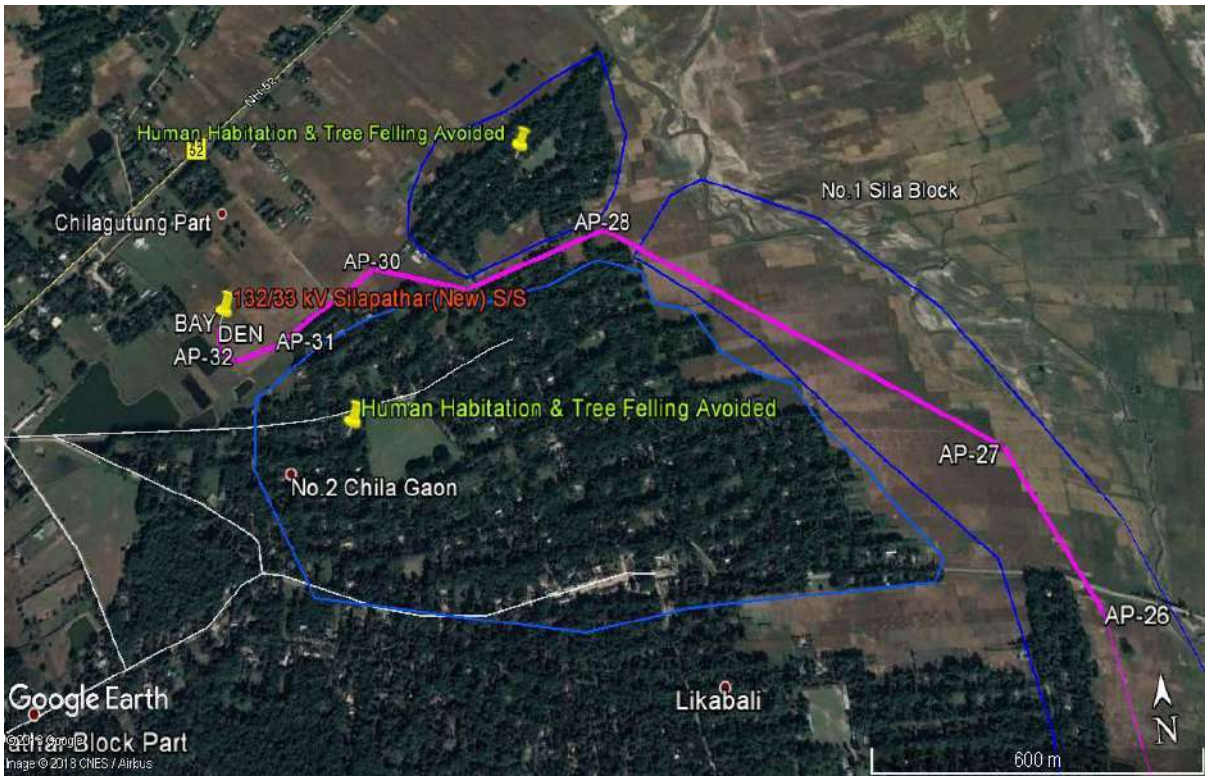


Consent from land owner & Permission/Transit Pass /Loyalty slip for Borrowed Earth

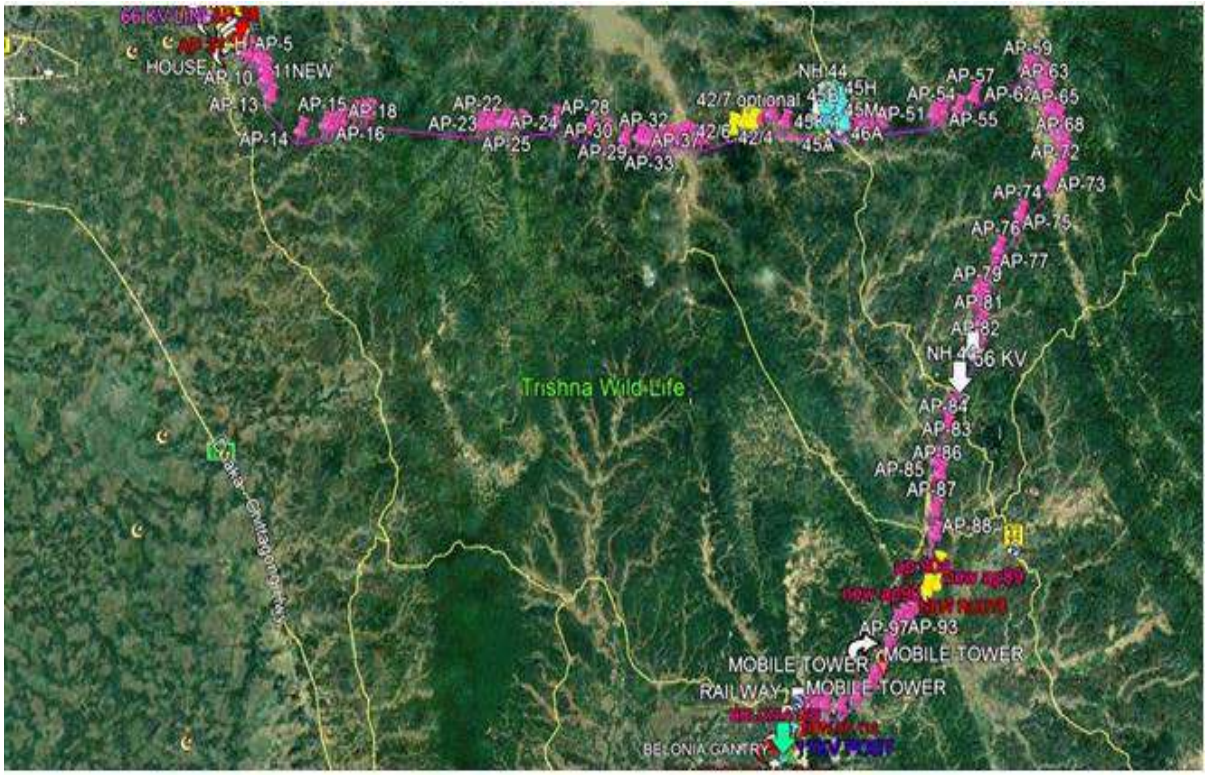
Development of Borrow Area into a Pond as desired by Local Villagers near 132/33 KV Tezpur Substation

Borrow Earth Site for Lamphel & Andro site in Manipur

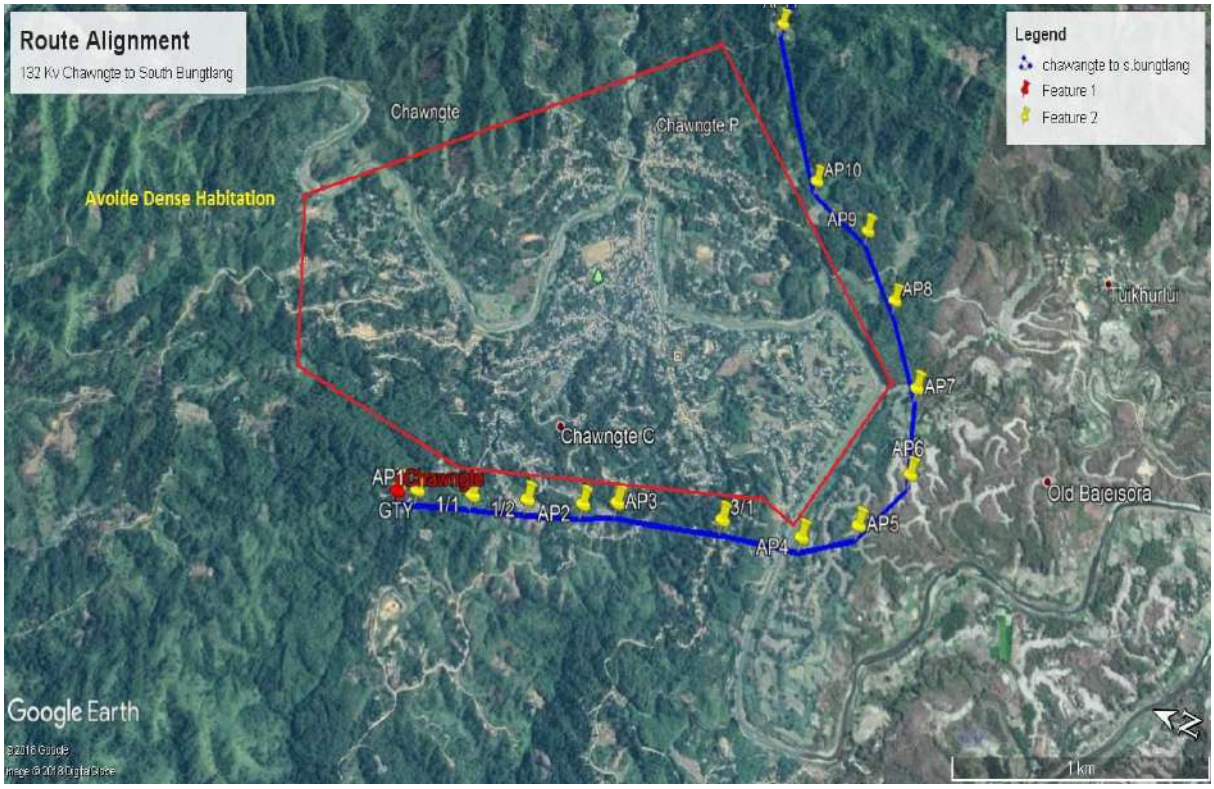
Plate 7: Avoidance of Environmentally and Socially Sensitive Areas



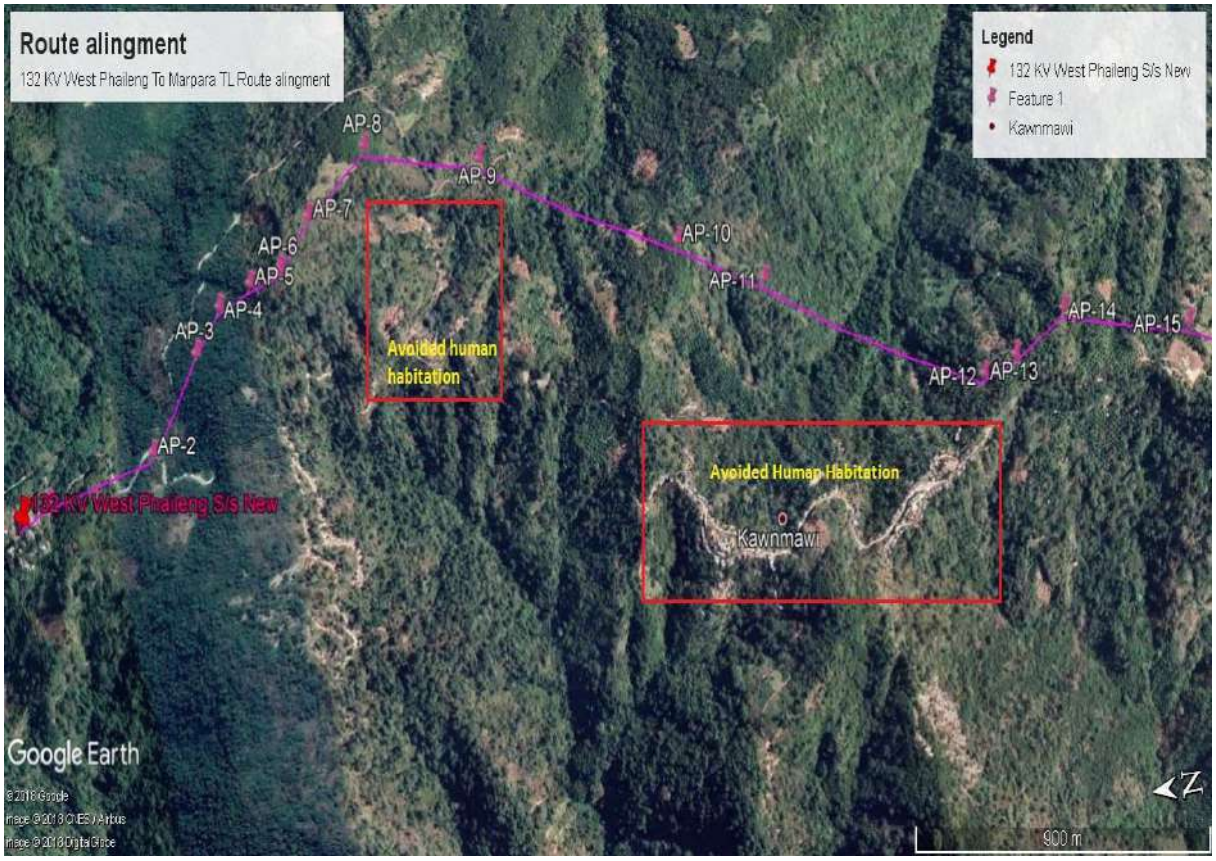
Avoidance of Human Habitation & Tree Felling in Dhemaji-Silapather 132kV line in Assam



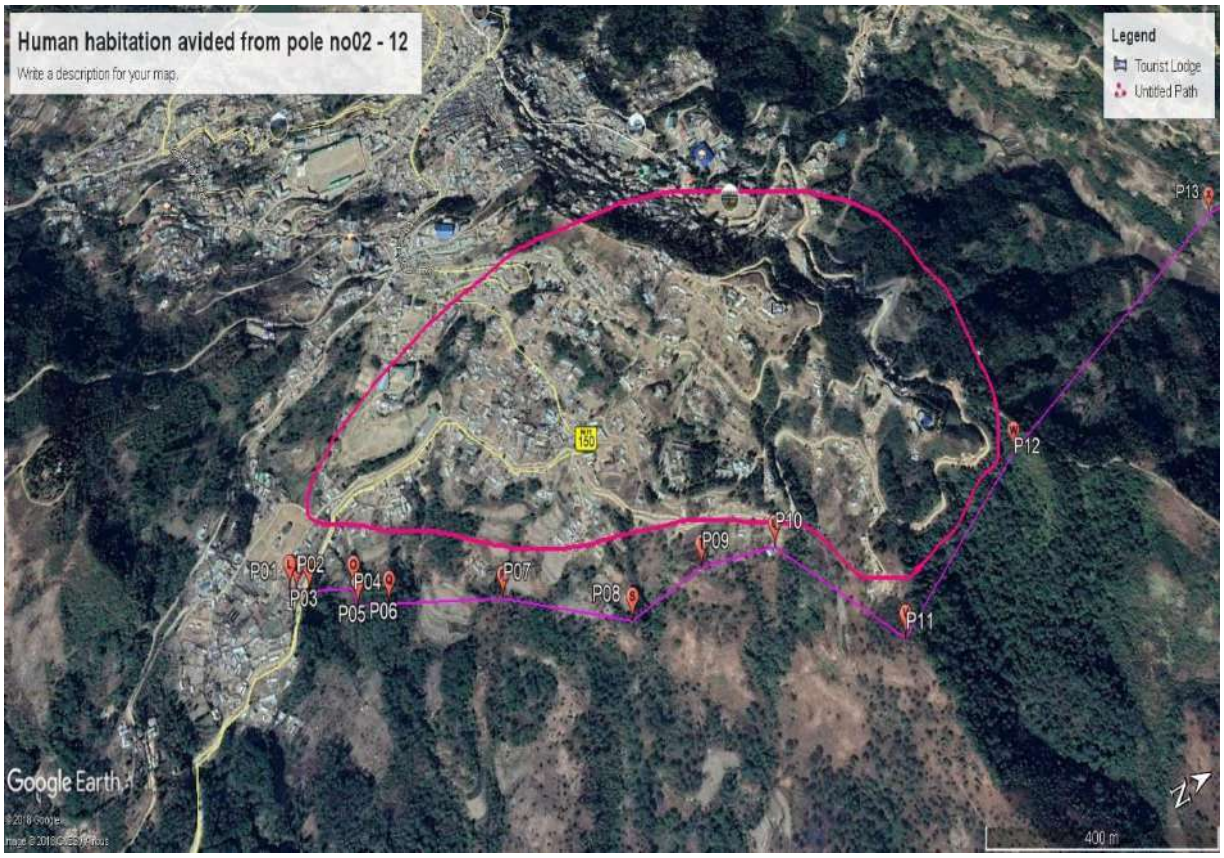
Complete Avoidance of Trishna Wildlife Sanctuary by adopting even more circuitous route (AP-14 to AP-109)for Rabindranagar- Belonia 132kV line in Tripura



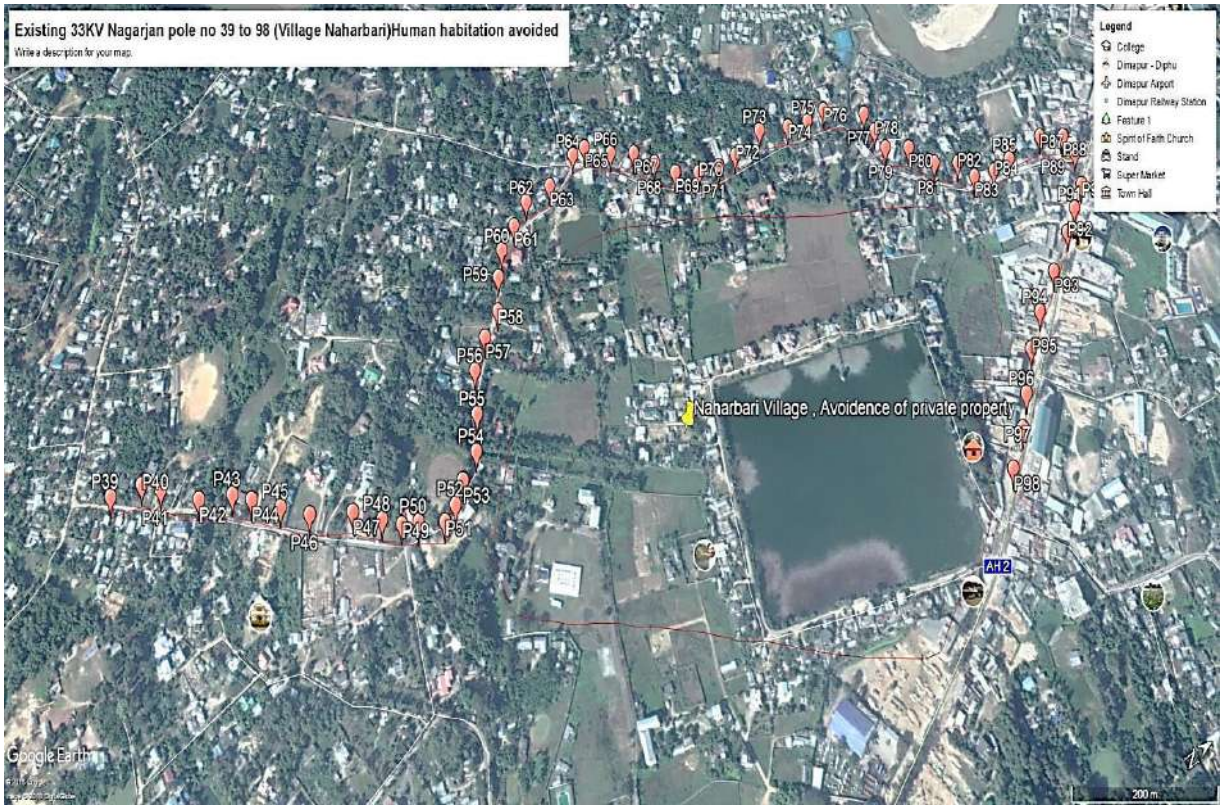
Avoidance of dense habitation area (AP-1 to AP-15) for Chawngte-S. Bungtlang 132kV line in Mizoram



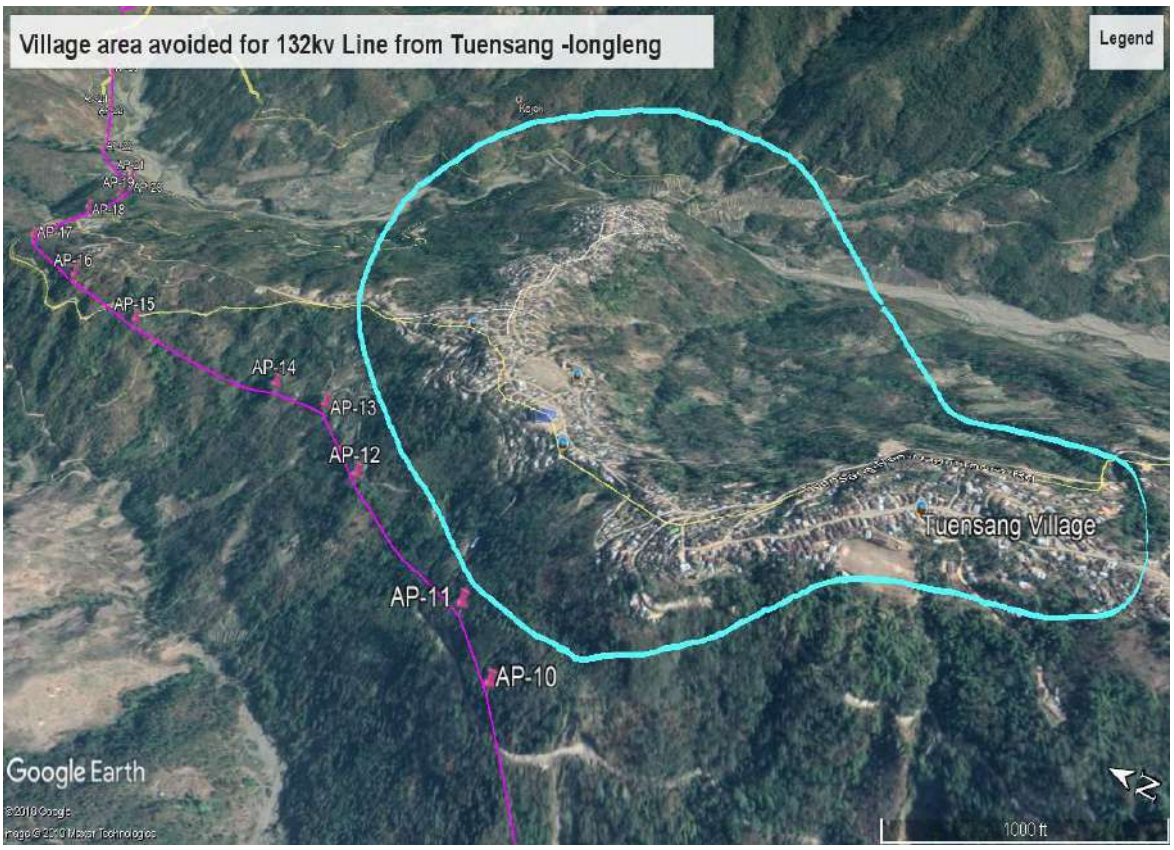
Avoidance of habitation area (AP-1 to AP-16) for West Phaileng- Marpara 132kV line in Mizoram



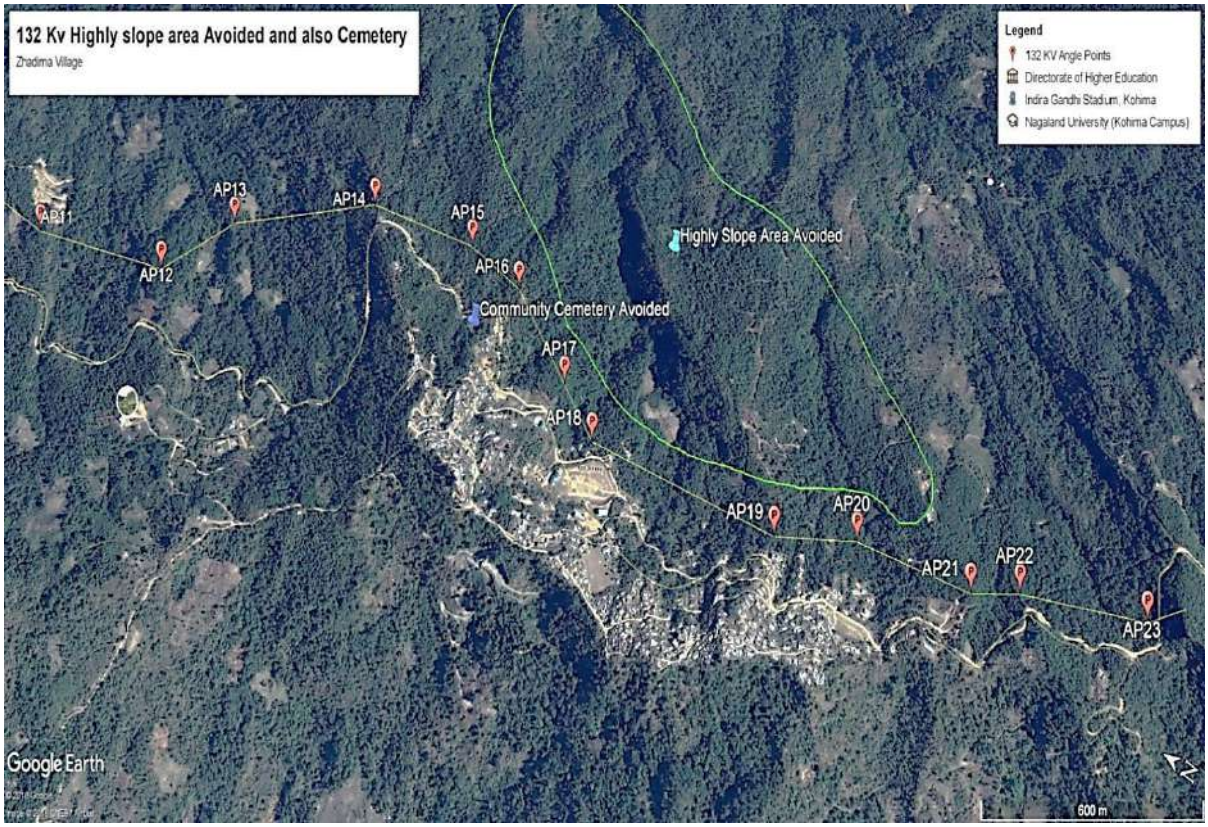
Avoidance of dense habitation area (Pole- 2 to Pole-12) for Pfutsero - Pfutsero 33 kV line in Nagaland



Avoidance of dense habitation area (Pole- 52 to Pole-98) even adopting more circuitous route for Nagarjan -Padam pukhri 33 kV line in Nagaland



Avoidance of habitation area for Tuensang – Longleng Complex 132kV line in Nagaland



Avoidance of Steep slope area and Cemetery (AP-14 to AP-24) for New Kohima – New Secretariat Complex 132kV line in Nagaland

Plate 8 : NoC/Consent from ADC/VDC/Land Owners

DORBAR SHNONG MAWPDANG

KHYRIM SYIEMSHIP

SHILLONG - 793018, EAST KHASI HILLS

Ref. No. : To .....

Date : 22/8/17

The Deputy Manager
Power Grid,NERPSIP
Nongrah,Lapalang
Shillong.

SuB:- No Objection Certificate (NOC) for 220KV

Sir,

With reference to the subject cited above, we would like inform you that the Dorbar Shnong Mawpdang has no objection for the construction of 220KV Line passing through our Village land and our jurisdiction as per your Map and Drawing.

We therefore, the undersigned issued this Certificate to your Office as per the following terms and conditions:-

1. That the Power GRID Corporation of India Ltd, should compensate to all the lands where the Towers is to be erected as per the rate approved by the District Council.

2. That the Power GRID Corporation of India Ltd, should compensate to all the Trees, Crops, Vegetables and Etc where the Line is passing through and affected as per the rate approved by the Government authorized Offices.

3. That the Power GRID Corporation of India Ltd, should inform from time to time in relation to any complaint or disputes to the headman of the Dorbar Shnong Mawpdang in the future to come.

Thanking You

Stai Sing Syiem

Sordar Shnong Mawpdang

Sordar
Shnong Mawpdang
Khyrim Syiemship
East Khasi Hills

Robinson Syiem

Gen.Secy Shnong Mawpdang

General Secretary
Shnong Mawpdang
Khyrim Syiemship
East Khasi Hills

****

OFFICE OF THE

TEROGVUNYU VILLAGE COUNCIL

P.O. TSEMINYU - 797109

Dist. Kohima : Nagaland

Ref. No..............

Date 14th July 2019

NO OBJECTION CERTIFICATE

The Terogvunyu Village council has no objection in regard to Survey (erection of power Tower) by the power grid co-operation of India withing its village jurisdiction.

The village council is also acknowledge the department for extending any possible land/ property damage compensation to the effected owner.

The village council wish all the success.

(DANIEL TEP)

Chairman

Chairman

Terogvunyu Village Council

OFFICE OF THE

CHAIRMAN VILLAGE COUNCIL TESOPHENYU

District Kohima: Nagaland

Ref. No......................

Date 13/11/19

TO WHOM IT MAY CONCERN.

This is to certify that construction of AP 90– AP 102. under Tesophenyu village jurisdiction is acknown to me from survey location as proposed by your company hence the village authority has duly issue no objection for execution of work any time as your own convenient.

I wish the project a grand Success.

13/11/19

(N.R. MAGH)

Chairman

Tesophenyu Village Council

Dist. Kohima : Nagaland

Name of the landowners from AP 90 – AP 102

1. AP 90 – Gwachung Chung. 8575555812
2. AP 91 – Yanchüghi Kath (Rajamo Kath)
3. AP 92 – NKülo Kemp.
4. AP. 93 – Besay Tep 8914844191
5. AP 94 – Ashüo Magh
6. AP-95 – Yantoshe Kath
7. AP. 96 – Kepfüshe Kath
8. AP. 97 – Nyokha Kez 8837358282
9. AP- 98 – Shuthozi Kath 9383088530
10. AP. 99. – AChanti Kez 9436401884
11. AP. 100 – Honlhoni Magh
12. AP. 101 – Apha Rengma 9612777980
13. AP. 102 – Vihozhe – 9612247611

NO OBJECTION CERTIFICATE

030

I Shri/Smti Sopola Hajong

~~S/O/D/O~~ W/O Babul Hajong

aged about 44 years

old and residing at Arjungre, West Garo Hills

District and Owner of Land mentioned hereunder at clause (I), hereby on this day the 20th of November, 2017 solemnly affirm and declare as follows :

1) That I have no objection whatsoever for MePTCL/PGCIL to construct 132KV Phulbari-Ampati Transmission Line passing through my land located at Arjungre Village West Garo Hills District Meghalaya.

2) That I am making this declaration sincerely and conscientiously, believing the same to be true and with full knowledge that it is on the strength of this declaration that MePTCL/ PGCIL has agreed to pay compensation to me, in accordance with the schedule of rates issued by the Deputy Commissioner West Garo Hills District / West Garo Hills District Council.

Land Owner

Witness :

1. Anjolly Hajong

2. Nomali Hajong

Plate- 9 Noise Level Measured at Different Construction Sites

WINPOWER INFRA PVT LTD

C/o – POWER GRID CORPORATION OF INDIA LIMITED

Noise Measurement Report

Name of Substation: HIYANGTHANG 33/11 KV S/S *Month:* March, 2018

SL NO Week	Area without machine	Average Reading	Mixer machine, Vibrator etc.	Average Reading	JCB, Hydra etc.	Average Reading	Remarks
1st	65.79, 64.98, 65.51, 66.20, 66.07	65.68	–, –, –, –, –	NA	–, –, –, –, –	NA	Reading taken every five minutes interval.
2nd	64.71, 64.35, 64.29, 64.85, 65.11	64.66	70.02, 70.16, 69.87, 69.79, 70.26	70.02	78.55, 79.11, 79.06, 78.91, 79.17	78.96	Reading taken every five minutes interval.
3rd	67.22, 67.50, 67.19, 66.96, 67.04	67.18	70.56, 71.23, 71.08, 70.86, 71.18	70.98	–, –, –, –, –	NA	– Do –
4th	66.95, 66.03, 67.08, 66.37, 66.80	66.63	70.53, 69.77, 69.69, 69.91, 70.05	69.97	79.25, 79.69, 80.12, 80.19, 79.98	79.82	– Do –

Site Supervisor Project Manager Power Grid

AYEKPAM DINKU
Asst. Engineer (N.E.R.P.S.I.P)
Power Grid Corporation of India Ltd.
Imphal, Manipur

For Hiyangthang S/S (Manipur)

WINPOWER INFRA PVT LTD

C/o – POWER GRID CORPORATION OF INDIA LIMITED

Noise Measurement Report

Name of Substation: KWAKTA 33/11 KV S/S *Month:* March, 2018

SL NO Week	Area without machine	Average Reading	Mixer machine, Vibrator etc.	Average Reading	JCB, Hydra etc.	Average Reading	Remarks
1st	49.79, 48.92, 48.83, 49.31, 49.17	49.04	70.00, 70.11, 69.79, 69.81, 70.15	69.98	–, –, –, –, –	NA	Reading taken every five minutes interval.
2nd	51.07, 51.12, 50.79, 50.95, 51.20	50.82	–, –, –, –, –	NA	–, –, –, –, –	NA	– Do –
3rd	51.88, 51.26, 52.17, 52.02, 52.21	52.11	70.76, 71.13, 71.25, 71.14, 71.08	71.07	–, –, –, –, –	NA	– Do –
4th	50.16, 50.70, 50.29, 50.36, 51.12	50.30	71.85, 71.65, 71.39, 71.22, 71.61	71.52	79.05, 79.10, 79.62, 79.11, 79.92	79.42	– Do –

Site Supervisor Project Manager Power Grid

AYEKPAM DINKU
Asst. Engineer (N.E.R.P.S.I.P)
Power Grid Corporation of India Ltd.
Imphal, Manipur

For Kwakta S/S (Manipur)

राष्ट्रीय प्रौद्योगिकी संस्थान अगरतला

NATIONAL INSTITUTE OF TECHNOLOGY AGARTALA

CIVIL ENGINEERING DEPARTMENT

Phone No: (0381) 2346630, 2348522 Fax No: (0381) 2346360

Job No: C- 177/17

Test Report of Noise level

Name of Client: PGCIL

Sites : Gokulnagar, Rabindranagar & Mohanpur.

Date of Test : 22/11/2017

Table 1: Results

SITE NAME	AREA WITH HEAVY MACHINES	AREA WITH LIGHT MACHINES	AREA WITHOUT MACHINES
GOKUL NAGAR	88.56 dB	81.96 dB	69.60 dB
RABINDRA NAGAR	85.00 dB	73.73 dB	67.76 dB
MOHANPUR	79.30 dB	67.66 dB	65.00 dB

Dr. S.K.Pal (Associate Professor, CE Deptt)

Dr. Partha Pratim Sarkar (Asstt. Professor, CE Deptt)

Dr. Jeyanta Pal (Asstt. Professor, CE Deptt)

Dr. Rajib Saha (Asstt. Professor, CE Deptt)

Dr. Dipankar Sarkar (Asstt. Professor, CE Deptt)

National Institute of Technology Agartala
Barjala, Jirania, West Tripura, PIN- 799046

For Rabindranagar S/S (Tripura)

SPML
Engineering Life

C/O: Power Grid Corporation of India Limited

Noise Test Report

132/33/11KV Sub-Station:- Gokulnagar Month:- November-2018

Sl.No. Week	Area Without Machines	Total Average Reading	Area With Light Machines	Total Average Reading	Area with Heavy Machines	Total Average Reading	Remarks
1ST	38.4, 40.7, 39.5	39.53 db	41.5, 39.4, 42.1	41.0 db	–, –, –		The Noise level observed is below from maximum allowable limit which is 90 db for 8hrs in the working area.
2ND	–, –, –		–, –, –		–, –, –		
3RD	–, –, –		–, –, –		–, –, –		
4TH	36.3, 38.7, 41.2	38.73 db	–, –, –		–, –, –		

Reading Taken BY: KESHAV SAH, Sr. Engineer - Safety (Som) Site Incharge Power Grid Review

For Gokul Nagar S/S (Tripura)

D.G. Noise Level Chart
132/33 KV Tangla (New) S/S

Sl. No.	Item Description	Date of Reading	Time	Average Noise Level (db)	Signature NECCON	Signature POWERGRID	Remark's
1	D.G	08.06.18	11.10 AM	73 db	Bhorush		
2	D.G	19.06.18	10.10 AM	72 db	Bhorush		
3	D.G	26.06.18	9.30 AM	70 db	Bhorush		
4	D.G	14.07.18	9.50 AM	70 db	Bhorush		
5	D.G	18.07.18	10:00 AM	71 db	Bhorush		
6	D.G	18.08.18	10.00 AM	71 db	Bhorush		
7	D.G	5.09.18	10.00 AM	70 db	Bhorush		
8	D.G	22.09.18	11.10 AM	70 db	Bhorush		
9	D.G	30.09.18	10.00 AM	72 db	Bhorush		
10	D.G	01.10.18	6.00 AM	72 db			
11	D.G	04.10.18	11.40 AM	70 db	Bhorush		
12	D.G	04.11.18	9.25 AM	70 db	Bhorush		
13	D.G	10.12.18	12.00 AM	70 db	Bhorush		
14	D.G	11.12.18	10.00 AM	70 db	Bhorush		
15	D.G	24.12.18	10.30 AM	70 db	Bhorush		
16							
17							
18							

Noise Level Monitored periodically at different Noise Source Point at 132/33 kV Tangla Substation (Assam)

Mobile Batching Plant(ALPHA &PRIMAX) Noise Level Chart
132/33 KV Tangla (New) S/S

Sl. No.	Item Description	Date of Reading	Time	Average Noise Level (db)	Signature NECCON	Signature POWERGRID	Remark's
1	MIXER MACHINE (PRIMAX)	04/06/18	11.10 AM	74 db			
2	MIXER MACHINE (PRIMAX)	08/06/18	10.20 AM	75 db			
3	MIXER MACHINE (PRIMAX)	19/06/18	10.25 AM	73 db	Bhorush		
4	MIXER MACHINE (PRIMAX)	26/06/18	10.12 AM	72 db	Bhorush		
5	MIXER MACHINE (PRIMAX)	18/07/18	11.40 AM	71 db	Bhorush		
6	MIXER MACHINE (PRIMAX)	18/08/18	10.30 AM	71 db	Bhorush		
7	MIXER MACHINE (PRIMAX)	08/09/18	2.40 PM	71 db	Bhorush		
8	MIXER MACHINE (PRIMAX)	22/09/18	10.00 AM	70 db	Bhorush		
9	MIXER MACHINE (PRIMAX)	30/09/18	11.45 AM	75 db	Bhorush		
10	MIXER MACHINE (PRIMAX)	01/10/18	6.30 AM	75 db	Bhorush		
11	MIXER MACHINE (PRIMAX)	04/10/18	9.45 AM	73 db	Bhorush		
12	MIXER Machine (Primax)	04/11/18	10.12 AM	72 db	Bhorush		
13	MIXER Machine (Primax)	10/12/18	12.10 AM	72 db	Bhorush		
14	MIXER Machine (Primax)	11/12/18	9.30 AM	73 db	Bhorush		
15	MIXER Machine (Primax)	24/12/18	11.20 AM	71 db	Bhorush		
16							
17							

Mini Batching Plant Diesel Engine (Boundary Wall) Noise Level Chart
132/33 KV Tangla (New) S/S

Sl. No.	Item Description	Date of Reading	Time	Average Noise Level (db)	Signature NECCON	Signature POWERGRID	Remark's
1	B. Wall	19:02:18	1:00 PM	79 db	Bhorush	Partha Deka	
2	B. Wall	24:02:18	12:30 Pm	75 db	Bhorush	Partha Deka	
3	B. Wall	27:02:18	1:12 Pm	72 db	Bhorush	Partha Deka	
4	B. Wall	03:03:18	2:31 Pm	78 db	Bhorush	Partha Deka	
5	B. Wall	06:03:18	9:00 Am	73 db	Bhorush	Partha Deka	
6	T. Camp (PCC)	09:04:18	4:20 Pm	78 db	Bhorush		
7	S. Room	10.04.18	10.08 AM	69 db	Bhorush		
8	B. Wall	19.04.18	11.40 AM	71 db	Bhorush		
9	T. Camp	25.04.18	1.16 Pm	72 db	Bhorush		
10	S. Room	28.04.18	2.12 Pm	70 db	Bhorush		
11	S. Room	16.07.	12.00 Pm	70 db	Bhorush		
12	S. Room	13.08.18	9.45 AM	70 db	Bhorush		
13	E. PCC	20.09.18	11.40 AM	71 db			
14	Equipment. P.CC	22.09.18	10.00 AM	71 db	Bhorush		
15	FFPH. PCC	23.12.18	1.30 PM	70 db	Bhorush		
16							
17							
18							
19							
20							

Plate- 10: Community/Villagers Safety

Display of Signage Board

Proper Barricading of Work Area

Safety Awareness and Information dissemination before start of work

Plate -11 : Permission/Way Leave for Rail/Road Crossing

N. F. Railway

Office of the
Sr. Divisional Engineer/Co-ord,
Maligaon, Guwahati-11

No. W/214/Way leave/PG/G/APDCL/Pt.I

Date: 16.06.2017

To
Chief Executive Officer
Guwahati Electrical Circle-I
APDCL (LAR), Ulubari
Guwahati-781007.

Sub:- Way leave facility in connection with laying and underground crossing of Railway track by 33 KV electric line at Km.9/1-2 & Km.9/9-10/0 of KYQ-GHY section by APDCL,), Ulubari, Guwahati-7.

Ref:- APDCL online application ID Nos.
(i) NFR-LMG-2016-117 dtd.16.11.2016 and (ii) NFR-LMG-2016-118 dtd.21.11.2016.

Sir,

In terms of the above, enclosed please find herewith the agreement copies executed between the Railway and APDCL (LAR), GEC-I, Ulubari, Guwahati-7 alongwith blue print copies of the Sr.DEN.C/MLG's approved plan Nos. SK/06/2017 & SK/07/2017 in connection with laying and underground crossing of Railway track by 33 KV electric line at Km.9/1-2 & Km.9/9-10/0 of KYQ-GHY section by APDCL, Ulubari, Guwahati-7. It is requested to execute the work in accordance with the provisions as laid in the plan and agreement.

Before energisation of the U/G electric line, a separate agreement may be made with electrical deptt. at the office of the Sr.DEE/GHY.

With regards.

Yours Sincerely,

(Ajay Kumar)
Sr.Divisional Engineer/W/GHY
N. F. Railway, Maligaon

DA:- As above.

Copy to:-
Sr.DSTE/MLG, Sr.DEE/GHY } for information please.
ADEN/T/GHY
ADEN/W/GHY, SSE/W/GHY
SSE/P-Way/GHY, SSE/P/GHY
SSE/Tele/GHY, SSE/Sig/GHY } for information and necessary action in this regard please.

Sr.Divisional Engineer/W/GHY
N. F. Railway, Maligaon

Misc Letter~