# COMPENSATION PLAN FOR TEMPORARY <br> DAMAGES (CPTD) <br> FOR 

T \& D NETWORK IN TINSUKIA AND
DIBRUGARH DISTRICTS IN ASSAM


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## LIST OF ABBREVIATIONS

| AC | $:$ | Autonomous Council |
| :--- | :--- | :--- |
| AEGCL | $:$ | Assam Electricity Grid Company Limited |
| AP | $:$ | Affected Person |
| APDCL | $:$ | Assam Power Distribution Company Limited |
| CEA | $:$ | Central Electricity Authority |
| Ckt-Km | $:$ | Circuit-kilometer |
| CGWB | $:$ | Central Ground Water Board |
| CP | $:$ | Compensation Plan |
| CPTD | $:$ | Compensation Plan for Temporary Damages |
| CPIU | $:$ | Central Project Implementation Unit |
| CRM | $:$ | Contractor Review Meeting |
| DC | $:$ | District Collector |
| D/c | $:$ | Double Circuit |
| DL | $:$ | Distribution Line |
| DM | $:$ | District Magistrate |
| DMS | $:$ | Distribution Management System |
| EHV | $:$ | Extra High Voltage |
| EHS | $:$ | Environment Health \& Safety |
| EMP | $:$ | Environment Management Plan |
| E\&S | $:$ | Environmental \& Social |
| ESPP | $:$ | POWERGRID's Environmental and Social Policy \& Procedures |
| ESPPF | $:$ | AEGCL \& APDCL's Environmental and Social Policy \& Procedures |
| Fol | $:$ | Gomework |
| GRC | $:$ | Grievance Redress Committee |
| GRM | $:$ | Grievance Redress Mechanism |
| Ha | $:$ | Hectare |
| HPC | $:$ | High Powered Committee |
| IA | $:$ | Implementing Agency |
| INRs | $:$ | Indian National Rupees |
| IP | $:$ | Indigenous People |
| IR | $:$ | Involuntary Resettlement |
| JCC | $:$ | Joint Coordination Committee |
| kV | $:$ | Kilo volt |
| Km | $:$ | Kilometer |
| LA | $:$ | Land Acquisition |
| MCM | $:$ | Million Cubic Meter |
| MoP | $:$ | Ministry of Power |
| M\&E | $:$ | Monitoring and Evaluation |
| NoC | $:$ | No Objection Certificate |
| NER | $:$ | North Eastern Region |
| NERPSIP | $:$ | North Eastern Region Power System Improvement Project |
| O\&M | $:$ | Operation and Maintenance |
| OP | $:$ | Operational Policy |
| PAP | $:$ | Project Affected Person |
| POWERGRID | $:$ | Power Grid Corporation of India Limited |
| PPIU | $:$ | PMC Project Implementation Unit |
| RFCTLARRA | $:$ | The Right to Fair Compensation and Transparency in Land, Acquision |
| RoW | $:$ | Rehabilitation and Resettlement Act, 2013 |
|  |  |  |
|  | Right of Way |  |


| RP | $:$ | Resettlement Plan |
| :--- | :--- | :--- |
| R\&R | $:$ | Resettlement and Rehabilitation |
| S/c | $:$ | Single Circuit |
| SC | $:$ | Scheduled Caste |
| Sq.m. | $:$ | Square Meters |
| SMF | $:$ | Social Management Framework |
| SPCU | $:$ | State Project Coordination Unit |
| ST | $:$ | Scheduled Tribe |
| T \& D | $:$ | Transmission \& Distribution |
| TL | $:$ | Transmission Line |
| USD | $:$ | United States Dollar |
| WB | $:$ | The Word Bank |

## GLOSSARY

Regional Council/Autonomous : An autonomous body/institution formed under the provisions District Council/ Village Council

Village Headman
Zila/District
Sub-division
Block
Panchayat of 6th Schedule of Constitution of India which provides tribal people freedom to exercise legislative, judicial, executive and financial powers.
Elected head of the Village Council
: It is the first administrative division at the State level.
: A revenue sub-division, within a district
: An administrative sub-division within a district The third tier of decentralized governance

## EXECUTIVE SUMMARY

i. The Compensation Plan for Temporary Damages (CPTD) has been prepared for Transmission \& Distribution (T \& D) network in Tinsukia and Dibrugarh districts of Assam State under the North Eastern Region Power System Improvement Project (NERPSIP) which is being funded by Govt. of India (Gol) and the World Bank (WB). The Implementing Agency (IA) is Power Grid Corporation of India Limited (POWERGRID). The CPTD is guided by laws and regulations of the Government of India/ State Govt viz. The Electricity Act, 2003, The Indian Telegraph Act, 1885, MoP guidelines Oct.' 2015 on RoW Compensation, Assam Electricity Grid Corporation Limited (AEGCL)/ Assam Power Distribution Company Limited (APDCL)'s Environmental and Social Policy \& Procedures Framework (ESPPF) and World Bank's Operational Policies.
ii. The project components include construction of 93.5 km of $220 / 132 \mathrm{kV}$ line and 42.71 km of 33 kV line along with associated new/extension of transmission \& distribution substations in Tinsukia and Dibrugarh district of Assam. The present CPTD has been prepared based on the detailed survey/ investigation. However, the temporary impacts on land and loss of crops/trees occurred only during the project implementation/construction. Therefore, the CPTD remains as draft, as actual temporary impacts on crop/tree including details of Affected Persons (AP) shall be ascertained during check survey and tower spotting once the construction contractor is mobilized for implementation. AEGCL \& APDCL/ POWERGRID ${ }^{1}$ provide compensation for actual damages after assessment by revenue authority. Check survey is done progressively during the construction of the transmission/distribution line. Normally the work is done in off season when there is no standing crop. The compensation for damage is assessed in actual after construction activities of transmission/distribution lines in three stages i.e. after completion of foundation, tower erection and stringing of conductor. The payment of compensation may also be paid in three instances, if there are different damages during all the above three activities. Assessment of damages at each stage and payment of compensation is a simultaneous and continuous activity. Hence, CPTD updation will be a continuous process during construction of line for which updated semi-annual CPTD monitoring report shall be submitted by AEGCL \& APDCL/POWERGRID.
iii. The project components under the scope of present CPTD include following transmission/ distribution lines and associated substations;
A. Transmission System Components:

1. Rupai - Chapakhowa 132 kV S/C on D/C line - $\mathbf{4 4} . \mathbf{0}$ km.

[^0]2. Tinsukia - Behiating (New Dibrugarh) 220kV D/C line - $\mathbf{4 9 . 5}$ km.
3. Establishment of $220 / 132 \mathrm{kV}$ new substation at Behiating \& $132 / 33 \mathrm{kV}$ new substation at Chapakhowa and Extension of 132/33 kV existing substation at Rupai

## B. Distribution System Components:

1. Chapakhowa (New) to Chapakhowa (Existing) substation 33kV line - $\mathbf{2 . 6 1 7} \mathbf{~ k m}$.
2. Dibrugarh (Existing) to Romai (New) substation 33kV line - $\mathbf{1 7 . 2 7 7} \mathbf{~ k m}$.
3. Behiating (New) to Bogibil (New) substation 33kV line - $\mathbf{1 3 . 4 7 6} \mathbf{~ k m}$.
4. Behiating (New) to Dibrugarh (New) substation 33 kV line $\mathbf{- 9 . 3 4 1} \mathbf{~ k m}$.
5. Establishment of $33 / 11 \mathrm{kV}$ new substation at Romai, Bogibil, Dibrugarh and Strengthening of $33 / 11 \mathrm{kV}$ existing substation at Chapakhowa.
iv. As per existing law, land for tower/pole and right of way is not acquired ${ }^{2}$ and agricultural activities are allowed to continue after construction activity. 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 $4-6 \mathrm{sq}-\mathrm{ft}$. 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 will be paid to the affected persons/ community for all damages including cost of land for tower base and RoW corridor to its owner without acquiring it as per the laws and provisions laid in ESPPF accompanied by MoP guidelines, as Assam has already adopted MoP guidelines for land compensation vide notification dated 10.03.2017.
v. For the temporary loss of crops, only agricultural land and private plantation land are considered for estimation. Though Right of Way (RoW) for $220 \mathrm{kV}, 132 \mathrm{kV}$ \& 33 kV line are 35 meter, 27 meter \& 15 meter respectively but average affected width/corridor would be limited to maximum 27 meter for $220 \mathrm{kV}, 20$ meter for 132 kV \& 10 meter for 33 kV line. Accordingly, actual impacted area for crops and other damages worked out to be approx. 584.535 acres. Total number of trees likely to be affected during construction of lines is 5474 including 2000 nos. of Tea bushes. Private trees will be compensated as per the entitlement matrix. The total number of affected persons is estimated to be 1832.
v. Public participation and community consultations have been taken up as an integral part of the project's social and environmental assessment process. Public is informed about the project at every stage of execution. During survey also AEGCL/APDCL \& POWERGRID's site officials meet

[^1]people and inform them about the routing of transmission line. During the construction, every individual, on whose land tower is erected and people affected by RoW, are consulted. There were many informal group and public consultation meetings conducted during survey of the entire routes of transmission/distribution lines and substation site. The process of such consultation is to be continued during project implementation and even during Operation \& Maintenance (O\&M) stage. The draft/summary CPTD will be disclosed to the affected households and other stakeholders by placing it on website. AEGCL/APDCL \& POWERGRID's site/field officials visit construction sites frequently during construction and meet with APs and discuss about norms and practices of damages and compensation to be paid for them. The executive summary of the CPTD and Entitlement Matrix in local language will be placed at construction offices/sites.
vi. Grievance Redress Mechanism (GRM) is an integral part of project implementation, operation and maintenance stage of the project. For handling grievance, Grievance Redress Committee (GRC) has been established at two places, one at the project/scheme level and another at corporate/head quarter level. The GRCs include members from AEGCL/APDCL, 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. The composition of GRC disclosed in Panchayat/village council office and concerned district headquarter for wider coverage. In case of any complaint, GRC meeting shall be convened within 15 days. If project level GRC is not able to take decision it may refer the complaint to corporate GRC for solution. GRC endeavors to pronounce its decision within 30-45 days of receiving grievances. In case complainant/appellant is not satisfied with the decision of project level GRC they can make an appeal to corporate GRC for review. The proposed mechanism does not impede access to the country's judicial or administrative remedies at any stage. Further, grievance redressal is also inbuilt in the tree/crop 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 also provides forum for raising the grievance towards any irregularity/complaint.
vii. The CPTD is based on the World Bank Safeguard Policies as well as AEGCL \& APDCL's ESPPF and law of the land. Being a transmission project, the relevant national laws applicable for this project are (i) The Electricity Act, 2003 and (ii) The Indian Telegraph Act, 1885 and (iii) Govt. of Assam notification on RoW Compensation dated $10^{\text {th }}$ March 2017. The compensation principles
adopted for the project shall comply with applicable laws and regulations of the Governments of India, AEGCL \& APDCL's ESPPF as well as World Bank Safeguard Policies.
viii. APs will be entitled for compensation for temporary damages to crops/trees/structures etc. as per the Entitlement Matrix given in E-1. Temporary damage will occur during construction of transmission/distribution lines for which compensation is paid as per relevant norms. All APs are paid compensation for actual damages irrespective of their religion, caste and their economic status. There is one time lump sum assistance to vulnerable households on recommendation of State Authority. As an additional assistance, construction contractors are encouraged to hire local labour that has the necessary skills. AEGCL \& APDCL/IA will provide compensation to all APs including non-title holders as already mentioned in the Entitlement Matrix.

E-1: Entitlement Matrix

| SI. | Type of Issue/ Impact | Beneficiary | Entitlement Options |
| :---: | :---: | :---: | :---: |
| 1. | Land area below tower base (\#) | Owner | $100 \%$ land cost at market value as ascertained by revenue authorities or based on negotiated settlement without actual acquisition/title transfer. |
| 2 | Land coming in corridor of width of Right of Way (\#) | Owner | $15 \%$ of land cost as decided by Deputy Commissioner |
| 3. | Loss/damage to crops and trees in line corridor | Owner/ Tenant/ sharecropper/ leaseholder | Compensation to actual cultivator at market rate for crops and 8 years income for fruit bearing trees*. APs will be given advance notice to harvest their crops. <br> All timber* will be allowed to retain by the owner. |
| 4. | Other damages (if applicable) | All APs | Actual cost as assessed by the concerned authority. |
| 5. | Loss of structure |  |  |
| (i) | House | Titleholders | Cash compensation at replacement cost (without deduction for salvaged material and depreciation value) plus Rs. 25,000/- assistance (based on prevailing GOI norms for weaker section housing) for construction of house plus transition benefits as per category-5 below. |
| (ii) | Shop/ Institutions/ Cattle shed | Individual/ Titleholders | Cash compensation plus Rs. 10000/- for construction of working shed/shop plus transition benefits as per category- 5 below |
| 6. | Losses during transition under (i) \& (ii) above for Shifting / Transport | Family/unit | Provision of transport or equivalent cash for shifting of material/ cattle from existing place to alternate place |


| SI. | Type of Issue/ Impact | Beneficiary | Entitlement Options |
| :--- | :--- | :--- | :--- | :--- |
| 7. | Tribal/ Vulnerable <br> APs | Vulnerable <br> APs3 | One time additional lump sum assistance not <br> exceeding 25\% of total compensation on <br> recommendation of State Authority/ADC/VC. |

(\#) Since Govt. of Assam has adopted MoP guidelines vide notification dated 10.03.17, compensation toward damages in respect to RoW shall be paid as per norms.

* Assistance/help of Forest department for timber yielding trees and Horticulture department for fruit bearing trees shall be taken for assessing the true value.
ix. No physical displacement is envisaged in the proposed project. Major damages in transmission/distribution line are not envisaged due to flexibility in routing of line. Displacement of structures is normally not envisaged in the transmission line projects. However, whenever it is necessary, compensation for structures as decided by committee based on government norms and entitlement matrix shall be provided. A notice for damage is issued to APs and the joint measurement by AEGCL \& APDCL/ POWERGRID and APs is to be done and verified by revenue official for actual damages. Hence, compensation is paid parallely with the construction activity of transmission/distribution line. The cost estimate for the project includes eligible compensation for loss of crops, trees, and support cost for implementation of CPTD, monitoring, other administrative cost etc. This is a tentative budget which may change during the original course of implementation. The total indicative cost is estimated to be INR 2251.17 Lakhs equivalent to USD 3.196 million.
$x$. The implementation and monitoring are critical activities which shall be followed as per Implementation Chart/Schedule provided in Chapter-X. POWERGRID will be the Implementing Agency (IA) for the Project. For the day to day implementation of Project activities, PMC Project Implementation Units (PPIUs) located in each participating State, has been formed including members of Utility on deputation, with its personnel being distributed over work site \& working in close association with the State Project Coordination Unit (SPCU) / Central Project Implementation Unit (CPIU). PPIU report to State level "Project Manager" nominated by the Project-in-Charge of IA. The IA will have a Core team stationed at the CPIU on permanent basis and other IA officers (with required skills) will visit as and when required by this core team. This team shall represent IA and shall be responsible for all coordination with SPCU, PIU, within IA and MoP, Gol. CPIU shall also assist MoP, Gol in monitoring project progress and in its coordination with The Bank.
xi. Public consultation and internal monitoring will be continued in an intermittent basis for the entire duration of project. Monitoring will be the responsibility of both AEGCL/APDCL \& IA. AEGCL \& APDCL/ POWERGRID will submit semi-annual monitoring reports on their implementation performance and submit the reports to The World Bank. If required,

[^2]
## I. INTRODUCTION AND PROJECT DESCRIPTION

### 1.1. Project Background

1. Recognizing that intrastate T\&D systems in the North Eastern States (NER) states have remained very weak and that there is a critical need to improve the performance of these networks, the Central Electricity Authority (CEA) developed a comprehensive scheme for the NER in consultation with POWERGRID and the concerned state governments. This scheme is intended to (a) augment the existing T\&D infrastructure to improve the reliability of service delivery across all the NER states and (b) build institutional capacity of the power utilities and departments in the NER. This scheme is part of the Gol's wider efforts to develop energy resources in the NER for electricity supply within the region, to strengthen transmission networks, expand and strengthen sub-transmission systems, and extend last mile electricity connectivity to household.
2. Gol requested for World Bank's support in implementing a set of priority investments in six NER states In 2016, the World Bank (WB) has approved a loan (IBRD 470 USD Million) to the Government of India (Gol) for North Eastern Region Power System Improvement Project (NERPSIP) which aims to create a robust intrastate transmission and distribution network in all the six (6) North Eastern States including Assam. The project being funded on 50:50 (World Bank loan: Gol) basis except the component of capacity building for Rs.89.00 crore, which Gol will bear entirely. The scheme is to be taken up under a new Central Sector Plan Scheme of MoP..
3. Ministry of Power, Gol has appointed POWERGRID as Implementing Agency (IA) to six North Eastern States for the said project. However, the ownership of the assets shall be with the respective State Utilities/State Government which upon progressive commissioning shall be handed over to them for taking care of Operation and Maintenance of assets.
4. The project will be implemented over a seven-year period and has two components, namely Component A: Priority Investments for Strengthening Intrastate Transmission, Sub-transmission, and Distribution Systems, and Component B: Technical Assistance for Capacity Building and Institutional Strengthening (CBIS) of Power Utilities and Departments of Participating States.
5. The scope of work under NERPSIP in state of Assam include construction of 376 km of 220/132 kV transmission lines \& associated 11 nos. new substations and 479 ckm of 33 kV distribution lines \& 16 nos. substation along with augmentation \& strengthening of transmission and sub-transmission spread across the State. The power map of Assam indicating the existing intrastate transmission network along with proposed project under Tranche-1 of NERPSIP is presented in Figure 1.1.

Figure 1.1 : Power Map of Assam along with proposed project


### 1.2. Project Components

6. The project components under the scope of present CPTD include following transmission/ distribution lines and associated Transmission \& Distribution substations proposed in Tinsukia and Dibrugarh district of Assam State;
A. Transmission System:
7. Rupai - Chapakhowa 132 kV S/C on D/C line - 44.0 km.
8. Tinsukia - Behiating (New Dibrugarh) 220kV D/C line - 49.5 km.
9. Establishment of $220 / 132 \mathrm{kV}$ new substation at Behiating \& $132 / 33 \mathrm{kV}$ new substation at Chapakhowa and Extension of $132 / 33 \mathrm{kV}$ existing substation at Rupai.
B. Distribution System :
10. Chapakhowa (New) to Chapakhowa (Existing) substation 33kV line - $\mathbf{2 . 6 1 7} \mathbf{~ k m}$.
11. Dibrugarh (Existing) to Romai (New) substation 33kV line - $\mathbf{1 7 . 2 7 7} \mathbf{~ k m}$.
12. Behiating (New) to Bogibil (New) substation 33kV line - 13.476 km.
13. Behiating (New) to Dibrugarh (New) substation 33 kV line -9.341 km .
14. Establishment of $33 / 11 \mathrm{kV}$ new substation at Romai, Bogibil, Dibrugarh and Strengthening of $33 / 11 \mathrm{kV}$ existing substation at Chapakhowa.
15. The schematic diagram of proposed transmission and distribution network in Dhemaji District is shown below:


### 1.3. Objective of Compensation Plan for Temporary Damages (CPTD)

8. The primary objective of the CPTD is to identify impacts/damages and to plan measures to mitigate losses likely to be caused by the projects. The CPTD is based on the general findings of field visits, preliminary assessments and meetings with various project-affected persons in the project areas. The CPTD presents (i) introduction and project description (ii) socio-economic information and profile (iii) legal \& regulatory framework (iv) project impacts,(v) entitlement, assistance and benefit (vi) information disclosure, consultation and participation (vii) institutional arrangements (viii) grievance redress mechanism (ix) budget (x) implementation schedule \& (xi) monitoring and reporting. The CPTD is guided by The Electricity Act 2003, The Indian Telegraph Act, 1885, Govt. of Assam notification dated $10^{\text {th }}$ March 2017 for payment of compensation towards damages in regards to right of way for transmission line, AEGCL/APDCL's ESPPF and World Bank's Safeguard Policies.

### 1.4. Scope and Limitation of the CPTD

9. Based on the assessment of proposed project components and intervention, it has been established that there will be no permanent land acquisition required and the anticipated project impacts are temporary in nature in terms of impacts on land and loss of standing crops/trees only. The present CPTD has been prepared based on the detailed survey/ investigation. However, the temporary impacts on land and loss of crops/trees occurred only during the project implementation/construction. Therefore, the CPTD remains as draft, as actual temporary impacts on crop/tree including details of Affected Persons (AP) shall be ascertained during check survey and tower spotting once the construction contractor is mobilized for implementation. AEGCL/ APDCL/ POWERGRID ${ }^{4}$ provide compensation for actual damages after assessment by revenue authority. Check survey is done progressively during the construction of the transmission/distribution line. Normally the work is done in off season when there is no standing crop. The compensation for damage is assessed in actual after construction activities of transmission/distribution lines in three stages i.e. after completion of foundation, tower erection and stringing of conductor. The payment of compensation shall be paid in three instances, if there are different damages during above all the three activities. Assessment of damages at each stage and payment of compensation is a simultaneous and continuous activity. Hence, CPTD updation will be a continuous process during construction of line for which updated semi-annual CPTD monitoring report shall be submitted by AEGCL \& APDCL/POWERGRID.
[^3]
### 1.5. Measures to Minimize Impact

10. In keeping with provisions of ESPPF and Bank's Safeguard Policies, State Utilities/ POWERGRID has selected and finalised 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 habituated 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.
11. For transmission/distribution line there is no permanent land acquisition involved as per applicable legal framework i.e. in exercise of the powers under Indian Telegraph Act-1885, Part 3, section 10 to 16 conferred under section 164 of the Electricity Act, 2003 through Power (Electricity) Department, Govt. of Assam vide notification dated $16^{\text {th }}$ March, 2016, AEGCL/APDCL has the mandate to place and maintain transmission lines under/ over/ along or across and posts in or upon, any immoveable property. However, clause 10 (d) of same act stipulates that the user agency shall pay full compensation to all interested for any damages sustained during the execution of said work. Therefore, State Utilities/ POWERGRID have developed a procedure which is designed to minimize impacts, during the preliminary survey/ investigation (for screening \& scoping of the project with at least 3 alternative route alignments), thereafter during detailed survey (spot)/design followed by foundation work, tower erection and during the stringing of conductors.
12. All tower foundations and tower footings are dug and laid, including transportation of material and land clearance, generally at the end of a crop season to avoid impacts on cultivations and need for compensation. After construction of transmission towers, farmers are allowed to continue agricultural activity below tower.
13. Because the concrete needs time to dry and settle, all towers are erected normally three weeks after casting of foundation. Thus, both foundation and erection works are generally completed in one gap between two crop seasons.
14. Given the limited time needed for the stringing, the latter can be done right after the tower construction, before the following crop season.
15. For this reason no household is significantly affected due to the project. Thus, productive loss due to construction is negligible. However, due care shall be taken to avoid damages to crop/trees by taking up the construction activities during lean period or post-harvest season. As per the prevailing norms farming activity shall be allowed after the construction work is completed. All affected farmers will be compensated for all sorts of damages during construction as per the laid down procedure.

### 1.6. Route Selection and Study of Alternatives

16. For selection of optimum route, the following points are taken into consideration:
(i) The route of the proposed transmission/distribution lines does not involve any human displacement/rehabilitation.
(ii) Any monument of cultural or historical importance is not affected by the route of the transmission/distribution line.
(iii) The proposed line route does not create any threat to the survival of any community with special reference to Tribal Community.
(iv) The proposed line route does not affect any public utility services like playgrounds, schools, other establishments etc.
(v) The line route does not pass through any National Parks, Sanctuaries etc.
(vi) The line route does not infringe with area of natural resources.
17. In order to achieve this, AEGCL \& APDCL/POWERGRID undertakes route selection for individual line in close consultation with representatives of concerned Forest Department and the Department of Revenue. Although under the law, State Utilities have the right of eminent domain yet alternative alignments are considered, keeping in mind, the above-mentioned factors during site selection, with minor alterations often added to avoid environmentally sensitive areas and settlements at execution stage.
a. As a rule, alignments are generally cited away from major towns, whenever possible, to account for future urban expansion.
b. Similarly, forests are avoided to the extent possible, and when it is not possible, a route is selected in consultation with the local Divisional Forest Officer, that causes minimum damage to existing forest resources.
c. Alignments are selected to avoid wetlands and unstable areas for both financial and environmental reasons.
18. In addition, care is also taken to avoid National Parks and Wildlife Sanctuaries and any other forest area rich in wildlife. Keeping above in mind the route of proposed lines have been so aligned that it takes care of above factors. As such different alternatives were studied with the help of Govt. published data like Forest atlas, Survey of India topo maps, satellite imageries etc. to arrive at most optimum sections of the route which can be taken up for detailed survey and assessment of environmental \& social impacts for their proper management.
19. The comparative details of three alternatives in respect of proposed lines are presented in Annexure-1.

## II. SOCIOECONOMIC INFORMATION AND PROFILE

### 2.1. General

20. The socio-economic profile of the project area is based on general information collected from various secondary sources. As the assets of any sorts will not be acquired but for temporary damage to crops/trees or any other structures adequate compensation as per norms shall be paid to all APs. This chapter provides broad socio-economic profile in terms of demography, literacy, employment and other infrastructure etc. in the State of Assam and Tinsukia \& Dibrugarh district in particular through which the various lines will traverse. Following section briefly discuss socioeconomic profile.

### 2.2. Socio-Economic Profile

### 2.2.1. Land Use Pattern Assam

21. Assam has a geographic area of 7.84 million ha, which constitutes $2.39 \%$ of the country's total area. It is situated between latitude $24^{\circ} 07$ to $28^{\circ} 00^{\prime} \mathrm{N}$ and longitude $89^{\circ} 42^{\prime}$ to $96^{\circ} 02^{\prime} \mathrm{E}$. Topographically, the State can be divided into three parts, viz. the Brahmaputra valley, the Surma valley and the Assam range. The first two parts are plain areas, while the Assam range is a mountainous region. The general land use pattern of the State is given in Table 2.1.

Table-2.1: Land Use Pattern of Assam

| Land Use | Area in '000 ha | Percentage |
| :--- | :---: | :---: |
| Total geographical area | 7,844 |  |
| Reporting area for land utilization | 7,850 | 100.00 |
| Forests | 1,853 | 23.60 |
| Not available for cultivation | 2,620 | 33.37 |
| Permanent pastures and other grazing lands | 160 | 2.04 |
| Land under misc. tree crops \& groves | 196 | 2.49 |
| Culturable wasteland | 78 | 0.99 |
| Fallow lands other than current fallows | 52 | 0.66 |
| Current Fallows | 81 | 1.03 |
| Net area sown | 2,811 | 35.80 |

Source: Land use statistics, Ministry of Agriculture, GOI, 2011-12

### 2.2.2 Tinsukia and Dibrugarh District

22. The Tinsukia district occupies an area of 3790 sq. km. The district extends from $27^{\circ} 23^{\prime} \mathrm{N}$ to $27^{\circ} 48^{\prime} \mathrm{N}$ and $95^{\circ} 22^{\prime} \mathrm{E}$ to $95^{\circ} 38^{\prime} \mathrm{E}$. It is located in the upper region of Assam and is bounded by Arunachal Pradesh in east-south, by Dibrugarh District in south-west and by Dhemaji District in the north, which is separated from Tinsukia District by Brahmaputra River.
23. Dibrugarh
district
 occupies an area of $3,381 \mathrm{sq} . \mathrm{km}$. The district extends from $27^{\circ} 5^{\prime} 38^{\prime \prime} \mathrm{N}$ to $27^{\circ} 42^{\prime} 30 \mathrm{~N}$ and $94^{\circ} 33^{\prime} 46$ " E to $95^{\circ} 29^{\prime} 8^{\prime \prime} \mathrm{E}$. It is located in the north eastern corner of the Upper Brahamputra valley and bounded by Dhemaji district on the North, Tinsukia district on the East, Tirap district of Arunachal district on the SouthEast and Sibsagar district on the North and South-West with an altitude ranging between 99 and 474 meters.


### 2.2.2.1 Climate

24. Assam has four well defined seasons in a year viz. summer, monsoon, winter and spring. Climate of Assam is sub-tropical. October to April offer a mild and moderate climate. Assam is never extremely cold or hot. Rainfall, one of the highest in the world (between 178 and 305 cm ), is concentrated in 4 months, June to September. The State experiences floods and droughts. Annual
rainfall varying from $1,500 \mathrm{~mm}$ to $3,750 \mathrm{~mm}$. The average temperature in January ranges from $10^{\circ} \mathrm{C}$ to $23^{\circ} \mathrm{C}$ and in July it ranges from $26^{\circ} \mathrm{C}$ to $32^{\circ} \mathrm{C}$.
25. The climate of the present sub-project areas districts is more or less similar with the climate of the State. The climate of Tinsukia is mild, and generally warm and temperate. The rainfall in Tinsukia is significant, with precipitation even during the driest month. The annual average temperature and rainfall of the district is $23.1^{\circ} \mathrm{C}$ and 2679 mm respectively. Dibrugarh district experiences subtropical monsoon climate with mild winter, warm and humid summer. The annual average temperature and rainfall of the district is $23.9^{\circ} \mathrm{C}$ and 2560 mm respectively.

### 2.2.2.2 Water Resources:

26. Brahmaputra Basin comprises of sub-basin of Subansiri, Jia Bharali, Badeng-Pubnoi, Dhansiri, Anas, Champamati, Dholai, Buridihing, Disang, Kopili, Kalang and Meghna Basin comprises of sub- Basin of Barak River. Assam is dominated by the Brahmaputra river (length: 2900 km ). Its drainage area is roughly $935,500 \mathrm{sq}$. km.
27. The major rivers flowing through sub-projects area districts are Brahmaputra River, Lohit River, Buri Dehing River and Dibru River. In the instant scheme, one of the line i.e. 132 kV Rupai Chapakhowa line has to cross Lohit river near the Dhola bridge. However, all possible efforts shall be made to avoid placing of tower in the river bed while crossing the river.

### 2.2.2.3 Soil

28. Mainly three types of soil found in Assam State viz. Alluvial, Red Loam, and Lateritic Soil. Alluvial Soil covers entire Darrang, Kamrup, Lakhinpur, Goalpara, Sibsagar and part of Garo Hills. Red Loam Soil is found in Garo Hills, Mizo Hills, Khasi-Jaintia Hills and part of Cachar \& Sibsagar district. Lateritic Soil found in part of Shibsagar, Jaintia Hills, Khasi Hills, Cachar, Nowgaon area. The most typical characteristics of Assam soil is acidity, where pH of the soils generally ranges between 4.2 to 5.8 . The soil found in the subproject area is mostly alluvial type.

### 2.2.2.4 Ecological Resources

29. The protected area found in the subproject districts are Dibru-Saikhowa National Park which is also a Biosphere reserve, Bherjan-Borajan-Padumoni \& Dihing-Patkai Wildlife Sanctuary and Dihing Patkai Elephant Reserve, However, the proposed transmission and distribution network doesn't pass through any protected area like national parks, sanctuaries, elephant
reserves/corridors and biosphere reserves etc. In the instant scheme all such areas are completely avoided through careful route selection. It is also observed that there is no ecologically sensitive area within a radius of 10 Km from the transmission and distribution lines proposed under this scheme. The nearest protected area is "Dibru-Saikhowa National Park which is located approx. 16 km away from one of the subproject namely 132 kV Rupai-Chapakhowa transmission line alignment.

### 2.2.2.5 Crops

30. Agriculture plays the chief role of revenue earning in Assam economy. The State of Assam experiences plenty of rainfall and possesses a fertile land which is extremely advantageous for cropping. This has led to the flourishing growth in food crops and staples in Assam agriculture. Rice is the main food crop in Assam agriculture as it is the main diet in the state too. Those who are engaged in the agricultural department of Assam fully concentrates on cultivating rice as it falls under their main priority. Other food crops cultivated in Assam agriculture include jute, sugarcane, fruits, tea, pulses, coconut, potatoes, cotton, and arecanuts. More than 50 percent of the total population of the state are involved in agricultural activities of Assam.

### 2.2.2.6 Human and Economic Development

31. Assam is a state rich in natural resources like natural oil, natural gas, coal, rubber, tea and some minerals like granite, limestone and kaolin. The present state is much smaller than what it was forty years ago. It is still the largest economy in the North East. Although it is more industrially developed than the other North Eastern states, it is primarily an agrian economy with $63 \%$ of its population engaged in agriculture and allied activities.
32. In Tea is a major industry in Assam which contributes $15 \%$ of world's tea production and $55 \%$ of the country's tea output. A large section of the labor force of the State is employed in the tea estates of Assam. The other agricultural produce involves rice, sugarcane, pulses, potatoes and jute. The secondary sector of the economy comprises of the industries in Assam with large and medium scale productions. Agro based industries prevail in the State coupled with the tea industry that has a major contribution to the economy of the State of Assam. Assam is first State in the country where oil was struck in 1889 at Digboy. Assam has four oil refineries located at Guwahati, Digboi, Numaligarh and Bongaigaon with a total capacity of 7 MMTPA (Million Metric Tonnes per annum).The State also earns revenue from the mining industry that produces the four important industrial minerals of coal, limestone, sillimanite and oil. Important cottage industries are
handloom, sericulture, manufacture of cane and bamboo articles, carpentry, smithy and manufacture of brass utensils. Assam is also the largest producer in the world of the golden colored muga silk.
33. Tinsukia is an industrial district of Assam. The Oldest oil refinery in India is situated at Digboi and places like Margherita and Ledo are famous for open cast coal mining. Tinsukia is one of the premier commercial centres in Assam. It produces a sizeable amount of tea, oranges, ginger, other citrus fruits and paddy (rice). The district also has a cosmetic plant of Hindustan Unilever (HUL).Tea and oil are the major revenue earners for the district.
34. Dibrugarh district has the world's largest area covered by tea gardens. The entire district is surrounded by tea plantations and has tea factories. Many tea gardens are more than 100 years old. The entire district has many oil and natural gas rigs owned by the Oil India Limited and Oil and Natural Gas Corporation Limited. The headquarters of Oil India Limited is located in Duliajan, a town 50 km from Dibrugarh town. The majority of the populations are occupied in farming of rice, sugar-cane, pulses, and fish farming. Beside these many rice and oilseed mills exist. Also there are some coal mining and petroleum production industries. Major industrial units like Brahmaputra Crackers and Polymers Limited (BCPL) has also come up in the district.

### 2.2.3 Demography Features

### 2.2.3.1. Total Population

35. Total population in Assam stands at 3,12,05,576 of which 2,68,07,034 (85.90\%) population belong to rural area and $43,98,542$ (14.10\%) population belong to urban area. Tinsukia district has a total of $13,27,929$ populations which is $4.26 \%$ of state population. The rural and urban population constitute $80.06 \%$ and $19.94 \%$ of total populations of this district. Dibrugarh district has a total of $13,26,335$ populations which is $4.25 \%$ of state population, where the rural and urban population constitute $80.06 \%$ and $19.94 \%$ of total populations of the district respectively. Details are given in Table 2.2.

Table 2.2: Details on Total Population

| Name/Particulars | Total Population | Total (Rural) | Total (Urban) | Percentage <br> (Rural) | Percentage <br> (Urban) |
| :--- | :---: | :---: | :---: | :---: | :---: |
| Assam | $3,12,05,576$ | $2,68,07,034$ | $43,98,542$ | 85.90 | 14.10 |
| Tinsukia | $13,27,929$ | $10,63,186$ | $2,64,743$ | 80.06 | 19.94 |
| Dibrugarh | $13,26,335$ | $10,82,605$ | $2,43,730$ | 81.62 | 18.38 |

Source: Census of India, 2011

### 2.2.3.2 Male and Female Population

36. Out of total population $3,12,05,576$ of the State, male population constitutes $15,939,443$
(51.08\%) and female population is $15,266,133$ ( $48.92 \%$ ). Total population in Tinsukia stands at 13,27,929 of which male population stands at 6,80,231 ( $51.22 \%$ ) and female population stands at $6,47,698(48.78 \%)$. The sex ratio of the Tinsukia district stands at 952 females per thousand male which is slightly lower than state average of 958. Total population in Dibrugarh stands at $13,26,335$ of which male population stands at $6,76,434(51.00 \%)$ and female population stands at $6,49,901$ (49.00\%). The sex ratio of this district stands at 961 females per thousand male which is higher than state average. Details are given in Table 2.3.

Table 2.3: Details on Male/ Female Population

| Name <br> /Particulars | Total <br> Population | Total Male | Total <br> Female | Percentage <br> (Male) | Percentage <br> (Female) | Sex <br> Ratio |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Assam | $3,12,05,576$ | $15,939,443$ | $15,266,133$ | 51.08 | 48.92 | 958 |
| Tinsukia | $13,27,929$ | $6,80,231$ | $6,47,698$ | 51.22 | 48.78 | 952 |
| Dibrugarh | $13,26,335$ | $6,76,434$ | $6,49,901$ | 51.00 | 49.00 | 961 |

Source: Census of India, 2011

### 2.2.3.3 Scheduled Caste (SC) and Scheduled Tribe (ST) Population

37. As per census 2011, the Scheduled Caste (SC) \& Scheduled Tribe (ST) population of the State stands at $22,31,321$ ( $7.15 \%$ ) and $38,84,371$ ( $12.4 \%$ ) respectively. Tinsukia district has a total SC population of $37,688(2.84 \%) \&$ ST population of 82,066 ( $6.18 \%$ ). Total SC and ST population in Dibrugarh district are 58,876 ( $4.44 \%$ ) \& $1,02,871$ ( $7.76 \%$ ) respectively. Details are given in Table 2.4.

Table 2.4: Details on Percentage SC/ST

| Name/ <br> Particulars | Total <br> Population | Total SC <br> Population | Percentage of <br> SC Population | Total ST <br> Population | Percentage of <br> ST Population |
| :--- | :---: | :---: | :---: | :---: | :---: |
| Assam | $3,12,05,576$ | $22,31,321$ | 7.15 | $38,84,371$ | 12.4 |
| Tinsukia | $13,27,929$ | 37,688 | 2.84 | 82,066 | 6.18 |
| Dibrugarh | $13,26,335$ | 58,876 | 4.44 | $1,02,871$ | 7.76 |

Source: Census of India, 2011

### 2.2.3.4 Literacy

38. The literacy rate of Tinsukia district stands at $60.12 \%$ which is slightly lower than State's average of $61.46 \%$. However, the male literacy rate of the district is lower than State's literacy rate. But in Dibrugarh district the literacy rate stands at $66.69 \%$ which is significantly higher than that of the State. Nevertheless Dibrugarh district has the female literacy rate which is slightly lower than the State's average. Details are given in Table 2.5.

Table 2.5 : Literate and Illiterate Population

| Name/Particulars | Total <br> Population | Total <br> Literate | Percentage <br> of Literate | Percentage <br> (Male) | Percentage <br> (Female) |
| :--- | :---: | :---: | :---: | :---: | :---: |
| Assam | $3,12,05,576$ | $19,177,977$ | 61.46 | 55.11 | 44.89 |
| Tinsukia | $13,27,929$ | $7,98,322$ | 60.12 | 56.80 | 43.20 |
| Dibrugarh | $13,26,335$ | $8,84,531$ | 66.69 | 55.55 | 44.45 |

Source: Census of India, 2011

### 2.3.3.5. Total Workers (Male and Female)

39. Total population into work in Assam stands at 1,19,69,690 of which total Male (work) population stands at $85,41,560(71.36 \%)$ and total female (Work) population stands at 34,28,130 ( $28.64 \%$ ). Tinsukia district has a total work population of $55,71,96$ of which total Male (work) population stands at $3,66,623(65.80 \%$ ) and total female (Work) population stands at 1,90,573 (34.20\%). Dibrugarh district has a total work population of $5,60,557$ of which total Male (work) population stands at 3,68,013 (65.65\%) and total female (Work) population stands at 1,92,544 ( $34.35 \%$ ). Details are given in Table 2.6.

Table 2.6: Details on Workers

| Name/ <br> Particulars | Total Population <br> (Work) | Total Male <br> (Work) | Total Female <br> (Work) | Percentage <br> (Male) | Percentage <br> (Female) |
| :--- | :---: | :---: | :---: | :---: | :---: |
| Assam | $1,19,69,690$ | $85,41,560$ | $34,28,130$ | 71.36 | 28.64 |
| Tinsukia | $55,71,96$ | $3,66,623$ | $1,90,573$ | 65.80 | 34.20 |
| Dibrugarh | $5,60,557$ | $3,68,013$ | $1,92,544$ | 65.65 | 34.35 |

Source: Census of India, 2011

### 2.3.3.6 Households

40. Total Households in Assam stands at 64, 06,471of which 54, 20,877 (84.61\%) households belong to rural area and $9,85,594$ (15.39\%) households belong to urban area. Tinsukia district has a total of $2,68,598$ households of which $2,10,707$ ( $78.45 \%$ ) households belong to rural area and 57,891 ( $21.55 \%$ ) households belong to urban area. Dibrugarh district has a total of 2,76,867 households of which 2,22,414 (80.33\%) households belong to rural area and 54,453 (19.67\%) households belong to urban area. Details are given in Table 2.7.

Table 2.7: Details on Households

| Name/ <br> Particulars | Total <br> Households | Total <br> (Rural) | Total <br> (Urban) | Percentage <br> (Rural) | Percentage <br> (Urban) |
| :--- | :---: | :---: | :---: | :---: | :---: |
| Assam | $64,06,471$ | $54,20,877$ | $9,85,594$ | 84.61 | 15.39 |
| Tinsukia | $2,68,598$ | $2,10,707$ | 57,891 | 78.45 | 21.55 |
| Dibrugarh | $2,76,867$ | $2,22,414$ | 54,453 | 80.33 | 19.67 |

Source: Census of India, 2011

## III. LEGAL \& REGULATORY FRAMEWORK

### 3.1. Overview

41. In India, compensation for land acquisition (LA) and rehabilitation for project affected persons/families is directed by the National law i.e. "The Right to Fair Compensation and Transparency in Land Acquisition, Rehabilitation and Resettlement Act, 2013 (hereafter RFCTLARR, 2013"), effective from $1^{\text {st }}$ January 2014. For transmission/distribution line project, land for tower/pole and right of way is not acquired and ownership of land remains with the owner and is allowed to continue cultivation after construction. However, as per existing laws ${ }^{5}$ compensation for all damages are paid to the individual land owner. The relevant national laws applicable for transmission/distribution project are (i) The Electricity Act, 2003 and (ii) The Indian Telegraph Act, 1885 and (iii) Govt. of Assam notification on RoW Compensation dated $10^{\text {th }}$ March 2017. The compensation principles adopted for this project shall comply with applicable laws and regulations of the Government of India/ State Govt, World Bank's Safeguard Policies and AEGCL \& APDCLs ESPPF.

### 3.2. Statutory Requirements

42. Transmission lines are constructed under the ambit of The Electricity Act, 2003. The provisions stipulated in section 67-68 of the Electricity Act, 2003 read with section 10 \& 16 of the Indian Telegraph Act, 1885 governs the compensation as AEGCL/APDCL has been vested with the powers of Telegraph Authority vide Power(Electricity) Department, Govt. of Assam notification dated $16^{\text {th }}$ March, 2016 under Section- 164 of the Electricity Act. As per the provision of Indian Telegraph Act, 1885 under section 10 (b), AEGCL/APDCL is not authorized to acquire any land hence land under tower is not acquired. However, compensation for all damages are paid to the individual land owner as per the provision of Section-10 (d) of Indian Telegraph Act, 1885.
43. The provisions in the Electricity Act, 2003 and Indian Telegraph Act, 1885 regarding compensation for laying of transmission lines are as follows:

### 3.2.1. The Electricity Act, 2003, Part-VIII, Section 67 \& 68

## Quote:

## Section 67 (3-5):

(3) A licensee shall, in exercise of any of the powers conferred by or under this section and the rules made thereunder, cause as little damage, detriment and inconvenience as may be, and

[^4]shall make full compensation for any damage, detriment or inconvenience caused by him or by any one employed by him.
(4) Where any difference or dispute [including amount of compensation under sub-section (3)] arises under this section, the matter shall be determined by the Appropriate Commission.
(5) The Appropriate Commission, while determining any difference or dispute arising under this section in addition to any compensation under sub-section (3), may impose a penalty not exceeding the amount of compensation payable under that sub-section.

## Section 68 (5 \& 6):

(5) Where any tree standing or lying near an overhead line or where any structure or other object which has been placed or has fallen near an overhead line subsequent to the placing of such line, interrupts or interferes with, or is likely to interrupt or interfere with, the conveyance or transmission of electricity or to interrupt or interfere with, the conveyance or transmission of electricity or the accessibility of any works, an Executive Magistrate or authority specified by the Appropriate Government may, on the application of the licensee, cause the tree, structure or object to be removed or otherwise dealt with as he or it thinks fit.
(6) When disposing of an application under sub-section (5), an Executive Magistrate or authority specified under that sub-section shall, in the case of any tree in existence before the placing of the overhead line, award to the person interested in the tree such compensation as he thinks reasonable, and such person may recover the same from the licensee.
Explanation. - For purposes of this section, the expression "tree" shall be deemed to include any shrub, hedge, jungle growth or other plant.

## Unquote.

### 3.2.2. The Indian Telegraph Act, 1885, Part-III, Section 10 :

## Quote:

Section 10 - The telegraph authority may, from time to time, place and maintain a telegraph line under, over, along, or across, and posts in or upon any immovable property, Provided that
a) the telegraph authority shall not exercise the powers conferred by this section except for the purposes of a telegraph established or maintained by the [Central Government], or to be so established or maintained;
b) the [Central Government] shall not acquire any right other than that of user only in the property under, over, along, across in or upon which the telegraph authority places any telegraph line or post; and
c) except as hereinafter provided, the telegraph authority shall not exercise those powers in respect of any property vested in or under the control or management of any local authority, without the permission of that authority; and
d) in the exercise of the powers conferred by this section, the telegraph authority shall do as little damage as possible, and, when it has exercised those powers in respect of any property other than that referred to in clause (c), shall pay full compensation to all persons interested for any damage sustained by them by reason of the exercise of those powers.

## Unquote.

Section 16 of the Indian Telegraph Act, 1885 which stipulates as under:
16. Exercise of powers conferred by section 10, and disputes as to compensation, in case of property other than that of a local authority:
(1) If the exercise of the powers mentioned in Section 10 in respect of property referred to in clause (d) of that section is resisted or obstructed, the District Magistrate may, in his discretion, order that the telegraph authority shall be permitted to exercise them.
(2) If, after the making of an order under sub section (1), any person resists the exercise of those powers, or, having control over the property, does not give all facilities for this being exercised, he shall be deemed to have committed an offence under section 188 of the Indian Penal Code (45 of 1860).
3.2.3. MoP guidelines dated 15th October, 2015 for payment of compensation toward damages in regard to RoW
44. Ministry of Power (MoP) vide its order No. 3/7/2015-Trans dated $15^{\text {th }}$ April' 15 constituted a Committee comprising of representatives of various State Govt., MoP, Central Electricity Authority (CEA) \& POWERGRID under the chairmanship of Special Secretary, MoP to analyze the issues relating to Right of Way for laying of transmission lines in the country and to suggest a uniform methodology for payment of compensation on this account. Based on recommendation of the Committee, Ministry of Power, Govt. of India vide its notification dated $15^{\text {th }}$ Oct'15 has issued guidelines for payment of compensation for damages in regard to RoW (Annexure-2). Ministry of Power (MoP) has also written to all the States for taking suitable decisions regarding adoption of these guidelines considering that acquisition of land is a State subject. The said guidelines were adopted by Govt. of Assam vide its notification dated $10^{\text {th }}$ March 2017 for implementation (Annexure-3) which is applicable to transmission lines supported by tower base of 66 kV only and
not for sub-transmission \& distribution lines below 66 kV . As per the guidelines following compensation shall be paid to all affected farmers/land owners in addition to normal tree and crop damage compensation;
i) Tower base: Compensation @ 85\% of land value as determined by District Commissioner/Bodoland Territorial Council (BTC) or any other competent authority based on Circle rate/ Guideline value/ Stamp Act for tower base area (between four legs).
ii) Line corridor: Compensation @ maximum 15\% of land value towards diminution of land value in the width of RoW corridor as determined by District Commissioner or any other competent authority based on Circle rate/ Guideline value/ Stamp Act.

### 3.3. World Bank's Environmental \& Social Safeguard Policies

45. The objective of Bank's policies is to prevent and mitigate undue harm to people and their environment in the development process. Safeguard policies provide a platform for the participation of stakeholders in project design, and act as an important instrument for building ownership among local populations. Operational Policies (OP) are the statement of policy objectives and operational principles including the roles and obligations of the Borrower and the Bank, whereas Bank Procedures (BP) is the mandatory procedures to be followed by the Borrower and the Bank. Apart from these, World Bank Group Environmental, Health, and Safety (EHS) General Guidelines and EHS Guidelines for Electric Power Transmission and Distribution are also relevant for environmental protection and monitoring of transmission projects. The WB's relevant social safeguard policies and their objective are given in Table-3.1.

Table 3.1: World Bank's Operational Policies for Social Safeguard

| Operational Policy (OP) | Policy Objectives |
| :--- | :--- |
| OP 4.11 - Physical <br> Cultural Resources <br> (PCR) | To preserve PCR and in avoiding their destruction or damage. PCR <br> includes resources of archeological, paleontological, historical, <br> architectural, and religious (including graveyards and burial sites), <br> aesthetic, or other cultural significance. |
| OP 4.12 - Involuntary <br> Resettlement | To avoid or minimize involuntary resettlement and, where this is not <br> feasible, assist displaced persons in improving or at least restoring <br> their livelihoods and standards of living in real terms relative to pre- <br> displacement levels or to levels prevailing prior to the beginning of <br> project implementation, whichever is higher. |


| OP 4.10 - | To ensure that the Indigenous Peoples receive social and economic <br> benefits those are culturally appropriate and gender and inter <br> generationally inclusive. The project shall ascertain broad community <br> support for the project based on social assessment and free prior <br> and informed consultation with the affected Tribal community, if any. |
| :--- | :--- |

### 3.4. AEGCL/APDCL's ESPPF

46. To address the environmental and social issues related to its power transmission and distribution projects under NERPSIP, AEGCL/APDCL has adopted an Environmental and Social Policy \& Procedures Framework (ESPPF) in 2015 based on the principles of avoidance, minimization, and mitigation. The ESPPF had been developed by POWERGRID on behalf of the State Utility based on ESPP of POWERGRID who has proven credentials in management of environmental and social issues of large number of power transmission projects both within and outside the country after a comprehensive review of Utility's existing policies/provisions and consultation with stakeholders.
47. ESPPF's outlines Utility's approach and commitment in dealing with the environmental and social issues relating to its transmission projects, lays down the management procedures and protocols for the purpose that includes the framework for identification, assessment, and management of environmental and social concerns at both organizational and project levels.
48. Specifically on social, the following criteria and approach are considered in the ESPPF:
(i) Take due precautions to minimize disturbance to human habitations, tribal areas and places of cultural significance.
(ii) Take due care of Project Affected Persons (PAP).
(iii) Involve affected people from inception stage to operation and maintenance.
(iv) Consult affected people in issues of RoW, land acquisition or loss of livelihood.
(v) Encourage consultation with communities in identifying environmental and social implications of projects.
(vi) Guarantee entitlements and compensation to affected people as per entitlement matrix.
(vii) Share information with local communities about environmental and social implications.
(viii)Always maintain highest standards of health and safety and adequately compensate affected persons in case of any eventuality.

### 3.5. Basic Principles for the Project

49. The basic principles adopted for the Project are:
(i) Avoid negative impacts of land acquisition and involuntary resettlement on persons affected by the Project to the extent possible.
(ii) Where negative impacts cannot be avoided, assist affected persons (AP), in improving or at least regaining their standard of living and income.
(iii) Carry out meaningful consultations with affected persons and inform all displaced persons of their entitlements and resettlement options. Ensure their participation in planning, implementation and monitoring of the Project
(iv) Disclose all information related to, and ensure AP participation in, resettlement planning and implementation.
(v) Provide compensation for acquired assets at replacement/market value in accordance with the RP/CPTD.
(vi) Ensure that displaced persons without titles to land or any recognizable legal rights to land are eligible for resettlement assistance and compensation for loss of non-land assets.
(vii) Provide resettlement assistance and income restoration to APs.
(viii) Provide for APs not present during enumeration. However, anyone moving into the project area after will not be entitled to assistance.
(ix) Develop procedures in a transparent, consistent, and equitable manner if land acquisition is through negotiated settlement to ensure that those people who enter into negotiated settlements will maintain the same or better income and livelihood status.
(x) Provide compensation and resettlement assistance prior to taking possession of the acquired lands and properties.
(xi) Establish grievance redress mechanisms to ensure speedy resolution of disputes.
(xii) Ensure adequate budgetary support to cover implementation costs for CPTD.
(xiii) Monitoring of the implementation of CPTD.
50. Additionally, the issues related to the Right of Way (RoW) for the transmission lines will be dealt with proper care especially for the temporary loss. For the loss of crops and trees due to construction of overhead lines, cash compensation payable by cheque/through online transfer will be provided during construction works. Further, cash compensation (by cheque/ online transfer) to the APs for the temporary loss of crop and loss of trees if occurred, during the time of maintenance and repair.

## IV. PROJECT IMPACTS

### 4.1. General

51. The project does not require any private land acquisition for construction of transmission/distribution lines. Therefore, no physical displacement is foreseen in the project. However, there are some social impacts due to construction of lines/placing of towers \& poles which are temporary in nature in terms of loss of standing crops/trees/structures in the RoW. Preliminary investigation/survey has been carried out for transmission/distribution line to estimate/arrive at the selection of one best feasible alignment route out of at least 3 alternative alignments studied, for detailed survey to be undertaken during execution of main contracts. The details of tower/pole schedule depicting location \& its coordinate, land use including major crossings along proposed route alignment is placed as Annexure-4. Therefore, the CPTD remains as draft, as actual temporary impacts shall be known only during implementation which will be based on the detailed design and final survey once the construction contractor is mobilized for implementation. The details of land use have been gathered to have an idea about the temporary damages that might occur during construction of the transmission and distribution lines. The corridor of width (Right of Way) required for 220 kV D/C and 132 KV D/C transmission line are 35 meter and 27 meter respectively whereas, for 33 kV distribution lines it is considered as 15 meter.
52. Soil \& Surface Geology: In plain areas impact on soil \& geology will be almost negligible as the excavated pit material is stacked properly and back filled as well as used for resurfacing the area. On hill slopes where soil is disturbed will be prone to erosion is suitably protected by revetment, breast walls, and proper drainage. Besides extensive leg /chimney extension shall be used to avoid benching or cutting of slopes to minimize the impact on slope stability.
53. The land requirement for erection of tower legs is very small i.e. for each leg of tower actual construction is done on a small square area with side length ranging from 0.20 to 0.30 meter depending on the types of tower. Four such square pieces of land will be required to place the legs of tower. The area that becomes unavailable because of the erection of tower legs for an average 220/132 kV D/c transmission tower ranges from 0.16-0.36 sq.m. of land. Thus, the actual impact is restricted to 4 legs of the tower and agriculture can continue as clearly depicted in the Figure-4.1. In case of 33 kV distribution line area that becomes unavailable because of the erection of pole is insignificant as approx. 1 sq . ft. land area is occupied for one pole (refer Figure. 4.2 depicting actual base area impact). Due diligence confirms that land is either agricultural or barren, and

Figure- 4.1: Typical Plan of Transmission Line Tower Footing


## INDICATIVE MEASURES

$X \& Y=5-10$ METERS
$\mathrm{a}=200-300 \mathrm{~mm}$

Figure- 4.2: 33 KV lines (Single \& H pole) depicting base area impact

$33 \mathbf{k V}$ line inside city area of Assam

## 33 kV (H Pole) line inside substation

current land use is not altered and resumed after construction. As per present practices, full compensation (100\%) towards land value in tower base areas as decided by the district authority is paid towards damages to the affected persons/land owners. Since, Govt. of Assam vide notification dated $10^{\text {th }}$ March, 2017 has adopted the MoP guidelines, compensation toward damages in regard to RoW shall be paid as per the norms in addition to normal crop and tree damages.
54. Crops: Construction of line in crop season is avoided as far as possible. In case when installation of towers/poles impacts on agricultural activity, detailed assessment/survey is conducted looking at existing crops, general crop patterns, seasonal particulars, nature and extent of yield. This data is compiled and analysed to study the extent and nature of impact. The compensation is in terms of yield/hectare and rate/quantity for prevailing crops in the area. Based on this, total compensation is calculated in consultation with revenue authorities. Compensation is paid to the owners and their acknowledgement obtained.
55. Trees: Construction of line in fruit bearing season is avoided as far as possible. Tree compensation is calculated on the basis of tree enumeration, tree species and an estimate of the compensation will be calculated on the basis of 8 years yield (assessed by revenue/horticulture department). Market rates of compensation are assessed by the relevant government authorities. The total estimate is submitted for approval of the competent authority. Payments are made to owners in the presence of local revenue authorities or village head/ Sarpanch and respective acknowledgements are obtained.
56. Other Damages: Like bunds, water bodies, fish ponds, approach paths, drainage and irrigation canals etc. are at best avoided. However, if damaged, the Revenue Department assesses the cost of damage as per State Govt. norms. The total estimate is submitted for approval to the competent authority. Payments are made to owners in the presence of local revenue authorities or village head/ Sarpanch and respective acknowledgements are obtained and POWERGRID/ AEGCL \& APDCL pays the compensation. Hindrances to power, telecom carrier \& communication lines etc. shall be paid as per Govt. norms.

### 4.2. Impact due to construction of New Substation and Bay extension

57. The project component consists of establishment of $220 / 132 \mathrm{kV}$ new substation at Behiating, 132/33 kV new substation at Chapakhowa \& extension of 132/33 kV Rupai and 33/11
kV new substation at Romai, Bogibil, Dibrugarh and strengthening of $33 / 11$ kV Chapakhowa substation (existing). Land for new substations are either available with AEGCL/APDCL or purchased on negotiated rates based on "willing buyer-willing seller basis". The extensions/strengthening works at proposed transmission and distribution substations will be done within the existing substations campus and no fresh land secured for this purpose. Since no involuntary acquisition is involved, $R \& R$ will not be an issue in the instant project. The details are provided in Table 4.1:

Table 4.1: Details of Substation

| Name of substation | Permanent Impact on Land Use | Temporary <br> Impact on <br> loss of crops | Impact on Loss of Trees | Remarks |
| :---: | :---: | :---: | :---: | :---: |
| 220/132 kV new substation at Behiating | Yes | Nil | Nil | AEGCL Land |
| $132 / 33$ kV new <br> substation at  <br> Chapakhowa   | Yes | Nil | Nil | Private Land purchased on negotiated rates based on "willing buyer-willing seller basis". |
| Extension of $132 / 33 \mathrm{kV}$ substation at Rupai (Existing) | No | Nil | Nil | AEGCL Land |
| 33/11 kV new substation at Romai | Yes | Nil | Nil | Private (Tea Garden) Land |
| 33/11 kV new substation at Bogibil | Yes | Nil | 5 | on lease |
| 33/11 kV new substation at Dibrugarh | Yes | Nil | Appx. 25 Tea Bushes \& 5 Large Trees | Private Land purchased on negotiated rates based on "willing buyer-willing seller basis". |
| Strengthening of $33 / 11$ <br> $\mathrm{kV} \quad$ Chapakhowa <br> (Existing) substation | No | Nil | Nil | APDCL land |

### 4.3. Temporary Impacts Caused due to Transmission/Distribution Line (Right of Way)

### 4.3.1. Type and Use of Land within Corridor Right of Way

58. The line corridor will pass through mixed land uses which are generally agricultural land, private plantation, government land etc. The calculations are based on detailed survey/ investigation carried out along the route of transmission/distribution lines and considering the total line length of the line and its right of way. The total line length is 136.251 kilometre (km) which will
impact an estimated of 880.08 acres $^{6}$ of land. These include 69.165 km of line passing through agricultural land ( 517.78 acre of agricultural land), 41.946 km of private plantation ( 261.22 acre of private plantation land) and 25.1 kms of government land (100.94 acre of government land). A brief description about the type and use of land in the corridor is given in Table 4.2.

Table 4.2: Type and Use of Land within Corridor of RoW (in Kms/Hectares)

| $\begin{aligned} & \hline \text { SI. } \\ & \text { No. } \end{aligned}$ | Name of the Line | $\begin{array}{\|c\|} \hline \text { RoW (in } \\ \text { meter) } \\ \hline \end{array}$ | Agricultural land | Private Plantation | Forest | Govt land | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| A. Transmission Line |  |  |  |  |  |  |  |
| 1 | Rupai - <br> Chapakhowa 132 <br> kV S/C on D/C  | 27 | $\begin{gathered} 31.5 \mathrm{~km} \\ (210.16 \mathrm{acre}) \end{gathered}$ | $\begin{gathered} 11.5 \mathrm{~km} \\ \text { (76.72 acre) } \end{gathered}$ | Nil | $\begin{gathered} 1 \mathrm{~km} \\ (6.67 \mathrm{acre}) \end{gathered}$ | $\begin{gathered} 44 \mathrm{~km} \\ (293.55 \mathrm{acre}) \end{gathered}$ |
| 2 | Tinsukia -Behiating (New Dibrugarh) 220 kV D/C | 35 | $\begin{gathered} 34 \mathrm{~km} \\ (294.04 \mathrm{acre}) \end{gathered}$ | $\begin{gathered} 14.5 \mathrm{~km} \\ (125.40 \mathrm{acre}) \end{gathered}$ | Nil | $\begin{gathered} 1 \mathrm{~km} \\ (8.65 \mathrm{acre}) \end{gathered}$ | $\begin{gathered} 49.5 \mathrm{~km} \\ (428.09 \mathrm{acre}) \end{gathered}$ |
| B. Distribution Line |  |  |  |  |  |  |  |
| 3 | Chapakhowa (New) to Chapakhowa substation 33 kV | 15 | Nil | Nil | Nil | $\begin{aligned} & 2.617 \mathrm{~km} \\ & (9.70 \mathrm{acre}) \end{aligned}$ | $\begin{aligned} & 2.617 \mathrm{~km} \\ & (9.70 \mathrm{acre}) \end{aligned}$ |
| 4 | Dibrugarh (Existing) to Romai (New) substation 33 kV |  | $\begin{gathered} 3.019 \mathrm{~km} \\ \text { (11.19 acre) } \end{gathered}$ | $\begin{gathered} 3.955 \mathrm{~km} \\ (14.66 \mathrm{acre}) \end{gathered}$ | Nil | $\begin{gathered} 10.303 \mathrm{~km} \\ (38.19 \mathrm{acre}) \end{gathered}$ | $\begin{gathered} 17.317 \mathrm{~km} \\ \text { (64.18 acre) } \end{gathered}$ |
| 5 | Behiating (New) to Bogibil (New) substation 33 kV |  | $\begin{gathered} 0.646 \mathrm{~km} \\ (2.39 \mathrm{acre}) \end{gathered}$ | $\begin{gathered} 10.191 \mathrm{~km} \\ (37.77 \mathrm{acre}) \end{gathered}$ | Nil | $\begin{gathered} 2.639 \mathrm{~km} \\ \text { (9.78 acre) } \end{gathered}$ | $\begin{gathered} 13.476 \mathrm{~km} \\ (49.94 \mathrm{acre}) \end{gathered}$ |
| 6 | Behiating (New) to <br> Dibrugarh (New) <br> Substation 33 kV |  | Nil | $\begin{gathered} 1.8 \mathrm{~km} \\ (6.67 \mathrm{acre}) \end{gathered}$ | Nil | $\begin{gathered} 7.541 \mathrm{~km} \\ (27.95 \mathrm{acre}) \end{gathered}$ | $\begin{gathered} 9.341 \mathrm{~km} \\ (34.62 \mathrm{acre}) \end{gathered}$ |
| Total |  |  | 69.165 km (517.78 acre) | 41.946 km $(261.22$ acre) | Nil | $\begin{array}{c\|} \hline 25.1 \mathrm{~km} \\ (100.94 \mathrm{acre}) \end{array}$ | $\begin{array}{\|c\|} \hline 136.251 \mathrm{~km} \\ (880.08 \text { acre) } \end{array}$ |

Source: Detailed Survey

### 4.3.2 Total loss of crop area (RoW Corridor \& Tower/Pole)

59. For the temporary loss of crops, only agricultural land and private plantation land are considered for estimation. The damages are not done in complete RoW of line but mostly restricted to tip to tip of the conductor and tower base area where average affected width/corridor would be limited to 27 meter (m) and 20 meter (maximum) instead of RoW of 35 meter and 27 m for 220 kV for 132 kV respectively. Whereas in 33 kV distribution lines, damages are minimal (mostly near bi-pole//quad-pole structure) however, 10 meter corridor is considered for accessing

[^5]the damages. Moreover, all efforts are made to reduce the damages to crops and to minimize the impacts whatsoever. One of the reasons is that schedules of construction activities are undertaken in lean season or post-harvest periods. As the assets of any sorts will not be acquired but during construction, only temporary damages will occur for which the compensation shall be paid to affected persons as per entitlement matrix.
60. Based on the above estimation, the total land considered for crop compensation for transmission/distribution line corridor and tower/pole foundation for the entire subproject covered under the scope of above CPTD is 584.535 acre. Details of estimated impacted area for crop damages is given in Table 4.3:

Table 4.3: Estimation on Loss of Land for Crop Damage due to Overhead Lines

| Name of the line <br> Width <br> Considered for <br> Estimation of <br> Loss of Crops <br> and other <br> impacts (Meter) | Total <br> Agricultural <br> Land (km) | Total <br> Private <br> Plantation <br> (km) | Total Line <br> Length <br> Considered <br> for Crop <br> Compensation <br> (km) | Total Land Area <br> considered for <br> Crop |  |
| :--- | :---: | :---: | :---: | :---: | :---: |
| Compensation <br> (acre) |  |  |  |  |  |
| Rupai - Chapakhowa <br> $132 \mathrm{kV} \mathrm{S/C}$ | 20 | 31.5 | 11.5 | 43 | 212.503 |
| Tinsukia -Behiating <br> 220kV D/C | 27 | 34 | 14.5 | 48.5 | 323.573 |
| Chapakhowa (New) to <br> Chapakhowa (Existing) <br> substation 33 kV | 10 | Nil | Nil | Nil | Nil |
| Dibrugarh (Existing) to <br> Romai(New) <br> substation 33 kV | 10 | 3.019 | 3.955 | 6.974 | 17.233 |
| Behiating (New) to <br> Bogibil (New) <br> substation 33 kV | 10 | 0.646 | 10.191 | 10.837 | 26.778 |
| Behiating (New) to <br> Dibrugarh(New) <br> Substation 33 kV | 10 | Nil | 1.8 | 1.8 | 4.448 |
| Total | 69.165 | $\mathbf{4 1 . 9 4 6}$ | $\mathbf{1 1 1 . 1 1 1}$ | 584.535 |  |

Source: Detailed Survey

### 4.3.3 Actual loss of land for Tower Base \& Pole

61. As already explained, the impact of transmission line is restricted to 4 legs of the tower and agriculture can continue after construction activity is over. The average land area will be unavailable for erection of one $220 \mathrm{kV} / 132 \mathrm{kV}$ T/L tower and one pole for $33 \mathrm{kV} \mathrm{D} / \mathrm{L}$ is approx. 0.25 sq.m \& 0.092 sq.m. respectively. Based on above, total land loss for construction of 93.5 km
of $220 \mathrm{kV} / 132 \mathrm{kV}$ transmission line and 42.7 km of 33 kV distribution line proposed under the present scheme is estimated 0.049 acre respectively. However, compensation toward loss land shall be provided to APs which is part of RoW compensation. Details of land loss for tower base \& pole are given in Table-4.4.

Table 4.4: Estimation of Actual Loss of Land for Tower Base \& Pole

| Name of the line | Line <br> length <br> (km) | Total <br> Tower/Pole <br> (Nos.) | Land loss per <br> tower/ pole <br> base (sq.m.) | Total land loss <br>  <br> pole base (sq.m) |
| :--- | :---: | :---: | :---: | :---: |
| Rupai - Chapakhowa 132 kV S/C | 44 | 159 | 0.25 | 39.75 |
| Tinsukia -Behiating (New Dibrugarh) <br> 220kV D/C | 49.5 | 191 | 0.25 | 47.75 |
| Chapakhowa (New) to Chapakhowa <br> (Existing) substation 33 kV | 2.617 | 56 | 0.092 | 5.152 |
| Dibrugarh (Existing) to Romai (New) <br> substation 33 kV | 17.277 | 465 | 0.092 | 42.78 |
| Behiating (New) to Bogibil (New) <br> substation 33 kV | 13.476 | 379 | 0.092 | 34.868 |
| Behiating (New) to Dibrugarh <br> (New)substation 33 kV | 9.341 | 286 | 0.092 | 26.312 |
| Total |  |  |  |  |

### 4.3.4 Land area for RoW compensation as per MoP Guidelines /Govt. of Assam notification

62. Subsequent to the notification by Govt. of Assam on adoption of MoP guidelines, compensation toward damages in regard to RoW for proposed 132 kV and 220 kV line @ $85 \%$ land value for tower base \& maximum $15 \%$ land value for width of RoW corridor as decided District Magistrate or any other authority shall paid to land owners, Details of land areas considered for such compensation is given in Table 4.5.

Table 4.5 Land area for RoW Compensation

| Name of the line | Line <br> length <br> (km) | Nos. <br> of <br> ofer | Land area <br> for Tower <br> base per <br> km <br> (in acre) | Total land <br> area for <br> tower <br> base <br> (In acre) | *RoW <br> Corridor <br> area per <br> km(In <br> acre) | Total land <br> area for <br> RoW <br> Corridor <br> (In acre) | Total <br> Land <br> area <br> (In acre) |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Rupai - Chapakhowa 132 <br> kV S/C | 44 | 159 | 0.036 | 1.584 | 6.635 | 291.94 | 293.52 |
| Tinsukia -Behiating (New <br> Dibrugarh) 220kV D/C line | 49.5 | 191 | 0.077 | 3.812 | 8.571 | 424.26 | 430.07 |

* Effective RoW corridor area has been considered after excluding tower base area.


### 4.3.5. Loss of Trees

63. Total numbers of trees likely to be affected due to construction of 93.5 km of $220 \mathrm{kV} / 132$ kV transmission line and 42.7 km of 33 kV distribution line is approx. 5474 including 2000 nos. of private Tea bushes. Out of this, 4403 are private trees and 1071 trees in govt. land. During construction, private trees will be compensated as per the entitlement matrix. Details on number of trees for each line are given in Table 4.6.

Table 4.6: Loss of Trees

| Name of Line | Trees in Private <br> Area (Numbers) | Trees in Govt. <br> Area (Numbers) | Total <br> Trees (Numbers) |
| :--- | :---: | :---: | :---: |
| Rupai - Chapakhowa $132 \mathrm{kV} \mathrm{S/C}$ <br> on D/C line | 1570 <br> (including 1000 nos. <br> of Tea Bushes ) | 50 | 1620 |
| Tinsukia -Behiating (New <br> Dibrugarh) 220kV D/C line | 1760 <br> (including 1000 nos. <br> of Tea Bushes ) | 40 | 1800 |
| Chapakhowa (New) to Chapakhowa <br> (Existing) substation 33 kV | Nil | 79 | 79 |
| Dibrugarh (Existing) to Romai <br> (New) substation 33 kV | 242 | 347 | 589 |
| Behiating (New) to Bogibil (New) <br> substation 33 kV | 727 | 165 | 892 |
| Behiating (New) to Dibrugarh <br> (New) Substation 33 kV | 104 | 390 | 494 |

Source: Detailed Survey

### 4.3.6. Loss of Other Assets (Small Shed in Agriculture Fields)

64. It has been observed during survey that approximately 08 numbers of small structures exist along the right of way of proposed lines. These are small storage sheds/huts which are mostly temporary structure associated with the agricultural fields. People do not use these small structures/sheds for residential purpose and they use it as storage of agricultural purpose only. During construction, these will be compensated in cash as per the entitlement matrix. Details on impacts on small structures are given in Table 4.7

Table 4.7: Loss of Other Assets

| Name of Line | No. of storage sheds/huts |
| :--- | :---: |
| Rupai - Chapakhowa 132 kV S/C on D/C | 03 |
| Tinsukia -Behiating (New Dibrugarh) 220kV D/C | 02 |


| Chapakhowa (New) to Chapakhowa (Existing) substation 33 kV | Nil |
| :--- | :--- |
| Dibrugarh (Existing) to Romai (New) substation 33 kV | 02 |
| Behiating (New) to Bogibil (New) substation 33 kV | 01 |
| Behiating (New) to Dibrugarh (New)Substation 33 kV | Nil |
| Total |  |

Source: Detailed Survey

### 4.4. Details of Affected Persons

65. It is estimated that total number of affected persons which may be impacted temporarily will be approximately 1832. Details are given in Table 4.8. The number of APs in the table refers to the most conservative option. State Utilities/ POWERGRID will schedule civil works in such a way to minimize impacts and substantially reduce the damages to crops and therefore the number of affected persons and Agricultural Households (AHH).

Table 4.8: Number of Affected Persons

| Name of Line | Total APs |
| :--- | :---: |
| Rupai - Chapakhowa 132 kV S/C on D/C | 770 |
| Tinsukia -Behiating (New Dibrugarh) 220kV D/C | 1020 |
| Chapakhowa (New) to Chapakhowa (Existing) substation 33 kV | Nil |
| Dibrugarh (Existing) to Romai (New) substation 33 kV | 27 |
| Behiating (New) to Bogibil (New) substation 33 kV | 12 |
| Behiating (New) to Dibrugarh (New)Substation 33 kV | 03 |
| Total |  |

Source: Detailed Survey

### 4.5 Other Damages

66. As far as possible, damages to bunds, water bodies, fish ponds, approach paths, drainage and irrigation canals etc. are avoided. However, if damaged during construction activities, compensation as per practice is paid after assessment of the cost of damage by the State Govt. Revenue Department. The total estimate is submitted for approval to the competent authority. AEGCL \& APDCL/POWERGRID pays the compensation to owners in the presence of local revenue authorities or Village head/ Sarpanch and respective acknowledgements are obtained. Any hindrances to power, telecom carrier \& communication lines etc. shall also be paid as per Govt. norms.

### 4.6 Impact on Indigenous People

67. Government of India, under Article 342 of the Constitution, considers the following characteristics to define indigenous peoples [Scheduled Tribes (ST)]:
(i) tribes' primitive traits;
(ii) distinctive culture;
(iii) shyness with the public at large;
(iv) geographical isolation; and
(v) social and economic backwardness before notifying them as a Scheduled Tribe.
68. Essentially, indigenous people have a social and cultural identity distinct from the 'mainstream' society that makes them vulnerable to being overlooked or marginalized in the development processes. STs, who have no modern means of subsistence, with distinctive culture and are characterized by socio-economic backwardness, could be identified as Indigenous Peoples. Indigenous people are also characterized by cultural continuity. Constitution of India identifies schedule areas which are predominately inhabited by such people. In Assam, special provisions also have been extended to the Tribal Areas under the $6^{\text {th }}$ Schedule [Articles 244(2) and 244(A) of the constitution] in addition to basic fundamental rights. The Sixth Schedule provides for administration of tribal areas as autonomous entities. The administration of an autonomous district is vested in a District Council and of an autonomous region, in a Regional Council.
69. The instant project is being implemented in the Tinsukia and Dibrugarh district which are not part of areas covered under the provisions of sixth schedule. However, it may be noted that all social issues shall be dealt separately in accordance with the provisions of Social Management Framework (SMF, A-C) placed in the AEGCL/APDCL's ESPPF.

### 4.7. Summary of Impacts

70. Based on the above assessment, temporary impacts on loss of crops, trees, other structures and number of APs are summarized below in Table 4.9.

Table 4.9: Summary of Impacts

| Particulars | Details |
| :--- | :---: |
| Length in Kms (Transmission/Distribution Line) | $93.5 / 42.7$ |
| Number of Towers/ Poles | $350 / 1186$ |
| Total Area under RoW (acre) | 880.08 |
| Total APs | 1832 |
| Affected Structures (Small Sheds for agricultural purpose) | 08 |
| Area of Temporary Damages for crop compensation (In acre) | 584.535 |
| Total Trees | $3474+2000$ Tree bushes |

Source: Detailed Survey

## V. ENTITLEMENTS, ASSISTANCE AND BENEFITS

### 5.1. Entitlements

71. In the instant project, there is no involuntary acquisition of land involved, only temporary damage will occur during construction of transmission/distribution lines for which compensation is paid as per relevant regulations/norms. APs will be entitled for compensation for diminution land value and other towards temporary damages to crops/trees/structures etc. as per the Entitlement Matrix given in Table 5.1. Compensation towards temporary damages to all eligible APs including non-title holders is paid after assessment by relevant authorities of State Govt. In order to streamline the compensation process, a disbursement module has been developed specifying time period with respect to various process/stages which will be implemented for the instant project.
72. All APs are paid compensation for actual damages irrespective of their religion, caste and their economic status. One time additional lump sum assistance will be paid to vulnerable households not exceeding $25 \%$ of total compensation on recommendation of State Authority/ADC/VC. As an additional assistance, construction contractors are encouraged to hire local labour that has the necessary skills.

### 5.2. Entitlement Matrix

73. An Entitlement Matrix for the subprojects is given in Table 5.1.

Table 5.1: Entitlement Matrix

| SI. | Type of Issue/ Impact | Beneficiary | Entitlement Options |
| :--- | :--- | :---: | :--- | :--- |
| 1. | Land area below <br> tower base (\#) | Owner | 100\% land cost at market value as ascertained by <br> revenue authorities or based on negotiated <br> settlement without actual acquisition/title transfer. |
| 2 | Land coming in <br> corridor of width of <br> Right of Way (\#) | Owner | $15 \%$ of land cost as decided by Deputy <br> Commissioner |
| 3. | Loss/damage to <br> crops and trees in <br> line corridor | Owner/ <br> Tenant/ <br> Sharecropper// <br> Leaseholder | Compensation to actual cultivator at market rate for <br> crops and 8 years income for fruit bearing trees*. <br> APs will be given advance notice to harvest their <br> crops. <br> All timber* will be allowed to retain by the owner. |
| 4. | Other damages <br> (if applicable) | All APs | Actual cost as assessed by the concerned authority. |
| 5. | Loss of structure |  |  |


| SI. | Type of Issue/ Impact | Beneficiary | Entitlement Options |
| :--- | :--- | :--- | :--- |
| (i) | House | Titleholders | Cash compensation at replacement cost (without <br> deduction for salvaged material and depreciation <br> value) plus Rs. 25,000/- assistance (based on <br> prevailing GOI norms for weaker section housing) for <br> construction of house plus transition benefits as per <br> category-5 below. |
| (ii) | Shop/ Institutions/ <br> Cattle shed | Individual/ <br> Titleholders | Cash compensation plus Rs. 10000/- for <br> construction of working shed/shop plus transition <br> benefits as per category-5 below |
| 6. | Losses during <br>  <br> (ii) above for Shifting / <br> Transport | Family/unit | Provision of transport or equivalent cash for shifting <br> of material/ cattle from existing place to alternate <br> place |
| 7. | Tribal/ Vulnerable <br> APs | Vulnerable <br> APs7 | One time additional lump sum assistance not <br> exceeding 25\% of total compensation on <br> recommendation of State Authority/ADC/VC. |

(\#) Since Govt. of Assam has adopted MoP guidelines vide notification dated 10.03.17, compensation toward damages in respect to RoW shall be paid as per norms.

* Assistance/help of Forest department for timber yielding trees and Horticulture department for fruit bearing trees shall be taken for assessing the true value.


### 5.3. Procedure of Tree/crop compensation

74. In exercise of the powers conferred by section 164 of the Electricity Act, 2003, Power (Electricity) Department, Govt. of Assam vide notification dated $16^{\text {th }}$ March, 2016 has authorized AEGCL/APDCL to exercise all the power vested in the Telegraph Authority under part-III of the Indian Telegraph Act, 1885, to place and maintain transmission lines under over along or across and posts in or upon, any immoveable property. However, the provisions of same act in Section 10 (d) stipulates that the user agency shall pay full compensation to all interested for any damages sustained during the execution of said work. Accordingly, AEGCL \& APDCL/ POWERGRID shall pay compensation to land owners towards damages, if any for tree, crop etc. during implementation of project as well as during operation and maintenance phase. The procedure followed for such compensation is as follows:
75. AEGCL/APDCL follows the principle of Avoidance, Minimization and Mitigation in the construction of line in agricultural field and cropping areas due to inherent flexibility in phasing the construction activity and tries to defer construction in cropped area to facilitate crop harvesting. However, if it is unavoidable and is likely to affect project schedule, compensation is given at market rate for standing crops. All efforts are also taken to minimize the crop damage to the extent

[^6]possible in such cases.:
76. As regard of trees coming in the Right of Way (RoW) following procedure is adopted for enumeration:

- All the trees which are coming within the clearance belt of ROW on either side of the center line are identified and marked/numbered from one AP to the other and documented.
- Type, Girth (Measured 1 m . above ground level), approximate height of the tree is also noted for each tree
- Trees belonging to Govt., Forest, Highways and other local bodies may be separately noted down or timely follow up with the concerned authorities for inspection and removal.
- Guava, Lemon, and other hybrid trees which are not of tall growing nature are not marked for cutting since these trees can be crossed using standard tower extensions if required.

77. A notice under Electricity Act, 2003/ Indian Telegraph Act, 1885 is served to the landowners informing that the proposed transmission line is being routed through the property of the individual concerned. The notice shall contain the particulars of the land, ownership details and the details of the trees/crops/land inevitability likely to be damaged during the course of the construction of the proposed transmission line and acknowledgement received from land owners. A copy of said notice is further issued to the Revenue Officer/SDM, who has been authorized by the Assam Govt. for the purpose of assessment/valuation and disbursement of compensation to the affected parties.
78. The revenue officer shall further issue a notice of intimation to the concerned land owner and inspect the site to verify the documents related to the proof of ownership and a detailed Mouja list is prepared for the identified trees/ crops/ land for tower footing inevitability damaged during the course of the construction. For assessing the true value of timber yielding trees help of forest officials is taken and for fruit bearing trees help of Horticulture department is taken.
79. The Mouja list shall contain the land owner details, type of tree/crop, its present age, variety, yielding pattern etc. and the same is prepared at site in the presence of the land owner. These Mouja lists are further compiled and a random verification is conducted by the concerned DC or his authorized representative in order to ascertain the assessment carried out by the revenue office is genuine and correct. After this process the DC issues a tree cutting permit to AEGCL/APDCL to enable removal / damage to the standing tree/crop identified in the line corridor.
80. Once the tree/crop is removed / damaged, AEGCL/APDCL shall issue a tree cutting/crop
damaged notice to the land owner with a copy to the Revenue Officer to process the compensation payment. Based on the above the compensation payment is generated by means of a computerized programme developed by the National Informatics Center exclusively for this purpose. The detailed Valuation statement thus generated using this programme is verified at various levels and approval of payment of compensation is accorded by the concerned District Collectors or Council Authority.
81. On approval of compensation, the revenue officer shall further intimate the amount payable to the different landowners and AEGCL \& APDCL/POWERGRID will arrange the payment by way Cheque/online transfer to the affected parties. The payment is further disbursed at the local village office after due verification of the documents in presence of other witnesses. Process of tree/crop compensation is depicted in Figure-5.1.

### 5.4. Land Compensation for Tower Footing \& RoW Corridor

82. Govt of Assam adopted the MoP guidelines of Oct.' 2015 on land compensation for tower footing and RoW Corridor on $10^{\text {th }}$ March 2017 which provides for payment of $85 \%$ and $15 \%$ of land value towards compensation for land coming under tower base and line corridor respectively. Based on this, land compensation will be paid for the sub projects located in the state of Assam. However, actual payment will made only after fixation of land rates by the concerned DC/DM. After fixation of rates by DC/DM and determination of land ownership details, payment of compensation will be made to the respective land owners to the extent of land area coming under tower/corridor.

### 5.5. Compensation for Structure

83. No physical displacement is envisaged in the proposed project. Displacement of structures is normally not envisaged due to flexibility of routing of transmission/distribution line. However, whenever it is necessary, compensation for structures as per entitlement matrix shall be provided (refer Table 5.1). In the instant case, 08 numbers of small structures likely to be encountered in the right of way of proposed transmission/distribution lines. These are small sheds/small storage which are associated with the agricultural fields. People do not use these small structures/sheds for residential purpose. A notice for damage is issued to APs and the joint measurement by AEGCL \& APDCL/POWERGRID and APs will be done and verified by revenue official for actual damages. The compensation will be paid to the APs as decided by committee based on state government norms. Hence, compensation is paid parallely with the construction activity of line.

### 5.6. Compensation Disbursement Module

84. In order to streamline the compensation process, a disbursement modules has been developed (Table -5.2) specifying time period with respect to various process/activities which will be implemented during the project execution.

Table 5.2: Compensation Disbursement Module

| Activity/Stage | Process | Maximum Time Period from Cut-Off date |
| :---: | :---: | :---: |
| Tower Foundation/ Erection/ Stringing | Serving of Notice (Cut-off date) | 0 date |
|  | Verification of Ownership by Revenue Deptt. | 15 days |
|  | Assessment/Verification of damages by Revenue Deptt. | 45 days |
|  | Online disbursement* | 60 days** |

* Provision of advance payment up to $25 \%$ (Rs. 1 lakh maximum) of total estimated land compensation already made in the RoW guidelines of POWERGRID and may also be implemented in the NERPSIP after consent of concerned State Utilities.
** 60 days is on maximum side. However, based on past experience it's normally concluded within 30-45 days.
*** For payment of land compensation also, the above schedule will be followed, however, the process will start only after fixation of land rates by concerned DC/DM.

Figure-5.1: Tree / Crop Compensation Process


## VI. INFORMATION DISCLOSURE, CONSULTATION \& PARTICIPATION

### 6.1. Consultations

85. Public consultation/information is an integral part of the project implementation. Public is informed about the project at every stage of execution. During survey also AEGCL/ APDCL \& 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 consulted. Apart from this, Public consultation using different technique like Public Meeting, Small Group Meeting, informal Meeting shall also be carried out during different activities of project cycle. During such consultation the public are informed about the project in general and in particular about the following;

- Complete project plan (i.e. its route and terminating point and substations, if any, in between);
- Design standards in relation to approved international standards;
- Health impacts in relation to EMF;
- Measures taken to avoid public utilities such as school, hospitals, etc.;
- Other impacts associated with transmission \& distribution lines and AEGCL/ APDCL approach to minimizing and solving them;
- Trees and crop compensation process.

86. In the instant project also, many group meetings were organized (informally and formally) in all villages where the interventions are likely to happen (Table-6.1). These meetings were attended by Village Panchayat members, senior/respected person of village, interested villagers/general public and representatives from AEGCL/APDCL \& POWERGRID. To ensure maximum participation, prior intimation in local language was given and such notices were also displayed at prominent places/panchayat office etc. Details of above public consultation meetings including minutes of meeting, list of participants and photographs are enclosed as Annexure -5.

Table 6.1 Details of Consultations

| Date of <br> meeting | Venue of Meeting | No. of <br> Persons <br> attended | Persons Attended |  |
| :--- | :---: | :---: | :---: | :---: |
| Public Consultation Meeting |  |  |  |  |
| 17.06 .2014 | Conference Hall, AEGCL <br> Rupai substation | 14 | Village <br> village | head, Panchayat members/ <br> headmen, project affected |


|  | District-Dibrugarh |  | persons \& general public etc. |
| :--- | :--- | :---: | :--- |
| 14.10 .2014 | AEGCL Office, Tinsukia | 30 | -Do- |
| 01.05 .2017 | Site Office, Chapakhowa <br> District-Tinsukia | 19 | Panchayat members, project affected <br> persons and general public etc. |
| 16.05 .2017 | Near HH 37, Niz Moidumia <br> Gaon, Mohanbari <br> District-Dibrugarh | 37 | Panchayat member, project affected <br> persons and general public etc. |
| Informal Group Meeting |  |  |  |
| 25.04 .2017 | Panchayat <br> Khanikar Gaon Office, <br> District-Dibrugarh | 14 | Project affected persons and general <br> public etc. |

87. During consultations/interaction processes with people of the localized areas, AEGCL/ APDCL field staffs explained benefit of the project, impacts of transmission line, payment of compensation for damaged of crops, trees, huts etc. as per The Indian Electricity Act, 2003 and The Indian Telegraph Act, 1885 and measures to avoid public utilities such as schools, hospital etc. People more or less welcomed the construction of the proposed project.
88. Various issues inter alia raised by the people during public consultation and informal group meetings are as follows;

- To Involve Village headman during survey work/finalization of line corridor;
- To engage local people in various works associated with construction of line and if required proper training may be provided to engage them.
- To provide flexibility in disbursement of compensation;
- Direct payment of compensation to affected land owners and expedious disbursement of compensation.

89. AEGCL/APDCL \& POWERGRID representative replied their queries satisfactorily and it was assured that compensation will be paid in time after Revenue department fixed/award the amount.

### 6.2. Plan for further Consultation and Community Participation during Project Implementation

90. The process of such consultation to be continued during project implementation and even during O\&M stage. The progress and proposed plan for Public consultation is described in Table

## 6.2

Table 6.2: Plan for Future Consultations

| S. N. | Activity | Technique | Schedule |
| :--- | :--- | :--- | :--- |
| 1. | Detailed/ <br> Check survey | Formal/Informal Meeting at different <br> places (20-50 Km) en-route final route <br> alignment of line | Public meeting during <br> pre-construction stage |
| 2. | Construction <br> Phase | Localized group meeting, Pamphlet/ <br> Information brochures, Public display etc. | During entire construction <br> period. |
| 3. | O\&M Phase | Information brochures, Operating field <br> offices, Response to public enquiries, <br> Press release etc. | Continuous process as <br> and when required. |

### 6.3. Information Disclosure

91. The draft/summary of CPTD will be disclosed to the affected households and other stakeholders by placing it on AEGCL \& POWERGRID websites. AEGCL/APDCL \& POWERGRID site officials visit construction sites frequently during construction and meet with APs and discuss about norms and practices of damages and compensation to be paid for them. A notice is also issued to APs after the detailed/ check survey and finalization of tower location during the construction. Affected persons also visit site/construction offices of AEGCL/APDCL \& POWERGRID to know about the compensation norms and policies and to discuss their grievances. The executive summary of the CPTD/ Entitlement Matrix in local language will be placed at construction offices/ sites. The CPTD will be disclosed on website of World Bank, AEGCL/APDCL \& POWERGRID. AEGCL/APDCL \& POWERGRID will organize further public consultation meetings with the stakeholders to share the views of public and all possible clarifications. This consultation process will continue throughout the project implementation period.

## VII. INSTITUTIONAL ARRANGEMENTS

### 7.1 Administrative Arrangement for_Project Implementation

92. Ministry of Power (MoP), Gol has appointed POWERGRID as Implementing Agency (IA) to implement the project in close coordination with the respective state power utilities and departments. POWERGRID will implement 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 will form 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;

Central Project Implementation Unit (CPIU) - A body responsible for coordinating the preparation and implementation of the project and shall be housed within the IA's offices at Guwahati. The "Project-In-Charge" of IA \& Head of each of the SPCU shall be a member of CPIU.

State Project Coordination Unit (SPCU) - A body formed by the Utility and responsible for coordinating with IA in preparing and implementing the project at the State level. It consist of experts across different areas from the Utility and shall be headed by an officer of the rank not below Chief Engineer, from the Utility.

PMC Project Implementation Unit (PPIU) - A body formed by the IA, including members of Utility on deputation, and responsible for implementing the Project across the State, with its personnel being distributed over work site \& working in close association with the SPCU/ CPIU. PIU report to State level "Project Manager" nominated by the Project-in-Charge of IA. The IA will have a Core team stationed at the CPIU on permanent basis and other IA officers (with required skills) will visit as and when required by this core team. This team shall represent IA and shall be responsible for all coordination with SPCU, PIU, within IA and MoP, Gol. CPIU shall also assist MoP, Gol in monitoring project progress and in its coordination with The Bank.


### 7.2. Review of Project Implementation Progress:

93. To enable timely implementation of the project/subprojects, following committee has been setup to review the progress;
A. Joint Co-ordination Committee (JCC): IA and SPCU nominate their representatives in a body called JCC to review the project. IA shall specify quarterly milestones or targets, which shall be reviewed by JCC through a formal monthly review meeting. This meeting forum shall be called as Joint Co-ordination Committee Meeting (JCCM). The IA shall convene \& keep a record of every meeting. MoP, Gol and The Bank may join as and when needed. Minutes of the meeting will be shared with all concerned and if required, with Gol and The Bank.
B. High Power Committee (HPC): The Utility in consultation with its State Government shall arrange to constitute a High Power Committee (HPC) consisting of high level officials from the Utility, State/ District Administration, Law enforcement agencies, Forest Department. etc. so that various permission/ approvals/ consents/ clearances etc. are processed expeditiously so as to reach the benefits of the Project to the end consumers. HPC shall meet on bimonthly basis or earlier, as per requirement. This forum shall be called as High Power Committee Meeting (HPCM) and the SPCU shall keep a record of every meeting. Minutes of the meeting will be shared with all concerned and if required, with Gol and The Bank.
C. Contractor's Review Meeting (CRM): Periodic Review Meeting will be held by officials of PIU with Contractors at field offices, State Head Quarters (PIU location) and if required with core team of IA at Guwahati. These shall be called "Contractor's Review Meeting" (CRM). PIU shall
keep a record of all CRMs, which shall be shared with all concerned and if required, with Gol and The Bank.
D. A review will be held among MoP, Gol, The Bank, State Government., Utility and IA, at four (4) months interval or earlier if needed, primarily to maintain oversight at the top level and also to debottleneck issues that require intervention at Gol/ State Government level. Minutes of the meeting shall be prepared by IA and shared with all concerned.

### 7.3. Arrangement for_Safeguard Implementation

94. At the central project implementation level (CPIU) based at Guwahati, POWERGRID has set up an Environmental and Social Management cell (ESMC) which is headed by Dy. General Manager (DGM) to oversee Environmental and Social issues of the projects and to coordinate the SPCU \& Site Offices.
95. At the State level, POWERGRID has already set up PPIU at the capital of each participating State. The PPIU is staffed with dedicated multidisciplinary team headed by Project Manager who is also responsible for overseeing and implementing the environmental and social aspects of project in their respective state. The PPIU team is assisted by a dedicated Field Officer (Environment \& Social Management) who has been specifically recruited for this purpose by POWERGRID. Moreover, State Utilities have constituted State Project Coordination Unit (SPCU) at each state and also designated their Environmental \& Social Officer within SPCU to work in close co-ordination with the PMC Project Implementation Unit of POWERGRID and CPIU team at Guwahati. Major responsibilities of Environment and Social team at State level are conducting surveys on environmental and social aspects to finalize the route/substation land, implementation Environment Management Plan (EMP)/CPTD, co-ordination with the various statutory departments, monitoring EMP/CPTD implementation and producing periodic progress reports to CPIU.
96. In the instant subprojects, POWERGRID will implement the CPTD in close co-ordination with AEGCL/APDCL which includes overall coordination, planning, implementation, financing and maintaining all databases \& also work closely with APs and other stakeholders. A central database will also be maintained for regular updation of social assessment $\&$ compensation data. State Utilities \& POWERGRID will ensure that local governments are involved in the CPTD implementation to facilitate smooth settlement of compensation related activities. Roles and responsibilities of various agencies for CPTD implementation are presented in Table 7.1.

Table 7.1: Agencies Responsible for CPTD Implementation

| Activity | Agency Responsible |  |
| :---: | :---: | :---: |
|  | Primary | Secondary |
| Implementing CPTD | Field staffs of POWERGRID <br> \& AEGCL/APDCL |  |
| Updating the CPTD | POWERGRID | AEGCL /APDCL |
| Review and Approval of CPTD | AEGCL /APDCL | POWERGRID |
| Verification survey for identification of APs | POWERGRID, AEGCL \& APDCL field staffs | Revenue Officials |
| Survey for identification of plots for Crop/Tree/ other damages Compensation | POWERGRID, AEGCL IAPDCL | Revenue Officials |
| Consultation and disclosure of CPTD to APs | POWERGRID, AEGCL IAPDCL | Revenue officials |
| Compensation award and payment of compensation | Revenue Deptt / Competent Authority | POWERGRID, AEGCL /APDCL |
| Fixing of replace cost and assistance | Revenue Dept / Competent Authority | POWERGRID, AEGCL /APDCL |
| Payment of replacement cost compensation | POWERGRID, AEGCL /APDCL | Revenue Department |
| Takeover temporary possession of land/houses | POWERGRID, AEGCL IAPDCL | Revenue Department |
| Hand over temporary possession land to contractors for construction | POWERGRID \& AEGCL IAPDCL | Contractor |
| Notify construction starting date to APs | POWERGRID \& AEGCL IAPDCL Field Staff | Contractor |
| Restoration of temporarily acquired land to its original state including restoration of private or common property resources | Contractor | POWERGRID, AEGCL /APDCL |
| Development, maintenance and updating of Compensation database | POWERGRID \& AEGCL /APDCL |  |
| Internal monitoring | POWERGRID \& AEGCL IAPDCL |  |
| External monitoring, if required | POWERGRID \& AEGCL IAPDCL |  |

### 7.4. Responsibility Matrix to manage RoW Compensation

In order to manage the RoW compensation effectively, a Work Time Breakdown (WTB) matrix depicting sequence of activities, timing, agencies responsible have been drawn both for Tree/Crop and Land compensation which will be implemented during project execution.
a) WTB for Tree/Crop Compensation

| Activities | Responsibility |  | Time Schedule |
| :---: | :---: | :---: | :---: |
|  | Primary | Secondary |  |
| Identification of APs (During Tower spotting \& Check Survey) | Contractor | POWERGRID \& AEGCL/APDCL field staffs | In 3 different Stages i.e. before start of Foundation, Erection \& Stringing Works |
| Serving Notice to APs | POWERGRID \& AEGCL/APDCL field staffs | Revenue Dept., | 0 date |
| Verification of ownership | POWERGRID \& AEGCL/APDCL Revenue Dept. | ADC/BTC (if applicable) | 0-15 days |
| Joint Assessment of damages | Revenue Dept. \& APs | POWERGRID \& AEGCL/APDCL | 16-45 days |
| Payment (online/DD) of compensation to $\mathrm{AP}^{*}$ | POWERGRID \& AEGCL/APDCL |  | 46-60 days |

a) WTB for Land Compensation

| Activities | Responsibility |  | Time Schedule |
| :---: | :---: | :---: | :---: |
|  | Primary | Secondary |  |
| Identification of APs (During Tower spotting and Check Survey) | Contractors | POWERGRID \& AEGCL/APDCL field staffs | Before start of Foundation/ Erection \& Stringing Works |
| Fixation of land rate | DC, ADC/BTC (if applicable) | POWERGRID \& AEGCL/APDCL | 0 date |
| Serving Notice to APs | POWERGRID \& AEGCL/APDCL field staffs | Revenue Dept., | 0-7 days |
| Assessment of compensation/ Verification of ownership | Revenue Dept./ ADC/BTC, | POWERGRID \& AEGCL/APDCL | 8-15 days |
| Payment (online/DD) of compensation to AP* | POWERGRID \& AEGCL/APDCL |  | 16-30 days |

* AP can approach to DC for any grievance on compensation.
** Discussion for release of certain \% as advance is also under progress with Utilities.
Note: Both a and b activities shall run parallely


## VIII. GRIEVANCE REDRESS MECHANISM

97. Grievance Redress Mechanism (GRM) is an integral and important mechanism for addressing/resolving the concern and grievances in a transparent and swift manner. Many minor concerns of peoples are addressed during public consultation process initiated at the beginning of the project. For handling grievance, a two tier GRM consisting of Grievance Redress Committee (GRC) have been constituted i.e. project/scheme level and Corporate/HQ level. The project level GRCs include members from AEGCL/APDCL, POWERGRID, Local Administration, Village Council/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. The composition of GRC also disclosed in Panchayat/Village council offices and concerned district headquarter for wider coverage.
98. The complainant will also be allowed to submit its complaint to local project official who will pass it to GRC immediately but not more than 5 days of receiving such complaint. The first meeting of GRC will be organized within 15 days of its constitution/disclosure to formulate procedure and frequency of meeting. In case of any complaint, GRC meeting shall be convened within 15 days. If Project level GRC is not able to take decision it may refer the complaint to corporate GRC for solution. GRC endeavours to pronounce its decision within 30-45 days of receiving grievances. In case complainant/appellant is not satisfied with the decision of project level GRC they can make an appeal to corporate GRC for review. The proposed mechanism does not impede access to the country's judicial or administrative remedies at any stage.
99. The corporate level GRC function under the chairmanship of Director (PMU) who nominated other members of GRC including one representative from corporate ESMC conversant with the environment \& social issues. The meeting of Corporate GRC shall be convened within 710 days of receiving the reference from project GRC or complainant directly and pronounce its decision within next 15 days.
100. 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 authorised representative also provides forum for raising the grievance towards any irregularity/complain. Moreover, AEGCL/APDCL \& POWERGRID officials also address to the complaints of affected farmers and the same are forwarded to revenue official for doing the needful. Details are depicted below in Figure-8.1:

Figure-8.1: Flow Chart of Grievance Redress Mechanism


## IX. BUDGET

101. The CPTD Implementation cost estimate for the project includes eligible compensation for loss of crops/ trees/ huts and support cost for implementation of CPTD, monitoring, other administrative cost etc. A budget provision has also been made for compensation for Tower Base ( $85 \%$ of the land cost) and RoW Corridor ( $15 \%$ of the land cost) as per MoP guidelines and subsequent State Govt. order. Accordingly, the cost has been estimated for proposed 220/132 kV lines only in the budget by including these provisions. However, this is a tentative budget which may change during the original course of implementation. The unit cost for the loss of crop has been derived through rapid field appraisal and based on AEGCL/APDCL \& POWERGRID's previous experience of similar project implementation. Contingency provision equivalent to $3 \%$ of the total cost has also been made to accommodate any variations from this estimate. Sufficient Budget has been provided to cover all compensation towards crops losses, other damages etc. As per AEGCL/APDCL \& POWERGRID's previous projects and strategy for minimization of impacts, an average of $50-60 \%$ of the affected land area is expected for compensation for crops and other damages. Structure will be avoided to the extent possible. However, if any structure is affected, budget provisions are available to cover all damages as per entitlement matrix. In any case no residential structure shall be affected. Therefore, provisions of budget expenditure for implementation of CPTD for the subprojects considering corridor 27 meter, 20 meter \& 10 meter maximum for 220 kV , 132 kV \& 33 kV line respectively.

### 9.1. Compensation for Land for Tower Base and RoW Corridor

102. The land area for 220 kV and 132 kV tower base are estimated as 0.077 acre and 0.036 acre per km respectively. Similarly, for RoW corridor the areas are estimated as 8.571 acre and 6.635 acre per km 220 kV and 132 kV respectively. The cost of land is estimated @ Rs. 15 lakh/acre considering the land use type as agriculture land in rural setting. Accordingly the cost of land compensation towards tower base \& RoW corridor for overhead line is thus estimated as Rs. 1680.25 Lakhs. A detail of cost is given below in Table 9.1.

Table 9.1: Cost of Land Compensation for Tower Base \& RoW Corridor

| Name of Line | Line <br> Length <br> (Km) | Land Area <br> for Tower <br> Base (acre) | Land Area <br> for RoW <br> Corridor* <br> (acre) | Avg. Cost <br> of Land <br> (Lakhs / <br> acre) | Total in Lakhs <br> (Tower base @ <br> Corridor@15\%) |
| :--- | :---: | :---: | :---: | :---: | :---: |
| Rupai - Chapakhowa <br> 132 kV S/C on D/C line | 44 | 1.584 | 291.94 | 15.00 | 677.061 |


| Tinsukia -Behiating (New <br> Dibrugarh) 220kV D/C | 49.5 | 3.812 | 424.26 | 15.00 | 1003.188 |
| :--- | :--- | :--- | :--- | :--- | :--- |

* Effective RoW corridor has been considered after excluding tower base area


### 9.2. Compensation for Crops and Trees

103. The crop compensation is estimated in consultation with revenue authorities in terms of yield/hectare and rate/quantity for prevailing crops in the area. Similarly, tree compensation is calculated on basis of tree enumeration, tree species and an estimate of the yield. In case of fruit bearing trees compensation will be calculated on the basis of 8 years yield (assessed by revenue/horticulture department). Market rates of compensation are assessed by the relevant government authorities. The estimation of crop and tree damages are based on preliminary investigation and accordingly budgetary provisions are made which will be updated during implementation. Details of line wise cost is given in Table 9.2 below.

Table 9.2: Cost of Compensation for Crops and Trees

| SI. <br> No. | Name of the Line | Total Length <br> (Km) | Compensation <br> /Km (In Lakh) | Total compensation cost <br> for Crops \& trees (Lakh) |  |  |
| :---: | :--- | :---: | :---: | :---: | :---: | :---: |
| 1 | Rupai - Chapakhowa 132 kV <br> S/C on D/C line | 44 | 5.0 | 220 |  |  |
| 2 | Tinsukia -Behiating (New <br> Dibrugarh) 220kV D/C line | 49.5 | 5.0 | 247.5 |  |  |
| 3 | Chapakhowa (New) to <br> Chapakhowa (Existing) <br> substation 33 kV | 2.617 | 0.5 | 1.31 |  |  |
| 4 | Dibrugarh (Existing) to Romai <br> (New) substation 33 kV | 17.277 | 0.5 | 8.64 |  |  |
| 5 | Behiating (New) to Bogibil <br> (New) substation 33 kV | 13.476 | 0.5 | 6.74 |  |  |
| 6 | Behiating (New) to Dibrugarh <br> (New)Substation 33 kV | 9.341 | 0.5 | 4.67 |  |  |
| Total |  |  |  |  |  | $\mathbf{4 8 8 . 8 6}$ |

### 9.3. Summary of Budget

104. The total indicative cost is estimated to be INR 2251.17 Lakhs equivalent to USD 3.196 million. Details are given in Table 9.3. The following estimated budget is part of complete project cost as on date. However, actual updation of the estimated cost shall be updated during execution.

Table 9.3: Summary of Budget

| Item | Amount in <br> Lakh (INR) | Amount in <br> (Million USD) |
| :--- | :---: | :---: |
| A. Compensation |  |  |
| A-1: Loss of Crops and Trees | 488.86 | 0.694 |
| A-2: Land Compensation for Tower Base and RoW <br> Corridor | 1680.25 | 2.386 |
| Sub Total-A | $\mathbf{2 1 6 9 . 1 1}$ | $\mathbf{3 . 0 8}$ |
| B: Implementation Support Cost |  |  |
| B-1: Man-power involved for CPTD Implem. \& Monitoring | 11.49 | 0.016 |
| B-2: External Monitoring, if required | 5.00 | 0.0071 |
| Sub Total- B | $\mathbf{1 6 . 4 9}$ | $\mathbf{0 . 0 2 3 1}$ |
| Total (A+B) | $\mathbf{2 1 8 5 . 6}$ | $\mathbf{3 . 1 0 3}$ |
| Contingency (3\%) | $\mathbf{6 5 . 5 7}$ | $\mathbf{0 . 0 9 3}$ |
| Grand Total | $\mathbf{2 2 5 1 . 1 7}$ | $\mathbf{3 . 1 9 6}$ |

## X. IMPLEMENTATION SCHEDULE

105. Following work schedule has been drawn for implementation of CPTD considering letter of award for execution of work placed in end of 2016. Tentative implementation schedule for project including various sub tasks presented in Table 10.1.

Table 10.1 Tentative Implementation Schedule

| SI. | Activity | 2017 |  |  |  | 2018 |  |  |  | 2019 |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Q | Q | Q | Q | Q | Q | Q | $\begin{gathered} \mathrm{Q} \\ 1 \end{gathered}$ | $\begin{aligned} & \hline \mathrm{Q} \\ & 2 \end{aligned}$ | Q | $\begin{aligned} & Q \\ & 4 \end{aligned}$ |
| 1. | Initial CPTD Matrix disclosure |  |  |  |  |  |  |  |  |  |  |  |  |
| 2. | Detailed Survey |  |  |  |  |  |  |  |  |  |  |  |  |
| 3. | Public Consultation |  |  |  |  |  |  |  |  |  |  |  |  |
| 4. | Compensation Plan Implementation |  |  |  |  |  |  |  |  |  |  |  |  |
| i) | Compilation of land record, ownership, |  |  |  |  |  |  |  |  |  |  |  |  |
| ii) | Finalization of list of APs, fixing rate by DC |  |  |  |  |  |  |  |  |  |  |  |  |
| iii) | Serving of Notice to APs |  |  |  |  |  |  |  |  |  |  |  |  |
| iv) | Joint assessment \&acknowledgement by APs |  |  |  |  |  |  |  |  |  |  |  |  |
| v) | Validation of Compensation amount |  |  |  |  |  |  |  |  |  |  |  |  |
| vi) | Compensation Payment |  |  |  |  |  |  |  |  |  |  |  |  |
| 5. | Civil Works |  |  |  |  |  |  |  |  |  |  |  |  |
| 6. | Review/ Activity Monitoring |  |  |  |  |  |  |  |  |  |  |  |  |
| i) | Monthly |  |  |  |  |  |  |  |  |  |  |  |  |
| ii) | Quarterly |  |  |  |  |  |  |  |  |  |  |  |  |
| iii) | Half yearly |  |  |  |  |  |  |  |  |  |  |  |  |
| iv) | Annual |  |  |  |  |  |  |  |  |  |  |  |  |
| 7. | Grievance redress |  |  |  |  |  |  |  |  |  |  |  |  |
| 8. | CPTD Documentation |  |  |  |  |  |  |  |  |  |  |  |  |
| 9. | External Monitoring, if required |  |  |  |  |  |  |  |  |  |  |  |  |

## XI. MONITORING AND REPORTING

106. Monitoring is a continuous process at all stages of project. Monitoring of CPTD implementation will be the responsibility of POWERGRID as well as the State Utility.
107. Internal monitoring will include: (i) administrative monitoring: daily planning, implementation, feedback and trouble shooting, maintenance, and progress reports and (ii) socio-economic monitoring: compensation for land/crops/trees or any other damages, demolition if any, salvaging materials, dates for consultations and number of grievance/complaints received etc.. Monitoring and reports documenting progress on compensation/ implementation of CPTD will be provided by POWERGRID to World Bank for review semi-annually.
108. If required, POWERGRID/State Utility will engage the services of an independent agency/External monitoring and provisions for the same have been made in the budget component.
109. AEGCL/APDCL is well equipped to implement and monitor its environment and social management plan including CPTD. Organizational Support Structure of AEGCL/APDCL for monitoring of above is given in Figure-11.1.

Figure - 11.1: AEGCL/APDCL Support Structure for Safeguard Monitoring


## ANNEXURE - 1

## EVALUATION OF ALTERNATIVES ROUTE ALIGNMENT

## EVALUATION OF ALTERNATIVES ROUTE ALIGNMENT

Three different alignments were studied with the help of Google Maps / published data such as Forest Atlas, Survey of India topographic sheets, etc. and walkover survey to arrive at the most optimum route to be considered for detailed survey. The comparative details of these three alternatives in respect of the proposed line are as follows;

## 1. Rupai - Chapakhowa 132 kV S/C on D/c line

| S.N | Description | Alternative-I | Alternative-II | Alternative-III |
| :---: | :---: | :---: | :---: | :---: |
| 1. | Route particulars |  |  |  |
| i. | Route Length (km) | 44 | 47.6 | 56 |
| ii. | Terrain |  |  |  |
|  | Hilly | Nil | Nil | Nil |
|  | Plain | 100\% | 100\% | 100\% |
| 2. | Environmental impact |  |  |  |
| i. | Name of District through which the line passes | Tinsukia | Tinsukia | Tinsukia |
| ii. | Town in alignment | Rupai \& Chapakhowa | Rupai \& Chapakhowa | Rupai \& Chapakhowa |
| iii. | House within RoW | Shall be ascertained after detailed survey | Shall be ascertained after detailed survey | Shall be ascertained after detailed survey |
| iv. | Forest involvement (km) | Nil | Nil | Nil |
| V. | Typer of Forest  <br> (RF/PF/Mangrove)and  <br> whether part of Wildlife  <br> Area/ Elephant <br> corridor/ Biodiversity <br> Hotspots/ Biosphere <br> Reserve/ Wetlands or <br> any other <br> environmentally  <br> sensitive area, if any  | Nil | Nil | Nil |
| vi. | Density of Forest | NA | NA | NA |
| vii. | Type of flora | Tea( Camellia sinensis), Bamboo (Bambusa balcooa), Paddy(Oryza sativa) Banana (Musa acuminate), Pineapple (Ananas comosus), \& Betel nut (Areca catechu) | Tea( Camellia sinensis), Bamboo (Bambusa vulgaris), Paddy(Oryza sativa) Banana (Musa acuminate), Pineapple (Ananas comosus), \& Betel nut (Areca catechu) | Tea( Camellia sinensis), Bamboo (Bambusa vulgaris), <br> Paddy(Oryza sativa) Banana (Musa acuminate), Pineapple (Ananas comosus), \& Betel nut (Areca catechu) |
| viii. | Type of fauna | Assamese <br> Macaque (Macaca assamensis), Grey Peacock Pheasant (Polyplectron bicalcaratum), Asian Toad(Bufo melanostictus) and common fauna like Fox, Monkey also found | Assamese <br> Macaque (Macaca assamensis), Grey Peacock Pheasant (Polyplectron bicalcaratum), Asian Toad(Bufo melanostictus) and common fauna like Fox, Monkey also found | Assamese <br> Macaque (Macaca assamensis), Grey Peacock Pheasant (Polyplectron bicalcaratum), Asian Toad(Bufo melanostictus) and common fauna like Fox, Monkey also found |


| S.N | Description | Alternative-I | Alternative-II | Alternative-III |
| :---: | :---: | :---: | :---: | :---: |
| ix. | Endangered species, if any | Nil | Nil | Nil |
| x. | Historical/cultural Monuments, if any | Nil | Nil | Nil |
| xi. | Others information | Line is mostly passing through paddy and tea garden area in some portion. | A portion of the line (Approx. 3.5 km ) is passing through Govt. land having medium dense tree cover. | A portion of the line (Apprx. 3.5 km ) is passing through Govt. land having medium dense tree cover. |
| 3 | Compensation Cost |  |  |  |
| i. | Crop (Non Forest) | Provision of 5 Lakhs/km kept in the budget | Provision of 5 Lakhs/km kept in the budget | Provision of 5 Lakhs/km kept in the budget |
| ii. | Forest (CA+NPV) | N.A. | N.A. | N.A. |
| 4. | Major Crossings: |  |  |  |
| i. | Highway (NH/SH) | 2 | 2 | 2 |
| ii. | Power Line (Nos.) | Nil | Nil | Nil |
| iii. | Railway Line (Nos.) | Nil | Nil | Nil |
| iv. | River Crossing (Nos.) | 1 | 3 | 3 |
| 5. | Overall remarks | Shortest in line length and easier access as it is routed along $\mathrm{NH}-$ 37 having with minimum tree felling | Line length is <br> more and <br> difficulty in <br> accessibility in <br> comparison to <br> Alt-1. It also <br> involve more no. <br>   <br> more tree felling  | Line length is longest and involves more tree felling. Access is very difficult as the route is not easily accessible and away from roads |

From the above comparison of the three different alternatives, it is evident that although there is no forest involvement in all the three routes, Alternative- I is found to be shortest route and is easily accessible due to its proximity to existing approach roads as compared to other two alternatives. Hence, lesser degree of construction and O\&M problems are anticipated. Also, since route is shorter in length, it will involve minimum tree felling. Hence, Alternative -I is considered as the most optimized route and recommended for detailed survey.

## 2. Tinsukia - Behiating 220 kV D/c line

| S.N | Description | Alternative-I | Alternative-II | Alternative-III |
| :---: | :---: | :---: | :---: | :---: |
| 1. | Route particulars |  |  |  |
| i. | Route Length (km) | 49.50 | 49.87 | 50.27 |
| ii. | Terrain |  |  |  |
|  | Hilly | Nil | Nil | Nil |
|  | Plain | 100\% | 100\% | 100\% |
| 2. | Environmental impact |  |  |  |
| i. | Name of District through which the line passes | Tinsukia \& Dibrugarh | Tinsukia \& Dibrugarh | Tinsukia \& Dibrugarh |
| ii. | Town in alignment | Tinsukia \& Dibrugarh | Tinsukia \& Dibrugarh | Tinsukia \& Dibrugarh |


| S.N | Description | Alternative-I | Alternative-II | Alternative-III |
| :---: | :---: | :---: | :---: | :---: |
| iii. | House within RoW | Shall be ascertained after detailed survey | Shall be ascertained after detailed survey | Shall be ascertained after detailed survey |
| iv. | Forest involvement (km) | Nil | Nil | Nil |
| v. | Type of Forest (RF/PF/Mangrove)and whether part of Wildlife Area/ Elephant corridor/ Biodiversity Hotspots/ Biosphere Reserve/ Wetlands or any other environmentally sensitive area, if any | Nil | Nil | Nil |
| vi. | Density of Forest | NA | NA | NA |
| vii. | Type of flora | Tea( Camellia sinensis), Bamboo (Bambusa balcooa), <br> Paddy(Oryza <br> sativa) Banana <br> (Musa acuminate), <br> Pineapple (Ananas comosus), \& Betel nut (Areca catechu) | Tea( Camellia sinensis), Bamboo (Bambusa vulgaris), Paddy(Oryza sativa) Banana (Musa acuminate), Pineapple (Ananas comosus), \& Betel nut (Areca catechu) | Tea( Camellia sinensis), Bamboo (Bambusa vulgaris), <br> Paddy(Oryza sativa) Banana (Musa acuminate), Pineapple (Ananas comosus), \& Betel nut (Areca catechu) |
| viii. | Type of fauna | Assamese <br> Macaque (Macaca assamensis), Grey Peacock Pheasant (Polyplectron bicalcaratum), Asian Toad(Bufo melanostictus) and common fauna like Fox, Monkey also found | Assamese Macaque (Macaca assamensis), Grey Peacock Pheasant (Polyplectron bicalcaratum), Asian Toad(Bufo melanostictus) and common fauna like Fox, Monkey also found | Assamese <br> Macaque (Macaca assamensis), Grey Peacock Pheasant (Polyplectron bicalcaratum), Asian Toad(Bufo melanostictus) and common fauna like Fox, Monkey also found |
| ix. | Endangered species, if any | Nil | Nil | Nil |
| x. | Historical/cultural Monuments, if any | Nil | Nil | Nil |
| xi. | Others relevant information | The line is passing mostly through agricultural land and small tea gardens. No major tree cover is encountered along the route. |  |  |
| 3 | Compensation Cost |  |  |  |
| iii. | Crop (Non Forest) | Provision of 5 Lakhs/km kept in the budget | Provision of 5 Lakhs/km kept in the budget | Provision of 5 Lakhs/km kept in the budget |
| iv. | Forest (CA+NPV) | N.A. | N.A. | N.A. |
| 4. | Major Crossings: |  |  |  |
| V. | Highway (NH/SH) | 1 | 1 | 1 |
| vi. | Power Line (Nos.) | Nil | Nil | Nil |


| S.N | Description | Alternative-I | Alternative-II | Alternative-III |
| :--- | :--- | :---: | :---: | :---: |
| vii. | Railway Line (Nos.) | 1 | 1 |  |
| viii. | River Crossing (Nos.) | Nil | Nil | Nil |
| 5. | Overall remarks | Shorter in length <br> and easier <br> access as it is <br> routed along <br> existing road | Line length is <br> more in <br> comparison to to <br> Alt-1 and also <br> difficulty in in <br> accessibility. | Access is very <br> difficult due to <br> non-existing paths <br> roads and path <br> up to the route <br> and line length is <br> highest |

From the above comparison of the three different alternatives, it is evident that although there is no forest involvement in all the three routes, Alternative- I is found to be shortest route and is easily accessible due to its proximity to existing approach roads as compared to other two alternatives. Hence, lesser degree of construction and O\&M problems are anticipated. Also, since route is shorter in length, it will involve minimum tree felling. Hence, Alternative - I is considered as the most optimized route and recommended for detailed survey.

## 3. Chapakhowa (New) to Chapakhowa (Existing) substation 33 kV line

The said distribution line connects two substations in close vicinity which is intended for providing power supply to the predestined area. The line length is only 2.617 km and has negligible environment and social impact including no involvement of any forest area. Hence, no alternative have been studied for the subject line.

## 4. Dibrugarh (Existing) to Romai (New) substation 33 kV line

| S.N | Description | Alternative-I | Alternative-II | Alternative-III |
| :---: | :---: | :---: | :---: | :---: |
| 1. | Route particulars |  |  |  |
| iii. | Route Length (km) | 17.277 | 21.8 | 22 |
| iv. | Terrain |  |  |  |
|  | Hilly | Nil | Nil | Nil |
|  | Plain | 100\% | 100\% | 100\% |
| 2. | Environmental impact |  |  |  |
| xii. | Name of District through which the line passes | Dibrugarh | Dibrugarh | Dibrugarh |
| xiii. | Town in alignment | Dibrugarh | Dibrugarh | Dibrugarh |
| xiv. | House within RoW | Shall be ascertained after detailed survey | Shall be ascertained after detailed survey | Shall be ascertained after detailed survey |
| xv. | Forest involvement (km) | Nil | Nil | Nil |
| xvi. |  | Nil | Nil | Nil |
| xvii. | Density of Forest | NA | NA | NA |


| S.N | Description | Alternative-I | Alternative-II | Alternative-III |
| :---: | :---: | :---: | :---: | :---: |
| xviii. | Type of flora | Tea( Camellia sinensis), Bamboo (Bambusa balcooa), Paddy(Oryza sativa) Banana (Musa acuminate), Pineapple (Ananas comosus), \& Betel nut (Areca catechu) | Tea( Camellia sinensis), Bamboo (Bambusa vulgaris), Paddy(Oryza sativa) Banana (Musa acuminate), Pineapple (Ananas comosus), \& Betel nut (Areca catechu) | Tea( Camellia sinensis), Bamboo ,(Bambusa vulgaris), Paddy(Oryza sativa) Banana (Musa acuminate), Pineapple (Ananas comosus), \& Betel nut (Areca catechu) |
| xix. | Type of fauna | Assamese <br> Macaque (Macaca assamensis), Grey Peacock Pheasant (Polyplectron bicalcaratum), Asian Toad(Bufo melanostictus) and common fauna like Fox, Monkey also found | Assamese <br> Macaque (Macaca assamensis), Grey Peacock Pheasant (Polyplectron bicalcaratum), Asian Toad(Bufo melanostictus) and common fauna like Fox, Monkey also found | Assamese <br> Macaque (Macaca assamensis), Grey Peacock Pheasant (Polyplectron bicalcaratum), Asian Toad(Bufo melanostictus) and common fauna like Fox, Monkey also found |
| xx. | Endangered species, if any | Nil | Nil | Nil |
| xxi. | Historical/cultural Monuments, if any | Nil | Nil | Nil |
| xxii. | Others information | Route is mostly passing along with the state/ village roads and also some portion through agriculture /paddy fields to avoid heavily populated area | Some portion of the line is passing through govt. land having medium dense tree cover. | Some portion of the line is passing through govt. land having mediun dense tree cover. |
| 3 | Compensation Cost |  |  |  |
| v. | Crop (Non Forest) | Provision of 0.5 Lakhs/km kept in the budget | Provision of 0.5 Lakhs/km kept in the budget | Provision of 0.5 Lakhs/km kept in the budget |
| vi. | Forest (CA+NPV) | N.A. | N.A. | N.A. |
| 4. | Major Crossings: |  |  |  |
| ix. | Highway (NH/SH) | Nil | Nil | Nil |
| x. | Power Line (Nos.) | Nil | Nil | Nil |
| xi. | Railway Line (Nos.) | Nil | Nil | Nil |
| xii. | River Crossing (Nos.) | Nil | 2 | 2 |
| 5. | Overall remarks | Shorter in length and easier access as it is routed along existing village/ state road | Line length is more comparison to Alt-1 and also involve more no. of river crossing \& more tree felling | $\begin{array}{lll}\text { Highest in line } \\ \text { length } & \text { and }\end{array}$ Access is very difficult due to route is little away existing roads. It also involve more no. of river crossing \& more tree felling |

From the above comparison of the three different alternatives, it is evident that although there is no forest involvement in all the three routes, Alternative- I is found to be shortest
route involving minimum tree felling and is easily accessible due to its proximity to existing village/state roads as compared to other two alternatives. As lesser degree of environmental impacts as well as construction and O\&M problems is anticipated, Alternative-I is considered as the most optimized route and recommended for detailed survey.

## 5. Behiating (New) to Bogibil (New) substation 33 kV line

| S.N | Description | Alternative-I | Alternative-II | Alternative-III |
| :---: | :---: | :---: | :---: | :---: |
| 1. | Route particulars |  |  |  |
| V. | Route Length (km) | 15.262 | 13.476 | 16.54 |
| vi. | Terrain |  |  |  |
|  | Hilly | Nil | Nil | Nil |
|  | Plain | 100\% | 100\% | 100\% |
| 2. | Environmental impact |  |  |  |
| xxiii. | Name of District through which the line passes | Dibrugarh | Dibrugarh | Dibrugarh |
| xxiv. | Town in alignment | Dibrugarh | Dibrugarh | Dibrugarh |
| xxv. | House within RoW | Shall be ascertained after detailed survey | Shall be ascertained after detailed survey | Shall be ascertained after detailed survey |
| xxvi. | Forest involvement (km) | Nil | Nil | Nil |
| xvii. |  | Nil | Nil | Nil |
| xviii. | Density of Forest | NA | NA | NA |
| xxix. | Type of flora | Tea( Camellia sinensis), Bamboo (Bambusa balcooa), Paddy(Oryza sativa) Banana (Musa acuminate), Pineapple (Ananas comosus), \& Betel nut (Areca catechu) | Tea( Camellia sinensis), Bamboo (Bambusa vulgaris), Paddy(Oryza sativa) Banana (Musa acuminate), Pineapple (Ananas comosus), \& Betel nut (Areca catechu) | Tea( Camellia sinensis), Bamboo (Bambusa vulgaris), Paddy(Oryza sativa) Banana (Musa acuminate), Pineapple (Ananas comosus), \& Betel nut (Areca catechu) |
| XXX. | Type of fauna | Assamese Macaque (Macaca assamensis), Grey Peacock Pheasant (Polyplectron bicalcaratum), Asian Toad(Bufo melanostictus) and common fauna like Fox, Monkey also found | Assamese <br> Macaque (Macaca assamensis), Grey Peacock Pheasant (Polyplectron bicalcaratum), Asian Toad(Bufo melanostictus) and common fauna like Fox, Monkey also found | Assamese <br> Macaque (Macaca assamensis), Grey Peacock Pheasant (Polyplectron bicalcaratum), Asian Toad(Bufo melanostictus) and common fauna like Fox, Monkey also found |
| xxxi. | Endangered species, if any | Nil | Nil | Nil |
| kxxii. | Historical/cultural Monuments, if any | Nil | Nil | Nil |


| S.N | Description | Alternative-I | Alternative-II | Alternative-III |
| :---: | :--- | :---: | :---: | :---: | :---: |
| xxiii. | $\begin{array}{l}\text { Others } \\ \text { information relevant }\end{array}$ | $\begin{array}{l}\text { Some portion of } \\ \text { the line is passing } \\ \text { through gov. land } \\ \text { having medium } \\ \text { dense tree cover. }\end{array}$ |  |  |
| Route is mostly |  |  |  |  |
| passing along with |  |  |  |  |
| the state/ village |  |  |  |  |
| roads |  |  |  |  | \(\left.\begin{array}{l}Some portion of <br>

the line is passing <br>
through gov. land <br>
having medium <br>
dense tree cover.\end{array}\right]\)

From the above comparison of the three different alternatives, it is evident that although there is no forest involvement in all the three routes, Alternative- II is found to be shortest route involving minimum tree felling and is easily accessible due to its proximity to existing village/state roads as compared to other two alternatives. As lesser degree of environmental impacts as well as construction and O\&M problems is anticipated, Alternative-II is considered as the most optimized route and recommended for detailed survey.

## 6. Behiating (New) to Dibrugarh (New) substation 33 kV line

The said distribution line connects two substations in close vicinity which is intended for providing power supply to the predestined area. The line length is only 9.341 km and has negligible environment and social impact including no involvement of any forest area. Hence, no alternative have been studied for the subject line.

## ANNEXURE - 2

## MOP GUIDELINES DATED 15 ${ }^{\text {TH }}$ OCT.'15 FOR PAYMENT OF COMPENSATION FOR TRANS LINE

> No.3/7/2015-Trans
> Government of India
> Ministry of Power
> Shram Shakti Bhawan
> Rafi Marg, New Delhi - 110001

Dated, $15^{\text {th }}$ October, 2015
To

1. Chief Secretaries/Administrators of all the States/UTs
(As per list attached)
2. Chairperson, CEA, New Delhi with the request to disseminate the above guidelines to all the stakeholders.
3. CMD, PGCIL, Gurgaon.
4. CEO, POSOCO, New Delhi.
5. Secretary, CERC, New Delhi.
6. CMD of State Power Utilities/SEBs

Subject: Guidelines for payment of compensation towards damages in regard to Right of Way for transmission lines.

During the Power Ministers Conference held on April 9-10, 2015 at Guwahati with States/UTs, it has, inter alia, been decided to constitute a Committee under the chairmanship of Special Secretary, Ministry of Power to analyse the issues related to Right of Way for laying of transmission lines in the country and to suggest a uniform methodology for payment of compensation on this count. Subsequently, this Ministry had constituted a Committee with representatives from various State Governments and others. The Committee held several meetings to obtain the views of State Governments on the issue and submitted its Report along with the recommendations (copy of the Report is at Annex-1).
2. The Recommendations made by the Committee are hereby formulated in the form of following guidelines for determining the compensation towards "damages" as stipulated in section 67 and 68 of the Electricity Act, 2003 read with Section 10 and 16 of Indian Telegraph Act, 1885 which will be in addition to the compensation towards normal crop and tree damages. This amount will be payable only for transmission lines supported by a tower base of 66 KV and above, and not for subtransmission and distribution lines below 66 KV:-
(i) Compensation @ $85 \%$ of land value as determined by District Magistrate or any other authority based on Circle rate/ Guideline value/ Stamp Act rates for tower base area (between four legs) impacted severely due to installation of tower/pylon structure;
(ii) Compensation towards diminution of land value in the width of Right of Way (RoW) Corridor due to laying of transmission line and imposing certain restriction would be decided by the States as per categorization/type of land in different places of States, subject to a maximum of $15 \%$ of land value as determined based on Circle rate/ Guideline value/ Stamp Act rates;
(iii) In areas where land owner/owners have been offered/ accepted alternate mode of compensation by concerned corporation/ Municipality under Transfer Development Rights (TDR) policy of State, the licensee /Utility shall deposit compensation amount as per (i) \& (ii) above with the concerned Corporation/ Municipality/ Local Body or the State Government.
(iv) For this purpose, the width of RoW corridor shall not be more than that prescribed in the table at Annex-2and shall not be less than the width directly below the conductors.
3. Necessary action may kindly be taken accordingly. These guidelines may not only facilitate an early resolution of RoW issues and also facilitate completion of the vital transmission lines through active support of State/ UT administration.
4. All the States/UTs etc. are requested to take suitable decision regarding adoption of the guidelinesconsidering that acquisition of land is a State subject.

Yours faithfully,

(Jyoti Arora)
Joint Secretary (Trans.)
Tele: 011-2371 0389
Copy, along with enclosure, forwarded to the following:

1. Secretaries of Government of India (Infrastructure Ministries/Deptt including MoEF - As per attached list)
2. Prime Minister's Office (Kind Attn: Shri Nripendra Mishra, Principal Secretary to PM).
3. Technical Director, NIC, Ministry of Power with the request to host on the website of Ministry of Power.

Copy to PS to Hon'ble MoSP (IC) / Secretary (Power) / AS (BNS) / AS (BPP) / All Joint Secretaries/EA/ All Directors/DSs, Ministry of Power.

## ANNEXURE - 3

## GOVT. OF ASSAM NOTIFICATION DATED $16{ }^{\text {TH }}$ MARCH 2016 ON ROW COMPENSATION

# GOVEIRNMENT OHASSAM <br> POWER (LGLECTRICITY) DEPALTMENT <br> DLSRUR, GUWAMATI-G <br> <br> NOMETCATION 

 <br> <br> NOMETCATION}

Dated Dispur the $10^{\text {ti }}$ March, 2017

## No. PEL. 219/2015/91

The Governor of Assam is pleased to notify the following rates for payment of compensation towards damages in regard to:Right of Way for transmission lines. In accordance with the Guidelines of Ministry of Power, Chovt. of India, vide Ref. No. 03/07/2015-Trans, dtd. 15.10.2015 for maintaining uniformity in compensation payment to the affected land owners during construction of transmission lines, it has been decided that a similar payment methodology towards compensation shall also be adopted in the State of Assam. These guidelines of payment methodology of compensation towards "damages" as stipulated in Section 67 \& 68 of the Flectricity Act, 2003 read with Section 10 and 16 of Indian Telegraph Act 1885 shall be in addition to the compensation towards normal crop and tree damages. This amount will be payable only for transmission lines supported by tower base of 66 KV and above, and not for sub-transmission and distribution lines below 66 KV .

- Compensation @ $8.5 \%$ of land value as determined by Deputy Commissioner / BTC or any other competent authority based on Circle rate / Guideline value / Stamp Act rates for tower base area (between four legs at ground level) impacted severely due to installation of tower / pylon structure.
- Compensation towards diminution of land value in the width of Right of Way (ROW) corridor due to laying of transmission line and imposing certain restriction at a maximum rate of $15 \%$ of land value as determined by Depuity Commissioner or any other competent authority based on Circle rate / Guideline value / Stamp Act ratos

For this purpose, the width of ROW corridor shall not be more than that prescribed in table at Annexure-I and shall not be less than the width directly below the conductors.

- In areas where land owner / owners have. been offered / accepted alternate mode of compensation by concerned corporation / Municipality under Transfer Development Rights (TDR) policy of State, the licensec/utility shall deposit compensation amount as per (i) \& (ii) above with the concerned Corporation / Municipality / Local Body or the State Government.

The above guidelines shall be effective from the date of issuance of the above mentioned Govermment of India guidelines and shall be applicable for only those new transmission line / projects where construction have started after this date, i.c. 15.10.2015. This guideline shall not be applicable for existing transmission lines which are already in service or under construction before the aforesaid date, or for maintenance of any existing transmission line.

| ROW width for different voltageline* |  |
| :---: | :---: |
| Transmission Voltage | Width of Right of Way (in Meters) |
| 66 KV | 18 |
| 110 KV | 22 |
| 132 KV | 27 |
| 220 KV | 35 |
| $400 \mathrm{KV} \mathrm{S} / \mathrm{C}$ | 46 |
| 400 KV D/C | 46 |
| +500 KV HVDC | 52 |
| 76.5 KV S/C (with delta configuration) | 64 |
| $765 \mathrm{KV} \mathrm{D/C}$ | 67 |
| +/-800KV HVIDC | 69 |
| 1200 KV | 89 |

* Width of Right of Way is as per Ministry of Environment \& Forests (MOEF) guidelines dtd. 05.05.2014.

This issues with the concurrence of Govt. of Assam, as well as the Finance Deparment, Govt. of Assam.
-Sd/-

## (Siri. RajiviKr. Bora, M.A.S.) <br> Additional Chief Secretary to the Gov. <br> Power (ilectricity) ot

Memo No.PEL.219/2015/91-A
Copy to:
(1) The Managing Director, Assam Electricity Grid Corp. Itd Guwahati-. I
(3) The Executive Director, Power Grid Corp of
(PGCII), Monal Tower,
(3) P.S. to Hon'ble Chier Minister, Assam, Dispur, Guwahati-6
(4) P.S. to Hon'ble Minister of State, Assam Pow, Guwahati - 6
(5) P.S. to the AddI. Chief Secretary to the Gower, etc., Dispur, Guwahati - 6 Management Department, Department Govt. of Assam, Revemue \& Disaster
(6) P.S. to the Chairman, APDCL, AFGOD, Dispur, Guwahati - 6
(7) P.S. to Secretary to the Govt of AsCL, APGCL, Bijulce Bhawan, Guwahati - 1 Guwahati-6
(8) The Director, Assm ( necessary action

> By order etc., Dower (Llect) Deptt. Assam,

ANNEXURE - 4

## DETAILS OF TOWER/POLE SCHEDULE OF PROPOSED LINES ROUTE ALIGNMENT





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| TINSUKIA TO DIBRUGARH 220 KV D/C , T/L LINE |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| NEW ROUTE ALIGNMENT SURVEY NO-1 |  |  |  |  |  |  |
| $\begin{aligned} & \text { AP } \\ & \text { NO } \end{aligned}$ | LOCATION NO | NORTHING | EASTING | SPAN | MAJOR CROSSING DETAIL | REMARKS |
|  | BAY | 27²2'50.5' | $95^{\circ} 22^{\prime} 42.2^{\prime \prime}$ | 30 |  | VILL:- TINSUKIA |
| 1 | 1/0 | 27º28'50.67" | $95^{\circ} 22^{\prime} 41.26^{\prime \prime}$ | 35 |  | VILL:- TINSUKIA <br> (* weight span beyond the permissible limit) |
| 2 | 2/0 | 27º28'50.50" | $95^{\circ} 22^{\prime} 40.22^{\prime \prime}$ | 165 | 1 nos $11 \mathrm{kV}, 2$ nos 132kV power line | VILL:- TINSUKIA |
| 3 | 3/0 | 27º28'45.53' | $95^{\circ} 22^{\prime} 37.76{ }^{\prime \prime}$ | 110 | 1 nos 66kV power line | VILL:- TINSUKIA |
| 4 | 4/0 | 27º $28^{\prime} 42.29^{\prime \prime}$ | 95²2'36.47" | 635 | 33 kV power line | VILL.- BHIMPARA |
| 5 | 5/0 | 27º $28^{\prime} 30.43 "$ | $95^{\circ} 22^{\prime} 17.692^{\prime}$ | 309 | 11kVpower line | VILL.- BHIMPARA |
| 6 | 6/0 | 27º $28^{\prime} 20.80$ " | 95²2'13.76" | 265 | 33 kV power line | VILL.- BHIMPARA |
| 7 | 7/0 | 27º $28^{\prime} 12.74{ }^{\prime \prime}$ | 95 ${ }^{\circ} 22^{\prime} 10.922^{\prime}$ | 465 |  | VILL.- BHIMPARA |
| 8 | 8/0 | 27º27'58.00" | $95^{\circ} 22^{\prime} 08.29^{\prime \prime}$ | 340 | a vill bitumen road \& 11 kV power line |  |
| 9 | 9/0 | 27º27'47.74" | $95^{\circ} 22^{\prime} 04.26^{\prime \prime}$ | 550 |  |  |
| 10 | 10/0 | 27º27'37.96" | 95 ${ }^{\circ} 21^{\prime} 47.656$ | 210 | a bitumen road to Tinsukia \& a 11 kV power line | VILL.- SEWPUR |
| 11 | 11/0 | 27º27'35.53" | 95²21'40.52' | 232 | a bitumen road to Digboy (SH) | VILL.- SEWPUR |
| 12 | 12/0 | 27º27'38.60' | 95º 21'32.797 | 690 |  | VILL.- SEWPUR |
| 13 | 13/0 | 27º27'44.957 | $95^{\circ} 21^{\prime} 8.721{ }^{\prime \prime}$ | 206 | Rail Track (Tinsikia to Bhadur Chariali) a bitumen road to Tinsukia, a 11 kV power line and telephone line | VILL.- JINGHA |
| 14 | 14/0 | $\begin{gathered} 27^{\circ} 27^{\prime} 45.269 \\ \hline \end{gathered}$ | $95^{\circ} 21^{\prime} 1.212^{\prime \prime}$ | 1021 | 1 bitumen road | VILL.- JINGHA |
| 15 | 15/0 | $\begin{gathered} 27^{\circ} 27^{\prime} 38.425 \\ \hline \end{gathered}$ | 95º $20^{\prime} 24.851^{\prime}$ | 1010 | Tingrai River | VILL.- JINGHA |
| 16 | 16/0 | 27º27'40.57" | $95^{\circ} 19^{\prime} 48.29^{\prime \prime}$ | 665 |  | VILL.- JINGHA |
| 17 | 17/0 | $\begin{array}{\|c\|} \hline 27^{\circ} 27^{\prime} 46.352 \\ \hline \end{array}$ | 95¹9'24.783' | 1046 |  | VILL.-KADOMANI |
| 18 | 18/0 | 27º27'42.97" | 95¹8'46.891' | 1710 | 11kV power line | VILL.-KADOMANI |
| 19 | 19/0 | 27º 27'34.93" | 95¹7'45.3' | 1030 | 11 kV power line | VILL.- KUKURAKHOOA |
| 20 | 20/0 | 27º 27'19.22" | 95 ${ }^{\circ} 17{ }^{\prime} 12.187$ | 337 | 1 bitumen road | VILL.- KUKURAKHOOA |
| 21 | 21/0 | 27º 27'20.61" | 95º $17^{\prime} 0.021{ }^{\prime \prime}$ | 3253 |  | VILL.- KUKURAKHOOA |
| 22 | 22/0 | $27^{\circ} 27^{\prime} 14.50{ }^{\prime \prime}$ | 95¹5'1.766" | 1712 | 11kV power line and | VILL.- KUKURAKHOOA |

$\left.\begin{array}{|c|c|c|c|c|c|c|}\hline & & & & & \text { a bitumen road to } \\ \text { Panitola }\end{array}\right]$

| 53 | 51B/0 | 27º26'34.14" | 94'59'15.69' | 218 |  | VILL.- BAKULMAJGAON |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 54 | 52/0 | 27º26'36.35" | 94'59'8.17" | 234 | vill-road \& It line | VILL.- BAKULMAJGAON |
| 55 | 52A/0 | 27º26'33.60' | 94'59'0.17" | 360 |  | VILL.- BAKULMAJGAON |
| 56 | 53/0 | 27 ${ }^{\circ} 26^{\prime} 29.032{ }^{\prime}$ | 94'58'48.042' | 682 |  | VILL.- BAKULMAJGAON |
| 57 | 54/0 | 27º26'20.293' | 94'58'25.223' | 342 | 11 kV power line | VILL.- BAKUL KATH GAON |
| 58 | 55/0 | $27^{\circ} 26^{\prime} 13.125^{\prime}$ | 94'58'15.725' | 1028 |  | VILL.- BAKUL KATH GAON |
| 59 | 56/0 | 27º 25'59.667 | 94'57'41.481' | 1017 |  | VILL.- BOGPARA |
| 60 | 57/0 | 27º $25^{\prime} 43.27^{\prime \prime}$ | 9457'9.32' | 199 |  | VILL. -HATIGOR BOGPARA |
| 61 | 58/0 | 27²5'40.91" | 94'57'02.59' | 1125 |  | VILL.- LAKEI |
| 62 | 59/0 | 27º $25^{\prime} 42.42^{\prime \prime}$ | 9456'21.79" | 649 |  | VILL.- LAKEI |
| 63 | 60/0 | 27²5'38.00' | 9455'58.68' | 270 |  | VILL.- LAKEI |
| 64 | 61/0 | 27º $25^{\prime} 34.21^{\prime \prime}$ | 9455'49.66" | 294 |  | VILL.- KHANIKARGAON |
| 65 | 62/0 | 27º $25^{\prime} 37.18^{\prime \prime}$ | 9455'39.41" | 441 |  | VILL.- KHANIKARGAON |
| 66 | 63/0 | 27º25'31.05" | 9455'24.89" | 181 | 11 kv power line \& bitumen road NH 67 | VILL.- KHANIKARGAON |
| 67 | 64/0 | 27º 25'27.48' | 9455'19.65' | 186 |  | VILL.- KHANIKARGAON |
| 68 | 65/0 | 27º25'23.02' | 9455'15.08' | 88 |  | VILL.- KHANIKARGAON |
|  | BAY | 27º $25^{\prime} 21.03^{\prime \prime}$ | 9455'12.77" | 49663 |  | VILL.- KHANIKARGAON |


| Name of Package: |  | ASM-DMS-02 |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Name of Work: |  | 33kV New Line from Proposed 132kV/33kV Chapakhowa Substation to Existing 33/11kV Chapakhowa Substation |  |  |  |
| SL NO | Pole From | Pole To | Span <br> (Meter) | Description of Land | Nature of damage |
| 1 | GANTRY | SP-1 | 23 m | Proposed 33/11kV <br> Chapakhowa S/S |  |
| 2 | SP-1 | FP-1 | 38 m | Govt. Land |  |
| 3 | FP-1 | SP-2 | 37 m | Govt. Land |  |
| 4 | SP-2 | SP-3 | 50 m | Govt. Land |  |
| 5 | SP-3 | SP-4 | 43 m | Govt. Land |  |
| 6 | SP-4 | SP-5 | 46 m | Govt. Land |  |
| 7 | SP-5 | SP-6 | 43 m | Govt. Land |  |
| 8 | SP-6 | SP-7 | 43 m | Govt. Land |  |
| 9 | SP-7 | FP-2 | 44 m | Road Crossing |  |
| 10 | FP-2 | SP-8 | 45 m | Govt. Land |  |
| 11 | SP-8 | SP-9 | 44 m | Govt. Land |  |
| 12 | SP-9 | SP-10 | 47 m | Govt. Land |  |
| 13 | SP-10 | SP-11 | 47 m | Govt. Land |  |
| 14 | SP-11 | SP-12 | 46 m | Govt. Land |  |
| 15 | SP-12 | SP-13 | 50 m | Govt. Land |  |
| 16 | SP-13 | SP-14 | 50 m | Govt. Land |  |
| 17 | SP-14 | SP-15 | 47 m | Govt. Land |  |
| 18 | SP-15 | SP-16 | 50 m | Govt. Land |  |
| 19 | SP-16 | SP-17 | 50 m | Govt. Land |  |
| 20 | SP-17 | SP-18 | 47 m | Govt. Land |  |
| 21 | SP-18 | SP-19 | 50 m | Govt. Land |  |
| 22 | SP-19 | SP-20 | 50 m | Govt. Land |  |
| 23 | SP-20 | SP-21 | 50 m | Govt. Land |  |
| 24 | SP-21 | SP-22 | 50 m | Govt. Land |  |
| 25 | SP-22 | SP-23 | 50 m | Govt. Land |  |
| 26 | SP-23 | SP-24 | 47 m | Govt. Land |  |
| 27 | SP-24 | SP-25 | 50 m | Govt. Land |  |
| 28 | SP-25 | SP-26 | 50 m | Govt. Land |  |
| 29 | SP-26 | DP-1 | 44 m | Govt. Land |  |
| 30 | DP-1 | SP-27 | 47 m | Govt. Land |  |
| 31 | SP-27 | SP-28 | 47 m | Govt. Land |  |
| 32 | SP-28 | SP-29 | 50 m | Govt. Land |  |
| 33 | SP-29 | SP-30 | 50 m | Govt. Land |  |
| 34 | SP-30 | SP-31 | 47 m | Govt. Land |  |
| 35 | SP-31 | SP-32 | 50 m | Govt. Land |  |
| 36 | SP-32 | SP-33 | 50 m | Govt. Land |  |
| 37 | SP-33 | SP-34 | 50 m | Govt. Land |  |
| 38 | SP-34 | SP-35 | 50 m | Govt. Land |  |
| 39 | SP-35 | SP-36 | 50 m | Govt. Land |  |


| 40 | SP-36 | SP-37 | 49 m | Govt. Land |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
| 41 | SP-37 | SP-38 | 50 m | Govt. Land |  |
| 42 | SP-38 | SP-39 | 50 m | Govt. Land |  |
| 43 | SP-39 | SP-40 | 50 m | Govt. Land |  |
| 44 | SP-40 | SP-41 | 50 m | Govt. Land |  |
| 45 | SP-41 | SP-42 | 50 m | Govt. Land |  |
| 46 | SP-42 | SP-43 | 47 m | Govt. Land |  |
| 47 | SP-43 | SP-44 | 50 m | Govt. Land |  |
| 48 | SP-44 | SP-45 | 50 m | Govt. Land |  |
| 49 | SP-45 | DP-2 | 44 m | Govt. Land |  |
| 50 | DP-2 | SP-46 | 50 m | Govt. Land |  |
| 51 | SP-46 | SP-47 | 50 m | Govt. Land |  |
| 52 | SP-47 | SP-48 | 41 m | Govt. Land |  |
| 53 | SP-48 | SP-49 | 39 m | Govt. Land |  |
| 54 | SP-49 | SP-50 | 45 m | Govt. Land |  |
| 55 | SP-50 | FP-3 | 47 m | Govt. Land |  |
| 56 | FP-3 | FP-4 | 17 m | Road Crossing |  |
| 57 | FP-4 | GANTRY | 16 m | Proposed $132 / 33 \mathrm{kV}$ <br> Chapakhowa S/S |  |
|  |  |  | $\mathbf{2 6 1 7} \mathbf{~ m}$ |  |  |

Total Pole location Count- 57
Total Single Pole- 50
Total Double Pole- 02
Total Four Pole- 04
Total SP-76 Pole- 21
Total SP76 Pole Location Count-09

| Name of Package: |  | ASM-DMS-02 |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Name of Work: |  | 33kV New Line from Existing 132/33kV Kodomani Substation to 33/11kV New Romai Substation |  |  |  |
| $\begin{gathered} \hline \text { SL } \\ \text { NO } \end{gathered}$ | Pole From | Pole To | Span (Meter) | Description of Area | Description of Pole Location |
| 1 | GANTRY | DP-1 | 351 | Govt. Land | Substation campus/UG |
| 2 | DP-1 | SP-1 | 40 | Govt. Land | Thermal colony road |
| 3 | SP-1 | DP-2 | 45 | Govt. Land | Thermal colony road |
| 4 | DP-2 | DP-3 | 45 | Govt. Land | Thermal colony road |
| 5 | DP-3 | SP-2 | 48 | Govt. Land | Along with railway line |
| 6 | SP-2 | SP-3 | 42 | Govt. Land | Along with railway line |
| 7 | SP-3 | 4P-1 | 38 | Govt. Land | Along with railway line |
| 8 | 4P-1 | 4P-2 | 46 | Railway \& NH Crossing | Underground cable |
| 9 | 4P-2 | SP-4 | 36 | Govt. Land(Along NH37) | Right side of NH/ market area |
| 10 | SP-4 | SP-5 | 37 | Govt. Land(Along NH37) | Right side of NH/ market area |
| 11 | SP-5 | SP-6 | 39 | Govt. Land(Along NH37) | Right side of NH/ market area |
| 12 | SP-6 | DP-4 | 43 | Govt. Land(Along NH37) | Right side of $\mathrm{NH} /$ market area |
| 13 | DP-4 | DP-5 | 39 | Govt. Land(Along NH37) | Right side of NH/ market area |
| 14 | DP-5 | SP-7 | 48 | Govt. Land(Along NH37) | Right side of $\mathrm{NH} /$ market area |
| 15 | SP-7 | SP-8 | 46 | Govt. Land(Along NH37) | Right side of $\mathrm{NH} /$ market area |
| 16 | SP-8 | SP-9 | 36 | Govt. Land(Along NH37) | Right side of NH/ market area |
| 17 | SP-9 | SP-10 | 44 | Govt. Land(Along NH37) | Right side of $\mathrm{NH} /$ market area |
| 18 | SP-10 | SP-11 | 44 | Govt. Land(Along NH37) | Right side of NH/ market area |
| 19 | SP-11 | SP-12 | 44 | Govt. Land(Along NH37) | Right side of $\mathrm{NH} /$ market area |
| 20 | SP-12 | SP-13 | 43 | Govt. Land(Along NH37) | Right side of NH/ market area |
| 21 | SP-13 | SP-14 | 51 | Govt. Land(Along NH37) | Right side of $\mathrm{NH} /$ market area |
| 22 | SP-14 | SP-15 | 49 | Govt. Land(Along NH37) | Right side of NH/ market area |
| 23 | SP-15 | SP-16 | 50 | Govt. Land(Along NH37) | Right side of NH/ market area |
| 24 | SP-16 | SP-17 | 46 | Govt. Land(Along NH37) | Right side of NH/ market area |
| 25 | SP-17 | SP-18 | 37 | Govt. Land(Along NH37) | Right side of $\mathrm{NH} /$ market area |
| 26 | SP-18 | SP-19 | 35 | Govt. Land(Along NH37) | Right side of $\mathrm{NH} /$ market area |
| 27 | SP-19 | SP-20 | 43 | Govt. Land(Along NH37) | Right side of NH/ market area |
| 28 | SP-20 | SP-21 | 35 | Govt. Land(Along NH37) | Right side of NH/ market area |
| 29 | SP-21 | DP-6 | 45 | Govt. Land(Along NH37) | Right side of NH/ market area |
| 30 | DP-6 | DP-7 | 37 | Govt. Land(Along NH37) | Corner of tea garden |
| 31 | DP-7 | SP-22 | 27 | Tea Garden- Road | Between Tea Garden- Road |
| 32 | SP-22 | SP-23 | 44 | Tea Garden- Road | Between Tea Garden- Road |
| 33 | SP-23 | 4P-3 | 43 | Tea Garden- Road | Between Tea Garden- Road |
| 34 | 4P-3 | SP-24 | 46 | Tea Garden- Road | Between Tea Garden- Road |
| 35 | SP-24 | SP-25 | 46 | Tea Garden- Road | Between Tea Garden- Road |
| 36 | SP-25 | SP-26 | 47 | Tea Garden- Road | Between Tea Garden- Road |
| 37 | SP-26 | SP-27 | 47 | Tea Garden- Road | Between Tea Garden- Road |
| 38 | SP-27 | SP-28 | 48 | Tea Garden- Road | Between Tea Garden- Road |
| 39 | SP-28 | SP-29 | 40 | Tea Garden- Road | Between Tea Garden- Road |


| 40 | SP-29 | SP-30 | 44 | Tea Garden- Road | Between Tea Garden- Road |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 41 | SP-30 | SP-31 | 49 | Tea Garden- Road | Between Tea Garden- Road |
| 42 | SP-31 | SP-32 | 47 | Tea Garden- Road | Between Tea Garden- Road |
| 43 | SP-32 | SP-33 | 46 | Tea Garden- Road | Between Tea Garden- Road |
| 44 | SP-33 | SP-34 | 42 | Tea Garden- Road | Between Tea Garden- Road |
| 45 | SP-34 | SP-35 | 48 | Tea Garden- Road | Between Tea Garden- Road |
| 46 | SP-35 | SP-36 | 44 | Tea Garden- Road | Between Tea Garden- Road |
| 47 | SP-36 | SP-37 | 42 | Tea Garden- Road | Between Tea Garden- Road |
| 48 | SP-37 | SP-38 | 47 | Tea Garden- Road | Between Tea Garden- Road |
| 49 | SP-38 | SP-39 | 48 | Tea Garden- Road | Between Tea Garden- Road |
| 50 | SP-39 | SP-40 | 44 | Tea Garden- Road | Between Tea Garden- Road |
| 51 | SP-40 | SP-41 | 43 | Tea Garden- Road | Between Tea Garden- Road |
| 52 | SP-41 | SP-42 | 47 | Tea Garden- Road | Between Tea Garden- Road |
| 53 | SP-42 | SP-43 | 48 | Tea Garden- Road | Between Tea Garden- Road |
| 54 | SP-43 | SP-44 | 42 | Tea Garden- Road | Between Tea Garden- Road |
| 55 | SP-44 | SP-45 | 41 | Tea Garden- Road | Between Tea Garden- Road |
| 56 | SP-45 | SP-46 | 42 | Tea Garden- Road | Between Tea Garden- Road |
| 57 | SP-46 | SP-47 | 47 | Tea Garden- Road | Between Tea Garden- Road |
| 58 | SP-47 | SP-48 | 46 | Tea Garden- Road | Between Tea Garden- Road |
| 59 | SP-48 | SP-49 | 47 | Tea Garden- Road | Between Tea Garden- Road |
| 60 | SP-49 | SP-50 | 47 | Tea Garden- Road | Between Tea Garden- Road |
| 61 | SP-50 | SP-51 | 47 | Tea Garden- Road | Between Tea Garden- Road |
| 62 | SP-51 | SP-52 | 47 | Tea Garden- Road | Between Tea Garden- Road |
| 63 | SP-52 | SP-53 | 49 | Tea Garden- Road | Between Tea Garden- Road |
| 64 | SP-53 | SP-54 | 44 | Tea Garden- Road | Between Tea Garden- Road |
| 65 | SP-54 | SP-55 | 41 | Tea Garden- Road | Between Tea Garden- Road |
| 66 | SP-55 | SP-56 | 47 | Tea Garden- Road | Near Dibrugarh \& Dist Planter club |
| 67 | SP-56 | SP-57 | 48 | Tea Garden- Road | Near Dibrugarh \& Dist Planter club |
| 68 | SP-57 | SP-58 | 47 | Tea Garden- Road | Near Dibrugarh \& Dist Planter club |
| 69 | SP-58 | SP-59 | 47 | Tea Garden- Road | Near Dibrugarh \& Dist Planter club |
| 70 | SP-59 | SP-60 | 43 | Tea Garden- Road | Near Dibrugarh \& Dist Planter club |
| 71 | SP-60 | DP-8 | 43 | Tea Garden- Road | Near Dibrugarh \& Dist Planter club |
| 72 | DP-8 | SP-61 | 44 | Tea Garden- Road | Between golf ground and road |
| 73 | SP-61 | SP-62 | 45 | Tea Garden- Road | Between golf ground and road |
| 74 | SP-62 | SP-63 | 45 | Tea Garden- Road | Between golf ground and road |
| 75 | SP-63 | SP-64 | 32 | Tea Garden- Road | Between golf ground and road |
| 76 | SP-64 | SP-65 | 46 | Tea Garden- Road | Between golf ground and road |
| 77 | SP-65 | SP-66 | 48 | Tea Garden- Road | Between golf ground and road |
| 78 | SP-66 | SP-67 | 45 | Tea Garden- Road | Between golf ground and road |
| 79 | SP-67 | SP-68 | 47 | Tea Garden- Road | Between golf ground and road |


| 80 | SP-68 | SP-69 | 44 | Tea Garden- Road | Between golf ground and road |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 81 | SP-69 | SP-70 | 45 | Tea Garden- Road | Between golf ground and road |
| 82 | SP-70 | SP-71 | 43 | Tea Garden- Road | Between golf ground and road |
| 83 | SP-71 | SP-72 | 45 | Tea Garden- Road | Between golf ground and road |
| 84 | SP-72 | DP-9 | 47 | Tea Garden- Road | Between golf ground and road |
| 85 | DP-9 | SP-73 | 42 | Tea Garden- Road | Between golf ground and road |
| 86 | SP-73 | SP-74 | 49 | Paddy Fiel-Pvt Land |  |
| 87 | SP-74 | SP-75 | 45 | Paddy Fiel-Pvt Land |  |
| 88 | SP-75 | SP-76 | 48 | Paddy Fiel-Pvt Land |  |
| 89 | SP-76 | SP-77 | 46 | Paddy Fiel-Pvt Land |  |
| 90 | SP-77 | SP-78 | 49 | Paddy Fiel-Pvt Land |  |
| 91 | SP-78 | SP-79 | 47 | Tea Garden- Road |  |
| 92 | SP-79 | 4P-4 | 49 | Tea Garden- Road | Village Road / Residence |
| 93 | 4P-4 | SP-80 | 45 | Tea Garden- Road | Village Road / Residence |
| 94 | SP-80 | SP-81 | 47 | Govt Land-Road | Village Road / Residence |
| 95 | SP-81 | SP-82 | 49 | Govt Land-Road | Village Road / Residence |
| 96 | SP-82 | SP-83 | 47 | Govt Land-Road | Village Road / Residence |
| 97 | SP-83 | SP-84 | 50 | Govt Land-Road | Village Road / Residence |
| 98 | SP-84 | SP-85 | 50 | Govt Land-Road | Village Road / Residence |
| 99 | SP-85 | SP-86 | 48 | Govt Land-Road | Village Road / Residence |
| 100 | SP-86 | SP-87 | 48 | Govt Land-Road | Village Road / Residence |
| 101 | SP-87 | SP-88 | 47 | Govt Land-Road | Village Road / Residence |
| 102 | SP-88 | SP-89 | 49 | Govt Land-Road | Paddy Field |
| 103 | SP-89 | SP-90 | 45 | Govt Land-Road | Paddy Field |
| 104 | SP-90 | SP-91 | 47 | Govt Land-Road | Paddy Field |
| 105 | SP-91 | SP-92 | 46 | Govt Land-Road | Paddy Field |
| 106 | SP-92 | SP-93 | 49 | Govt Land-Road | Lake Area |
| 107 | SP-93 | SP-94 | 47 | Govt Land-Road | Lake Area |
| 108 | SP-94 | SP-95 | 48 | Govt Land-Road | Lake Area |
| 109 | SP-95 | SP-96 | 50 | Govt Land-Road | Lake Area |
| 110 | SP-96 | SP-97 | 49 | Govt Land-Road | Lake Area |
| 111 | SP-97 | DP-10 | 47 | Govt Land-Road | Lake Area |
| 112 | DP-10 | SP-98 | 48 | Govt Land-Road | Brick factory area |
| 113 | SP-98 | SP-99 | 49 | Govt Land-Road | Brick factory area |
| 114 | SP-99 | SP-100 | 50 | Govt Land-Road | Brick factory area |
| 115 | SP-100 | SP-101 | 50 | Govt Land-Road |  |
| 116 | SP-101 | SP-102 | 49 | Govt Land-Road |  |
| 117 | SP-102 | SP-103 | 42 | Govt Land-Road |  |
| 118 | SP-103 | SP-104 | 43 | Govt Land-Road |  |
| 119 | SP-104 | 4P-5 | 42 | Govt Land-Road |  |
| 120 | 4P-5 | SP-105 | 38 | Govt Land-Road | this route should be changed as per requirements |
| 121 | SP-105 | SP-106 | 43 | Govt Land-Road |  |
| 122 | SP-106 | 4P-6 | 44 | Govt Land-Road |  |
| 123 | 4P-6 | SP-107 | 47 | Govt Land-Road |  |


| 124 | SP-107 | SP-108 | 42 | Govt Land-Road |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 125 | SP-108 | SP-109 | 46 | Govt Land-Road |  |
| 126 | SP-109 | SP-110 | 47 | Paddy Fiel-Pvt Land |  |
| 127 | SP-110 | SP-111 | 47 | Paddy Fiel-Pvt Land |  |
| 128 | SP-111 | SP-112 | 49 | Paddy Fiel-Pvt Land |  |
| 129 | SP-112 | SP-113 | 44 | Paddy Fiel-Pvt Land |  |
| 130 | SP-113 | DP-11 | 43 | Paddy Fiel-Pvt Land |  |
| 131 | DP-11 | SP-114 | 43 | Paddy Fiel-Pvt Land |  |
| 132 | SP-114 | SP-115 | 42 | Paddy Fiel-Pvt Land |  |
| 133 | SP-115 | 4P-7 | 40 | Paddy Fiel-Pvt Land |  |
| 134 | 4P-7 | SP-116 | 39 | Paddy Fiel-Pvt Land |  |
| 135 | SP-116 | SP-117 | 44 | Proposed NH | Along with Left side of NH/Paddy Field |
| 136 | SP-117 | SP-118 | 48 | Proposed NH | Along with Left side of NH/Paddy Field |
| 137 | SP-118 | SP-119 | 50 | Proposed NH | Along with Left side of NH/Paddy Field |
| 138 | SP-119 | SP-120 | 49 | Proposed NH | Along with Left side of NH/Paddy Field |
| 139 | SP-120 | SP-121 | 50 | Proposed NH | Along with Left side of NH/Paddy Field |
| 140 | SP-121 | SP-122 | 50 | Proposed NH | Along with Left side of NH/Paddy Field |
| 141 | SP-122 | SP-123 | 50 | Proposed NH | Along with Left side of NH/Paddy Field |
| 142 | SP-123 | SP-124 | 49 | Proposed NH | Along with Left side of NH/Paddy Field |
| 143 | SP-124 | SP-125 | 44 | Proposed NH | Along with Left side of NH/Paddy Field |
| 144 | SP-125 | SP-126 | 45 | Proposed NH | Along with Left side of NH/Paddy Field |
| 145 | SP-126 | DP-12 | 42 | Proposed NH | Along with Left side of NH/Paddy Field |
| 146 | DP-12 | SP-127 | 41 | Proposed NH | Along with Left side of NH/Paddy Field |
| 147 | SP-127 | SP-128 | 50 | Proposed NH | Along with Left side of NH/Paddy Field |
| 148 | SP-128 | SP-129 | 50 | Proposed NH | Along with Left side of NH/Paddy Field |
| 149 | SP-129 | SP-130 | 50 | Proposed NH | Along with Left side of NH/Paddy Field |
| 150 | SP-130 | SP-131 | 45 | Proposed NH | Along with Left side of NH/Paddy Field |
| 151 | SP-131 | SP-132 | 44 | Proposed NH | Along with Left side of NH/Paddy Field |
| 152 | SP-132 | DP-13 | 47 | Proposed NH | Along with Left side of NH/Paddy Field |
| 153 | DP-13 | SP-133 | 47 | Proposed NH | Along with Left side of NH/Paddy Field |


| 154 | SP-133 | SP-134 | 39 | Proposed NH | Along with Left side of NH/Paddy Field |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 155 | SP-134 | SP-135 | 43 | Proposed NH | Along with Left side of NH/Paddy Field |
| 156 | SP-135 | SP-136 | 40 | Proposed NH | Along with Left side of NH/Paddy Field |
| 157 | SP-136 | SP-137 | 43 | Proposed NH | Along with Left side of NH/Paddy Field |
| 158 | SP-137 | DP-14 | 39 | Proposed NH | Along with Left side of NH/Paddy Field |
| 159 | DP-14 | SP-138 | 37 | Proposed NH | Along with Left side of NH/Paddy Field |
| 160 | SP-138 | SP-139 | 46 | Proposed NH | Along with Left side of NH/Paddy Field |
| 161 | SP-139 | SP-140 | 46 | Proposed NH | Along with Left side of NH/Paddy Field |
| 162 | SP-140 | SP-141 | 48 | Proposed NH | Along with Left side of NH/Paddy Field |
| 163 | SP-141 | SP-142 | 37 | Proposed NH | Along with Left side of NH/Paddy Field |
| 164 | SP-142 | SP-143 | 40 | Proposed NH | Along with Left side of NH/Paddy Field |
| 165 | SP-143 | SP-144 | 45 | Proposed NH | Along with Left side of NH/Paddy Field |
| 166 | SP-144 | SP-145 | 47 | Proposed NH | Along with Left side of NH/Paddy Field |
| 167 | SP-145 | SP-146 | 49 | Proposed NH | Along with Left side of NH/Paddy Field |
| 168 | SP-146 | SP-147 | 47 | Proposed NH | Along with Left side of NH/Paddy Field |
| 169 | SP-147 | SP-148 | 48 | Proposed NH | Along with Left side of NH/Paddy Field |
| 170 | SP-148 | SP-149 | 45 | Proposed NH | Along with Left side of NH/Paddy Field |
| 171 | SP-149 | SP-150 | 44 | Proposed NH | Along with Left side of NH/Paddy Field |
| 172 | SP-150 | SP-151 | 34 | Proposed NH | Along with Left side of NH/Paddy Field |
| 173 | SP-151 | SP-152 | 49 | Proposed NH | Along with Left side of NH/Paddy Field |
| 174 | SP-152 | SP-153 | 43 | Proposed NH | Along with Left side of NH/Paddy Field |
| 175 | SP-153 | SP-154 | 49 | Proposed NH | Along with Left side of NH/Paddy Field |
| 176 | SP-154 | SP-155 | 44 | Proposed NH | Along with Left side of NH/Paddy Field |
| 177 | SP-155 | DP-15 | 49 | Proposed NH | Along with Left side of NH/Paddy Field |
| 178 | DP-15 | SP-156 | 43 | Proposed NH | Along with Left side of NH/Paddy Field |


| 179 | SP-156 | SP-157 | 36 | Proposed NH | Along with Left side of <br> NH/Paddy Field |
| :--- | :--- | :--- | :--- | :--- | :--- |
| 180 | SP-157 | SP-158 | 49 | Proposed NH | Along with Left side of <br> NH/Paddy Field |
| 181 | SP-158 | SP-159 | 47 | Proposed NH | Along with Left side of <br> NH/Paddy Field |
| 182 | SP-159 | SP-160 | 50 | Proposed NH | Along with Left side of <br> NH/Paddy Field |
| 183 | SP-160 | SP-161 | 47 | Proposed NH | Along with Left side of <br> NH/Paddy Field |
| 184 | SP-161 | DP-16 | 45 | Proposed NH | Along with Left side of <br> NH/Paddy Field |
| 185 | DP-16 | SP-162 | 49 | Proposed NH | Along with Left side of <br> NH/Paddy Field |
| 186 | SP-162 | SP-163 | 41 | Proposed NH | Along with Left side of <br> NH/Paddy Field |
| 187 | SP-163 | SP-164 | 49 | Proposed NH | Along with Left side of <br> NH/Paddy Field |
| 188 | SP-164 | SP-165 | 50 | Proposed NH | Along with Left side of <br> NH/Paddy Field |
| 192 | SP-19 | SP-176 | 47 | SP-173 | SP-174 |
| 189 | SP-165 | SP-17 | 49 | 49 | Proposed NH | | SP-175 |
| :--- |


| 204 | SP-177 | SP-178 | 49 | Proposed NH | Along with Left side of $\mathrm{NH} /$ Residence |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 205 | SP-178 | SP-179 | 47 | Proposed NH | Along with Left side of $\mathrm{NH} /$ Residence |
| 206 | SP-179 | SP-180 | 50 | Proposed NH | Along with Left side of NH/Residence |
| 207 | SP-180 | SP-181 | 47 | Proposed NH | Along with Left side of $\mathrm{NH} /$ Residence |
| 208 | SP-181 | SP-182 | 45 | Proposed NH | Along with Left side of NH/Residence |
| 209 | SP-182 | SP-183 | 37 | Proposed NH | Along with Left side of NH/Paddy Field |
| 210 | SP-183 | SP-184 | 47 | Proposed NH | Along with Left side of NH/Paddy Field |
| 211 | SP-184 | SP-185 | 45 | Proposed NH | Along with Left side of NH/Paddy Field |
| 212 | SP-185 | SP-186 | 50 | Proposed NH | Along with Left side of NH/Paddy Field |
| 213 | SP-186 | DP-20 | 45 | Proposed NH | Along with Left side of NH/Paddy Field |
| 214 | DP-20 | SP-187 | 32 | Proposed NH | NH Crossing / UG CABLE |
| 215 | SP-187 | SP-188 | 47 | Paddy Fiel-Pvt Land | Paddy Field |
| 216 | SP-188 | SP-189 | 47 | Paddy Fiel-Pvt Land | Paddy Field |
| 217 | SP-189 | SP-190 | 48 | Paddy Fiel-Pvt Land | Paddy Field |
| 218 | SP-190 | SP-191 | 47 | Paddy Fiel-Pvt Land | Paddy Field |
| 219 | SP-191 | SP-192 | 34 | Paddy Fiel-Pvt Land | Paddy Field |
| 220 | SP-192 | SP-193 | 36 | Paddy Fiel-Pvt Land | Paddy Field |
| 221 | SP-193 | SP-194 | 49 | Paddy Fiel-Pvt Land | Paddy Field |
| 222 | SP-194 | SP-195 | 50 | Paddy Fiel-Pvt Land | Paddy Field |
| 223 | SP-195 | SP-196 | 49 | Paddy Fiel-Pvt Land | Paddy Field |
| 224 | SP-196 | SP-197 | 45 | Paddy Fiel-Pvt Land | Paddy Field |
| 225 | SP-197 | SP-198 | 49 | Paddy Fiel-Pvt Land | Paddy Field |
| 226 | SP-198 | SP-199 | 50 | Paddy Fiel-Pvt Land | Paddy Field |
| 227 | SP-199 | SP-200 | 49 | Paddy Fiel-Pvt Land | Paddy Field |
| 228 | SP-200 | SP-201 | 50 | Paddy Fiel-Pvt Land | Paddy Field |
| 229 | SP-201 | SP-202 | 42 | Govt Land-Road | Paddy Field |
| 230 | SP-202 | SP-203 | 23 | Govt Land-Road | Paddy Field |
| 231 | SP-203 | DP-21 | 33 | Govt Land-Road | this route should be changed |
| 232 | DP-21 | DP-22 | 37 | Govt Land-Road | as APDCL recomndation |
| 233 | DP-22 | DP-23 | 17 | Govt Land-Road |  |
| 234 | DP-23 | 4P-8 | 46 | Govt Land-Road |  |
| 235 | 4P-8 | SP-204 | 43 | Govt Land-Road |  |
| 236 | SP-204 | 4P-9 | 50 | Govt Land-Road |  |
| 237 | 4P-9 | 4P-10 | 49 | Railway \& NH Crossing | UG |
| 238 | 4P-10 | SP-205 | 38 | Paddy Fiel-Pvt Land |  |
| 239 | SP-205 | SP-206 | 45 | Paddy Fiel-Pvt Land |  |
| 240 | SP-206 | SP-207 | 49 | Paddy Fiel-Pvt Land |  |


| 241 | SP-207 | DP-24 | 46 | Paddy Fiel-Pvt Land |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 242 | DP-24 | SP-208 | 47 | Tea Garden- Road | Between Tea Garden- Road |
| 243 | SP-208 | SP-209 | 45 | Tea Garden- Road | Between Tea Garden- Road |
| 244 | SP-209 | SP-210 | 47 | Tea Garden- Road | Between Tea Garden- Road |
| 245 | SP-210 | SP-211 | 48 | Tea Garden- Road | Between Tea Garden- Road |
| 246 | SP-211 | SP-212 | 46 | Tea Garden- Road | Between Tea Garden- Road |
| 247 | SP-212 | SP-213 | 49 | Tea Garden- Road | Between Tea Garden- Road |
| 248 | SP-213 | DP-25 | 37 | Tea Garden- Road | Between Tea Garden- Road |
| 249 | DP-25 | SP-214 | 38 | Tea Garden- Road | Between Tea Garden- Road |
| 250 | SP-214 | SP-215 | 47 | Tea Garden- Road | Between Tea Garden- Road |
| 251 | SP-215 | SP-216 | 50 | Tea Garden- Road | Between Tea Garden- Road |
| 252 | SP-216 | SP-217 | 48 | Tea Garden- Road | Between Tea Garden- Road |
| 253 | SP-217 | SP-218 | 48 | Tea Garden- Road | Between Tea Garden- Road |
| 254 | SP-218 | SP-219 | 45 | Tea Garden- Road | Between Tea Garden- Road |
| 255 | SP-219 | DP-26 | 35 | Tea Garden- Road | Between Tea Garden- Road |
| 256 | DP-26 | DP-27 | 40 | Tea Garden- Road | Between Tea Garden- Road |
| 257 | DP-27 | SP-220 | 38 | Tea Garden- Road | Between Tea Garden- Road |
| 258 | SP-220 | SP-221 | 49 | Tea Garden- Road | Between Tea Garden- Road |
| 259 | SP-221 | SP-222 | 48 | Tea Garden- Road | Between Tea Garden- Road |
| 260 | SP-222 | SP-223 | 50 | Tea Garden- Road | Between Tea Garden- Road |
| 261 | SP-223 | SP-224 | 49 | Tea Garden- Road | Between Tea Garden- Road |
| 262 | SP-224 | SP-225 | 50 | Tea Garden- Road | Between Tea Garden- Road |
| 263 | SP-225 | SP-226 | 49 | Tea Garden- Road | Between Tea Garden- Road |
| 264 | SP-226 | SP-227 | 48 | Tea Garden- Road | Between Tea Garden- Road |
| 265 | SP-227 | DP-28 | 45 | Tea Garden- Road | Between Tea Garden- Road |
| 266 | DP-28 | 4P-11 | 50 | State Road Crossing | Both side of the road |
| 267 | 4P-11 | SP-228 | 34 | Pvt Land | Right side of State Road/ residence |
| 268 | SP-228 | SP-229 | 48 | Pvt Land | Right side of State Road/ residence |
| 269 | SP-229 | SP-230 | 39 | Pvt Land | Right side of State Road/ residence |
| 270 | SP-230 | SP-231 | 40 | Govt Land-Road | Right side of State Road |
| 271 | SP-231 | SP-232 | 40 | Govt Land-Road | Right side of State Road |
| 272 | SP-232 | DP-29 | 49 | Govt Land-Road | Right side of State Road |
| 273 | DP-29 | SP-233 | 45 | Govt Land-Road | Right side of State Road |
| 274 | SP-233 | SP-234 | 49 | Govt Land-Road | Right side of State Road |
| 275 | SP-234 | SP-235 | 47 | Govt Land-Road | Right side of State Road |
| 276 | SP-235 | DP-30 | 44 | Govt Land-Road | Right side of State Road |
| 277 | DP-30 | SP-236 | 45 | Govt Land-Road | Right side of State Road |
| 278 | SP-236 | SP-237 | 45 | Govt Land-Road | Right side of State Road |
| 279 | SP-237 | DP-31 | 45 | Nallah Crossing (Sessa River Crossing) | River area |
| 280 | DP-31 | SP-238 | 50 | Govt Land-Road | River area |
| 281 | SP-238 | SP-239 | 50 | Govt Land-Road | Paddy Field |


| 282 | SP-239 | SP-240 | 48 | Govt Land-Road | Paddy Field/ side of state road |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 283 | SP-240 | SP-241 | 48 | Govt Land-Road | Paddy Field/ side of state road |
| 284 | SP-241 | SP-242 | 47 | Govt Land-Road | Paddy Field/ side of state road |
| 285 | SP-242 | DP-32 | 35 | Govt Land-Road | Paddy Field/ side of state road |
| 286 | DP-32 | SP-243 | 30 | Govt Land-Road | Paddy Field/ side of state road |
| 287 | SP-243 | SP-244 | 43 | Govt Land-Road | Paddy Field/ side of state road |
| 288 | SP-244 | SP-245 | 43 | Govt Land-Road | Paddy Field/ side of state road |
| 289 | SP-245 | SP-246 | 49 | Govt Land-Road | Paddy Field/ side of state road |
| 290 | SP-246 | SP-247 | 47 | Govt Land-Road | Paddy Field/ side of state road |
| 291 | SP-247 | 4P-12 | 49 | Govt Land-Road | Paddy Field/ side of state road |
| 292 | 4P-12 | SP-248 | 42 | Govt Land-Road | Paddy Field/ side of state road |
| 293 | SP-248 | SP-249 | 14 | Paddy Fiel-Pvt Land | Paddy Field |
| 294 | SP-249 | DP-33 | 35 | Paddy Fiel-Pvt Land | Paddy Field |
| 295 | DP-33 | DP-34 | 31 | Paddy Fiel-Pvt Land | Paddy Field |
| 296 | DP-34 | SP-250 | 47 | Paddy Fiel-Pvt Land | Paddy Field |
| 297 | SP-250 | SP-251 | 49 | Paddy Fiel-Pvt Land | Paddy Field |
| 298 | SP-251 | SP-252 | 48 | Paddy Fiel-Pvt Land | Paddy Field |
| 299 | SP-252 | DP-35 | 38 | Paddy Fiel-Pvt Land | Paddy Field |
| 300 | DP-35 | SP-253 | 31 | Paddy Fiel-Pvt Land | Village Road / Residence |
| 301 | SP-253 | DP-36 | 30 | Paddy Fiel-Pvt Land | Paddy Field |
| 302 | DP-36 | SP-254 | 37 | Paddy Fiel-Pvt Land | Paddy Field |
| 303 | SP-254 | SP-255 | 39 | Paddy Fiel-Pvt Land | Paddy Field |
| 304 | SP-255 | DP-37 | 32 | Paddy Fiel-Pvt Land | Paddy Field |
| 305 | DP-37 | SP-256 | 25 | Paddy Fiel-Pvt Land | Paddy Field |
| 306 | SP-256 | SP-257 | 49 | Paddy Fiel-Pvt Land | Paddy Field |
| 307 | SP-257 | SP-258 | 48 | Paddy Fiel-Pvt Land | Paddy Field |
| 308 | SP-258 | SP-259 | 48 | Paddy Fiel-Pvt Land | Paddy Field |
| 309 | SP-259 | SP-260 | 48 | Paddy Fiel-Pvt Land | Paddy Field |
| 310 | SP-260 | SP-261 | 48 | Paddy Fiel-Pvt Land | Paddy Field |
| 311 | SP-261 | SP-262 | 43 | Paddy Fiel-Pvt Land | Paddy Field |
| 312 | SP-262 | SP-263 | 43 | Paddy Fiel-Pvt Land | Paddy Field |
| 313 | SP-263 | 4P-13 | 42 | Paddy Fiel-Pvt Land | Paddy Field |
| 314 | 4P-13 | SP-264 | 40 | Paddy Fiel-Pvt Land | Paddy Field/ side of state road |
| 315 | SP-264 | 4P-14 | 45 | Paddy Fiel-Pvt Land | Paddy Field/ side of state road |
| 316 | 4P-14 | SP-265 | 41 | Paddy Fiel-Pvt Land | Paddy Field/ side of state road |
| 317 | SP-265 | SP-266 | 48 | Govt Land-Road | Paddy Field/ side of state road |
| 318 | SP-266 | SP-267 | 48 | Govt Land-Road | Paddy Field/ side of state road |
| 319 | SP-267 | SP-268 | 45 | Govt Land-Road | Paddy Field/ side of state road |
| 320 | SP-268 | SP-269 | 48 | Govt Land-Road | Paddy Field/ side of state road |
| 321 | SP-269 | SP-270 | 50 | Govt Land-Road | Paddy Field/ side of state road |
| 322 | SP-270 | SP-271 | 45 | Govt Land-Road | Paddy Field/ side of state road |
| 323 | SP-271 | SP-272 | 49 | Govt Land-Road | Paddy Field/ side of state road |
| 324 | SP-272 | SP-273 | 46 | Govt Land-Road | Paddy Field/ side of state road |
| 325 | SP-273 | SP-274 | 46 | Govt Land-Road | Paddy Field/ side of state road |


| 326 | SP-274 | SP-275 | 47 | Govt Land-Road | Paddy Field/ side of state road |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 327 | SP-275 | SP-276 | 46 | Govt Land-Road | Paddy Field/ side of state road |
| 328 | SP-276 | SP-277 | 43 | Govt Land-Road | Paddy Field/ side of state road |
| 329 | SP-277 | SP-278 | 40 | Govt Land-Road | Paddy Field/ side of state road |
| 330 | SP-278 | SP-279 | 44 | Govt Land-Road | Paddy Field/ side of state road |
| 331 | SP-279 | DP-38 | 48 | Govt Land-Road | Paddy Field/ side of state road |
| 332 | DP-38 | SP-280 | 49 | Govt Land-Road | Paddy Field/ side of state road |
| 333 | SP-280 | SP-281 | 36 | Govt Land-Road | Paddy Field/ side of state road |
| 334 | SP-281 | SP-282 | 43 | Govt Land-Road | Paddy Field/ side of state road |
| 335 | SP-282 | SP-283 | 42 | Govt Land-Road | Paddy Field/ side of state road |
| 336 | SP-283 | SP-284 | 49 | Govt Land-Road | Paddy Field/ side of state road |
| 337 | SP-284 | SP-285 | 46 | Govt Land-Road | Paddy Field/ side of state road |
| 338 | SP-285 | SP-286 | 49 | Govt Land-Road | Paddy Field/ side of state road |
| 339 | SP-286 | SP-287 | 47 | Govt Land-Road | Paddy Field/ side of state road |
| 340 | SP-287 | SP-288 | 44 | Govt Land-Road | Paddy Field/ side of state road |
| 341 | SP-288 | SP-289 | 44 | Govt Land-Road | Paddy Field/ side of state road |
| 342 | SP-289 | SP-290 | 46 | Govt Land-Road | Paddy Field/ side of state road |
| 343 | SP-290 | SP-291 | 47 | Govt Land-Road | Paddy Field/ side of state road |
| 344 | SP-291 | SP-292 | 50 | Govt Land-Road | Paddy Field/ side of state road |
| 345 | SP-292 | SP-293 | 51 | Govt Land-Road | Paddy Field/ side of state road |
| 346 | SP-293 | SP-294 | 45 | Govt Land-Road | Paddy Field/ side of state road |
| 347 | SP-294 | SP-295 | 50 | Govt Land-Road | Paddy Field/ side of state road |
| 348 | SP-295 | SP-296 | 50 | Govt Land-Road | Paddy Field/ side of state road |
| 349 | SP-296 | SP-297 | 49 | Govt Land-Road | Paddy Field/ side of state road |
| 350 | SP-297 | DP-39 | 51 | Govt Land-Road | Paddy Field/ side of state road |
| 351 | DP-39 | SP-298 | 50 | Govt Land-Road | Paddy Field/ side of state road |
| 352 | SP-298 | SP-299 | 50 | Govt Land-Road | Paddy Field/ side of state road |
| 353 | SP-299 | SP-300 | 50 | Govt Land-Road | Paddy Field/ side of state road |
| 354 | SP-300 | SP-301 | 50 | Govt Land-Road | Paddy Field/ side of state road |
| 355 | SP-301 | SP-302 | 49 | Govt Land-Road | Paddy Field/ side of state road |
| 356 | SP-302 | SP-303 | 47 | Govt Land-Road | Paddy Field/ side of state road |
| 357 | SP-303 | SP-304 | 49 | Govt Land-Road | Paddy Field/ side of state road |
| 358 | SP-304 | 4P-15 | 49 | Govt Land-Road | Paddy Field/ side of state road |
| 359 | 4P-15 | SP-305 | 44 | Govt Land-Road | Paddy Field/ side of state road |
| 360 | SP-305 | SP-306 | 50 | Paddy Fiel-Pvt Land | Paddy Field |
| 361 | SP-306 | SP-307 | 48 | Paddy Fiel-Pvt Land | Paddy Field |
| 362 | SP-307 | SP-308 | 50 | Paddy Fiel-Pvt Land | Paddy Field |
| 363 | SP-308 | SP-309 | 41 | Paddy Fiel-Pvt Land | Paddy Field |
| 364 | SP-309 | SP-310 | 40 | Paddy Fiel-Pvt Land | Paddy Field |
| 365 | SP-310 | SP-311 | 40 | Paddy Fiel-Pvt Land | Paddy Field |
| 366 | SP-311 | SP-312 | 48 | Paddy Fiel-Pvt Land | Paddy Field |
| 367 | SP-312 | SP-313 | 50 | Paddy Fiel-Pvt Land | Paddy Field |
| 368 | SP-313 | SP-314 | 50 | Paddy Fiel-Pvt Land | Paddy Field |
| 369 | SP-314 | SP-315 | 50 | Paddy Fiel-Pvt Land | Paddy Field |


| 370 | SP-315 | DP-40 | 47 | Paddy Fiel-Pvt Land | Paddy Field |
| :--- | :--- | :--- | :--- | :--- | :--- |
| 371 | DP-40 | SP-316 | 50 | Paddy Fiel-Pvt Land | Paddy Field |
| 372 | SP-316 | SP-317 | 45 | Paddy Fiel-Pvt Land | Paddy Field |
| 373 | SP-317 | SP-318 | 45 | Tea Garden- Road | Tea Garden- Road |
| 374 | SP-318 | SP-319 | 45 | Tea Garden- Road | Tea Garden- Road |
| 375 | SP-319 | SP-320 | 46 | Tea Garden- Road | Tea Garden- Road |
| 376 | SP-320 | SP-321 | 47 | Tea Garden- Road | Tea Garden- Road |
| 377 | SP-321 | 4P-16 | 45 | Tea Garden- Road | Tea Garden- Road |
| 378 | $4 P-16$ | GANTRY | $\mathbf{4 0}$ | Proposed Land for <br> 33/11KV Romai S/s |  |
|  |  |  | $\mathbf{1 7 2 7 7}$ |  |  |

Note : Pole Type, Span, No \& Qty may change as per site requirement and direction from PGCIL

Total location count- 379
Total Single Pole- 321
Total Double pole-40
Total 4 pole- 16
Total SP76 pole Location- 60

| Name of Work: |  | 33kV New Line from Existing 132kV/33kV Behiating Substation to 33/11kV Existing Bogibill Substation |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | ROUTE 1 |  |  |  |
| $\begin{aligned} & \text { SL } \\ & \text { NO } \end{aligned}$ | Pole <br> From | Pole To | Span <br> (Meter) | Recommendation | Description of Land | Nature of damage |
| 1 | GANTRY | FP-1 | 45 | SP64 | SUBSTATION Campus |  |
| 2 | FP-1 | SP-1 | 47 | SP64 | SUBSTATION Campus |  |
| 3 | SP-1 | SP-2 | 49 | SP64 | SUBSTATION Campus |  |
| 4 | SP-2 | FP-2 | 45 | SP64 | 33KV LINE CROSSING |  |
| 5 | FP-2 | SP-3 | 46 | SP64 | FIELD |  |
| 6 | SP-3 | SP-4 | 42 | SP64 | FIELD |  |
| 7 | SP-4 | SP-5 | 36 | SP64 | FIELD |  |
| 8 | SP-5 | SP-6 | 48 | SP76 | LOCAL ROAD CROSSING / 33KV CROSSING |  |
| 9 | SP-6 | SP-7 | 36 | SP64 | PADDY FIELD |  |
| 10 | SP-7 | SP-8 | 48 | SP64 | SIDE BY NEW NH |  |
| 11 | SP-8 | DP-1 | 48 | SP64 | SIDE BY NEW NH |  |
| 12 | DP-1 | SP-9 | 50 | SP64 | SIDE BY NEW NH |  |
| 13 | SP-9 | SP-10 | 50 | SP64 | SIDE BY NEW NH |  |
| 14 | SP-10 | DP-2 | 41 | SP64 | SIDE BY NEW NH |  |
| 15 | DP-2 | SP-11 | 50 | SP64 | SIDE BY NEW NH |  |
| 16 | SP-11 | SP-12 | 48 | SP64 | TEA GARDEN |  |
| 17 | SP-12 | SP-13 | 47 | SP64 | TEA GARDEN |  |
| 18 | SP-13 | SP-14 | 49 | SP64 | TEA GARDEN |  |
| 19 | SP-14 | SP-15 | 46 | SP64 | TEA GARDEN |  |
| 20 | SP-15 | SP-16 | 50 | SP64 | TEA GARDEN |  |
| 21 | SP-16 | SP-17 | 50 | SP64 | TEA GARDEN |  |
| 22 | SP-17 | SP-18 | 40 | SP64 | TEA GARDEN |  |
| 23 | SP-18 | FP-3 | 33 | SP64 | TEA GARDEN |  |
| 24 | FP-3 | DP-3 | 33 | SP64 | TEA GARDEN |  |
| 25 | DP-3 | FP-4 | 48 | SP64 | TEA GARDEN |  |
| 26 | FP-4 | SP-19 | 38 | SP64 | LEFT SIDE BY NEW NH |  |
| 27 | SP-19 | SP-20 | 44 | SP64 | LEFT SIDE BY NEW NH |  |
| 28 | SP-20 | SP-21 | 48 | SP64 | LEFT SIDE BY NEW NH |  |
| 29 | SP-21 | SP-22 | 41 | SP64 | LEFT SIDE BY NEW NH |  |
| 30 | SP-22 | SP-23 | 43 | SP64 | LEFT SIDE BY NEW NH |  |
| 31 | SP-23 | SP-24 | 48 | SP64 | LEFT SIDE BY NEW NH |  |
| 32 | SP-24 | SP-25 | 45 | SP76 | 33 KV CROSSING |  |
| 33 | SP-25 | SP-26 | 38 | SP64 | LEFT SIDE BY NEW NH |  |
| 34 | SP-26 | SP-27 | 37 | SP64 | LEFT SIDE BY NEW NH |  |
| 35 | SP-27 | SP-28 | 47 | SP64 | LEFT SIDE BY NEW NH |  |
| 36 | SP-28 | SP-29 | 47 | SP64 | LEFT SIDE BY NEW NH |  |
| 37 | SP-29 | SP-30 | 48 | SP64 | LEFT SIDE BY NEW NH |  |
| 38 | SP-30 | SP-31 | 48 | SP64 | LEFT SIDE BY NEW NH |  |


| 39 | SP-31 | SP-32 | 48 | SP64 | LEFT SIDE BY NEW NH |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 40 | SP-32 | SP-33 | 43 | SP64 | LEFT SIDE BY NEW NH |  |
| 41 | SP-33 | DP-4 | 49 | SP64 | LEFT SIDE BY NEW NH |  |
| 42 | DP-4 | SP-34 | 48 | SP64 | LEFT SIDE BY NEW NH |  |
| 43 | SP-34 | SP-35 | 46 | SP64 | LEFT SIDE BY NEW NH |  |
| 44 | SP-35 | SP-36 | 50 | SP64 | LEFT SIDE BY NEW NH |  |
| 45 | SP-36 | DP-5 | 31 | SP64 | LEFT SIDE BY NEW NH |  |
| 46 | DP-5 | SP-37 | 41 | SP64 | LEFT SIDE BY NEW NH |  |
| 47 | SP-37 | SP-38 | 26 | SP64 | LEFT SIDE BY NEW NH |  |
| 48 | SP-38 | SP-39 | 29 | SP64 | LEFT SIDE BY NEW NH |  |
| 49 | SP-39 | SP-40 | 44 | SP64 | LEFT SIDE BY NEW NH |  |
| 50 | SP-40 | SP-41 | 46 | SP64 | LEFT SIDE BY NEW NH |  |
| 51 | SP-41 | SP-42 | 45 | SP64 | LEFT SIDE BY NEW NH |  |
| 52 | SP-42 | SP-43 | 44 | SP64 | LEFT SIDE BY NEW NH |  |
| 53 | SP-43 | SP-44 | 44 | SP64 | LEFT SIDE BY NEW NH |  |
| 54 | SP-44 | SP-45 | 39 | SP64 | LEFT SIDE BY NEW NH |  |
| 55 | SP-45 | SP-46 | 49 | SP64 | LEFT SIDE BY NEW NH |  |
| 56 | SP-46 | SP-47 | 46 | SP64 | LEFT SIDE BY NEW NH |  |
| 57 | SP-47 | SP-48 | 45 | SP64 | LEFT SIDE BY NEW NH |  |
| 58 | SP-48 | SP-49 | 49 | SP64 | TREES | Tree triming / Cutting |
| 59 | SP-49 | SP-50 | 49 | SP64 | TREES | Tree triming / Cutting |
| 60 | SP-50 | DP-6 | 49 | SP64 | TREES | Tree triming / Cutting |
| 61 | DP-6 | DP-7 | 48 | SP64 | LEFT SIDE BY NEW NH |  |
| 62 | DP-7 | SP-51 | 47 | SP64 | TREES | Tree triming / Cutting |
| 63 | SP-51 | SP-52 | 45 | SP64 | MARKET \& RESIDENT AREA |  |
| 64 | SP-52 | SP-53 | 48 | SP64 | MARKET \& RESIDENT AREA |  |
| 65 | SP-53 | SP-54 | 49 | SP64 | MARKET \& RESIDENT AREA |  |
| 66 | SP-54 | SP-55 | 48 | SP64 | MARKET \& RESIDENT AREA |  |
| 67 | SP-55 | SP-56 | 50 | SP64 | MARKET \& RESIDENT AREA |  |
| 68 | SP-56 | DP-8 | 48 | SP64 | MARKET \& RESIDENT AREA |  |
| 69 | DP-8 | SP-57 | 49 | SP64 | MARKET \& RESIDENT AREA |  |
| 70 | SP-57 | SP-58 | 36 | SP64 | MARKET \& RESIDENT AREA |  |
| 71 | SP-58 | DP-9 | 42 | SP64 | MARKET \& RESIDENT AREA |  |
| 72 | DP-9 | SP-59 | 50 | SP64 | MARKET \& RESIDENT AREA |  |


| 73 | SP-59 | SP-60 | 46 | SP64 | MARKET \& RESIDENT <br> AREA |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 74 | SP-60 | SP-61 | 46 | SP64 | MARKET \& RESIDENT <br> AREA |  |
| 75 | SP-61 | SP-62 | 35 | SP64 | MARKET \& RESIDENT <br> AREA |  |
| 76 | SP-62 | SP-63 | 46 | SP64 | MARKET \& RESIDENT <br> AREA |  |
| 77 | SP-63 | SP-64 | 47 | SP64 | MARKET \& RESIDENT <br> AREA |  |
| 78 | SP-64 | SP-65 | 46 | SP64 | MARKET \& RESIDENT <br> AREA |  |
| 79 | SP-65 | SP-66 | 50 | SP64 | MARKET \& RESIDENT <br> AREA |  |
| 80 | SP-66 | SP-67 | 43 | SP64 | MARKET \& RESIDENT <br> AREA |  |
| 91 | SP-67 | SP-68 | 43 | SP64 | MARKET \& RESIDENT <br> AREA |  |
| 98 | SP-83 | SP-84 | 42 | SP-82 | SP-83 | 49 |
| 98 | SP-68 | SP-69 | 43 | SP-85 | 45 | SP |


| 99 | SP-85 | SP-86 | 50 | SP64 | MARKET \& RESIDENT <br> AREA |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 100 | SP-86 | FP-5 | 47 | SP64 | MARKET \& RESIDENT <br> AREA |  |
| 101 | FP-5 | FP-6 | 46 | UG CABLE | NEW BYPASS <br> CROSSING | TEA GARDEN |
| 102 | FP-6 | SP-87 | 46 | SP64 | Tree triming / <br> Cutting |  |
| 103 | SP-87 | SP-88 | 48 | SP64 | TEA GARDEN | Tree triming / <br> Cutting |
| 104 | SP-88 | SP-89 | 49 | SP64 | TEA GARDEN | Tree triming / <br> Cutting |
| 105 | SP-89 | SP-90 | 48 | SP64 | TEA GARDEN | Tree triming / <br> Cutting |
| 106 | SP-90 | SP-91 | 46 | SP64 | TEA GARDEN | Tree triming / <br> Cutting |
| 107 | SP-91 | SP-92 | 48 | SP64 | SPA | Tree triming / <br> Cutting |
| 123 | SP-105 | SP-106 | 45 | SP-106 | SP-107 | 45 |
| SP-92 | SP-93 | 48 | SP-101 | SP-102 | 49 | SP64 |


| 124 | SP-107 | SP-108 | 41 | SP64 | TEA GARDEN | Tree triming / Cutting |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 125 | SP-108 | SP-109 | 46 | SP64 | TEA GARDEN | Tree triming / Cutting |
| 126 | SP-109 | SP-110 | 45 | SP64 | TEA GARDEN | Tree triming / Cutting |
| 127 | SP-110 | SP-111 | 46 | SP64 | TEA GARDEN | Tree triming / Cutting |
| 128 | SP-111 | SP-112 | 41 | SP64 | TEA GARDEN | Tree triming / Cutting |
| 129 | SP-112 | FP-8 | 43 | UG CABLE | AT ROAD CROSSING | Tree triming / Cutting |
| 130 | FP-8 | SP-113 | 48 | SP64 | TEA GARDEN | Tree triming / Cutting |
| 131 | SP-113 | SP-114 | 46 | SP64 | TEA GARDEN | Tree triming / Cutting |
| 132 | SP-114 | SP-115 | 49 | SP64 | TEA GARDEN | Tree triming / Cutting |
| 133 | SP-115 | DP-10 | 47 | SP64 | TEA GARDEN | Tree triming / Cutting |
| 134 | DP-10 | SP-116 | 50 | SP64 | TEA GARDEN | Tree triming / Cutting |
| 135 | SP-116 | SP-117 | 46 | SP64 | TEA GARDEN | Tree triming / Cutting |
| 136 | SP-117 | SP-118 | 50 | SP64 | TEA GARDEN | Tree triming / Cutting |
| 137 | SP-118 | DP-11 | 46 | SP64 | TEA GARDEN | Tree triming / Cutting |
| 138 | DP-11 | SP-119 | 45 | SP64 | TEA GARDEN | Tree triming / Cutting |
| 139 | SP-119 | SP-120 | 45 | SP64 | TEA GARDEN | Tree triming / Cutting |
| 140 | SP-120 | SP-121 | 46 | SP64 | TEA GARDEN | Tree triming / Cutting |
| 141 | SP-121 | SP-122 | 46 | SP64 | TEA GARDEN | Tree triming / Cutting |
| 142 | SP-122 | SP-123 | 39 | SP64 | TEA GARDEN | Tree triming / Cutting |
| 143 | SP-123 | FP-9 | 40 | SP64 | TEA GARDEN | Tree triming / Cutting |
| 144 | FP-9 | SP-124 | 46 | SP64 | TEA GARDEN | Tree triming / Cutting |
| 145 | SP-124 | SP-125 | 46 | SP64 | TEA GARDEN | Tree triming / Cutting |
| 146 | SP-125 | SP-126 | 50 | SP64 | TEA GARDEN | Tree triming / Cutting |
| 147 | SP-126 | SP-127 | 47 | SP64 | TEA GARDEN | Tree triming / Cutting |
| 148 | SP-127 | SP-128 | 49 | SP64 | TEA GARDEN | Tree triming / Cutting |


| 149 | SP-128 | SP-129 | 48 | SP64 | TEA GARDEN | Tree triming / <br> Cutting |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 150 | SP-129 | SP-130 | 49 | SP64 | Tree triming / <br> Cutting |  |
| 151 | SP-130 | SP-131 | 40 | SP64 | TEA GARDEN | Tree triming / <br> Cutting |
| 152 | SP-131 | FP-10 | 44 | SP76 | TEA GARDEN |  |
| 153 | FP-10 | SP-132 | 44 | SP64 | TEA GARDEN |  |
| 154 | SP-132 | SP-133 | 46 | SP64 | TEA GARDEN |  |
| 155 | SP-133 | SP-134 | 50 | SP64 | TEA GARDEN |  |
| 156 | SP-134 | SP-135 | 45 | SP64 | TEA GARDEN |  |
| 157 | SP-135 | FP-11 | 45 | SP76 | TEA GARDEN |  |
| 158 | FP-11 | SP-136 | 45 | SP76 | TEA GARDEN |  |
| 159 | SP-136 | SP-137 | 50 | SP76 | 11 KV LINE CROSSING |  |
| 160 | SP-137 | SP-138 | 46 | SP76 | TREES(labour colony) | Dense <br> residential area |
| 161 | SP-138 | DP-12 | 50 | SP76 | Tree triming / |  |
| 182 | SP-150 | SP-151 | 39 | SP64 | Tree triming / <br> Cutting |  |
| 162 | DP-12 | SP-139 | 40 | SP64 | Tree triming / |  |
| Cutting |  |  |  |  |  |  |

\(\left.\left.$$
\begin{array}{|l|l|l|l|l|l|l|}\hline 184 & \text { SP-152 } & \text { SP-153 } & 38 & \text { SP64 } & \text { TEA GARDEN } & \begin{array}{l}\text { Tree triming / } \\
\text { Cutting }\end{array} \\
\hline 185 & \text { SP-153 } & \text { SP-154 } & 50 & \text { SP64 } & \begin{array}{l}\text { Tree triming / } \\
\text { Cutting }\end{array} \\
\hline 186 & \text { SP-154 } & \text { SP-155 } & 45 & \text { SP64 } & \text { TEARDEN } & \begin{array}{l}\text { Tree triming / } \\
\text { Cutting }\end{array} \\
\hline 187 & \text { SP-155 } & \text { SP-156 } & 49 & \text { SP64 } & \text { TEA GARDEN } & \begin{array}{l}\text { Tree triming / } \\
\text { Cutting }\end{array} \\
\hline 188 & \text { SP-156 } & \text { SP-157 } & 45 & \text { SP64 } & \text { TEA GARDEN } & \begin{array}{l}\text { Tree triming / } \\
\text { Cutting }\end{array} \\
\hline 189 & \text { SP-157 } & \text { SP-158 } & 45 & \text { SP64 } & \text { TEA GARDEN } & \begin{array}{l}\text { Tree triming / } \\
\text { Cutting }\end{array} \\
\hline 190 & \text { SP-158 } & \text { SP-159 } & 46 & \text { SP64 } & \text { TEA GARDEN } & \begin{array}{l}\text { Tree triming / } \\
\text { Cutting }\end{array} \\
\hline 191 & \text { SP-159 } & \text { SP-160 } & 50 & \text { SP64 } & \text { SEA GARDEN } & \begin{array}{l}\text { Tree triming / } \\
\text { Cutting }\end{array} \\
\hline 192 & \text { SP-160 } & \text { SP-161 } & 47 & \text { SP64 } & \text { SP64 } & \text { TEA GARDEN }\end{array}
$$ $$
\begin{array}{l}\text { Tree triming / } \\
\text { Cutting }\end{array}
$$\right] \begin{array}{l}Tree triming / <br>

Cutting\end{array}\right]\)| TEA |
| :--- |


| 209 | SP-176 | SP-177 | 48 | SP64 | TEA GARDEN | Tree triming / <br> Cutting |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 210 | SP-177 | SP-178 | 46 | SP64 | Tree triming / <br> Cutting |  |
| 211 | SP-178 | SP-179 | 49 | SP64 | TEA GARDEN | Tree triming / <br> Cutting |
| 212 | SP-179 | SP-180 | 48 | SP64 | TEA GRDEN | Tree triming / <br> Cutting |
| 213 | SP-180 | SP-181 | 46 | SP64 | TEA GARDEN | Tree triming / <br> Cutting |
| 214 | SP-181 | DP-19 | 50 | SP64 | TEA GARDEN | Tree triming / <br> Cutting |
| 215 | DP-19 | SP-182 | 45 | SP64 | TEA GARDEN | Tree triming / <br> Cutting |
| 216 | SP-182 | SP-183 | 48 | SP64 | TEA GARDEN | Tree triming / <br> Cutting |
| 217 | SP-183 | SP-184 | 46 | SP64 | TEA GARDEN | Tree triming / <br> Cutting |
| 218 | SP-184 | SP-185 | 44 | SP64 | SPA | Tree triming / <br> Cutting |
| 232 | SP-198 | SP-199 | 48 | SP-199 | SP-200 | 40 |
| SP-197 | SP-198 | 45 | SP-185 | SP-186 | 50 | SP64 |


| 234 | SP-200 | DP-20 | 39 | SP64 | TEA GARDEN | Tree triming / Cutting |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 235 | DP-20 | DP-21 | 43 | SP76 | 11KV \& ROAD CROSSING | Tree triming / Cutting |
| 236 | DP-21 | SP-201 | 41 | SP64 | TEA GARDEN | Tree triming / Cutting |
| 237 | SP-201 | SP-202 | 48 | SP64 | TEA GARDEN | Tree triming / Cutting |
| 238 | SP-202 | SP-203 | 44 | SP64 | TEA GARDEN | Tree triming / Cutting |
| 239 | SP-203 | SP-204 | 45 | SP64 | TEA GARDEN | Tree triming / Cutting |
| 240 | SP-204 | SP-205 | 47 | SP64 | TEA GARDEN | Tree triming / Cutting |
| 241 | SP-205 | SP-206 | 47 | SP64 | TEA GARDEN | Tree triming / Cutting |
| 242 | SP-206 | SP-207 | 45 | SP64 | TEA GARDEN | Tree triming / Cutting |
| 243 | SP-207 | SP-208 | 40 | SP64 | TEA GARDEN | Tree triming / Cutting |
| 244 | SP-208 | SP-209 | 41 | SP64 | TEA GARDEN | Tree triming / Cutting |
| 245 | SP-209 | SP-210 | 35 | SP64 | TEA GARDEN | Tree triming / Cutting |
| 246 | SP-210 | SP-211 | 47 | SP64 | TEA GARDEN | Tree triming / Cutting |
| 247 | SP-211 | SP-212 | 45 | SP64 | TEA GARDEN | Tree triming / Cutting |
| 248 | SP-212 | SP-213 | 45 | SP64 | TEA GARDEN | Tree triming / Cutting |
| 249 | SP-213 | SP-214 | 44 | SP64 | TEA GARDEN | Tree triming / Cutting |
| 250 | SP-214 | SP-215 | 45 | SP64 | TEA GARDEN | Tree triming / Cutting |
| 251 | SP-215 | SP-216 | 39 | SP64 | TEA GARDEN | Tree triming / Cutting |
| 252 | SP-216 | SP-217 | 41 | SP64 | TEA GARDEN | Tree triming / Cutting |
| 253 | SP-217 | SP-218 | 39 | SP64 | TEA GARDEN | Tree triming / Cutting |
| 254 | SP-218 | SP-219 | 40 | SP76 | 11 KV LINE CROSSING | Tree triming / Cutting |
| 255 | SP-219 | SP-220 | 47 | SP64 | TEA GARDEN | Tree triming / Cutting |
| 256 | SP-220 | SP-221 | 48 | SP64 | TEA GARDEN | Tree triming / Cutting |
| 257 | SP-221 | DP-22 | 44 | SP64 | TEA GARDEN | Tree triming / Cutting |
| 258 | DP-22 | SP-222 | 45 | SP64 | TEA GARDEN | Tree triming / Cutting |


| 259 | SP-222 | SP-223 | 50 | SP64 | TEA GARDEN | Tree triming / Cutting |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 260 | SP-223 | SP-224 | 49 | SP64 | TEA GARDEN | Tree triming / Cutting |
| 261 | SP-224 | SP-225 | 50 | SP64 | TEA GARDEN | Tree triming / Cutting |
| 262 | SP-225 | SP-226 | 47 | SP64 | TEA GARDEN | Tree triming / Cutting |
| 263 | SP-226 | SP-227 | 47 | SP64 | TEA GARDEN | Tree triming / Cutting |
| 264 | SP-227 | SP-228 | 45 | SP64 | TEA GARDEN | Tree triming / Cutting |
| 265 | SP-228 | SP-229 | 44 | SP64 | TEA GARDEN | Tree triming / Cutting |
| 266 | SP-229 | SP-230 | 42 | SP64 | TEA GARDEN | Tree triming / Cutting |
| 267 | SP-230 | SP-231 | 48 | SP64 | TEA GARDEN | Tree triming / Cutting |
| 268 | SP-231 | SP-232 | 43 | SP64 | TEA GARDEN | Tree triming / Cutting |
| 269 | SP-232 | SP-233 | 42 | SP64 | TEA GARDEN | Tree triming / Cutting |
| 270 | SP-233 | SP-234 | 44 | SP64 | TEA GARDEN | Tree triming / Cutting |
| 271 | SP-234 | SP-235 | 39 | SP64 | TEA GARDEN | Tree triming / Cutting |
| 272 | SP-235 | FP-15 | 38 | SP76 | ROAD CROSSING | Tree triming / Cutting |
| 273 | FP-15 | SP-236 | 50 | SP64 | TEA GARDEN | Tree triming / Cutting |
| 274 | SP-236 | SP-237 | 47 | SP64 | TEA GARDEN | Tree triming / Cutting |
| 275 | SP-237 | SP-238 | 47 | SP64 | TEA GARDEN | Tree triming / Cutting |
| 276 | SP-238 | SP-239 | 49 | SP64 | TEA GARDEN | Tree triming / Cutting |
| 277 | SP-239 | SP-240 | 40 | SP64 | TEA GARDEN | Tree triming / Cutting |
| 278 | SP-240 | SP-241 | 46 | SP64 | TEA GARDEN | Tree triming / Cutting |
| 279 | SP-241 | DP-23 | 50 | SP64 | TEA GARDEN | Tree triming / Cutting |
| 280 | DP-23 | SP-242 | 49 | SP64 | TEA GARDEN | Tree triming / Cutting |
| 281 | SP-242 | SP-243 | 50 | SP64 | TEA GARDEN | Tree triming / Cutting |
| 282 | SP-243 | SP-244 | 50 | SP64 | TEA GARDEN | Tree triming / Cutting |
| 283 | SP-244 | SP-245 | 44 | SP64 | TEA GARDEN | Tree triming / Cutting |


| 284 | SP-245 | SP-246 | 50 | SP64 | TEA GARDEN | Tree triming / <br> Cutting |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 285 | SP-246 | SP-247 | 47 | SP64 | Tree triming / <br> Cutting |  |
| 286 | SP-247 | SP-248 | 48 | SP64 | TEA GARDEN | Tree triming / <br> Cutting |
| 287 | SP-248 | SP-249 | 42 | SP64 | TEA GARDEN | Tree triming / <br> Cutting |
| 288 | SP-249 | SP-250 | 34 | SP64 | Tree triming / <br> Cutting |  |
| 289 | SP-250 | SP-251 | 42 | SP64 | Tree triming / <br> Cutting |  |
| 290 | SP-251 | FP-16 | 36 | SP76 | TEA GARDEN | Tree triming / <br> Cutting |
| 291 | FP-16 | SP-252 | 42 | SP64 | Tree triming / <br> Cutting |  |
| 292 | SP-252 | SP-253 | 37 | SP64 | TEA GARDEN | Tree triming / <br> Cutting |
| 293 | SP-253 | SP-254 | 36 | SP64 | Tree triming / <br> Cutting |  |
| 294 | SP-254 | SP-255 | 46 | SP64 | TEA GARDEN |  |
| 295 | SP-255 | FP-17 | 40 | SP64 |  |  |
| 296 | FP-17 | SP256 | 38 | SP76 | 33KV LINE CROSSING |  |
| 297 | SP256 | SP257 | 45 | SP64 | NEAR SUBSTATION |  |
| 298 | SP257 | FP18 | 44 | SP64 | NEAR SUBSTATION |  |
| 299 | FP18 | FP19 | 42 | SP64 | SUBSTATION Campus |  |
| 300 | FP19 | GANTRY | 40 | SP64 | SUBSTATION Campus |  |
|  | Total Span Length- | 13476 |  |  |  |  |

Note : Pole Type, Span, No \& Qty may change as per site requireent and direction from PGCIL

## Total Pole Location Count-300

Total Single Pole- 257
Total Double Pole- 23
Total Four Pole- 19
Total SP76 Pole Location Count-22
Total No SP76 Pole - 56

| Name of Work |  | : 33kV New Line from Existing 132/33kV Khanikar Substation to 33/11kV New Dibrugarh Substation |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| $\begin{aligned} & \hline \text { SL } \\ & \text { NO } \end{aligned}$ | Pole From | Pole To | Span (meter) | Description of Area | Description of Pole Location |
| 1 | GANTRY | FP-1 | 12 | 132/33kV Khanikar Substation |  |
| 2 | FP-1 | DP-1 | 53 | Substation Land |  |
| 3 | DP-1 | DP-2 | 1 | Substation Land |  |
| 4 | DP-2 | DP-3 | 44 | Substation Land |  |
| 5 | DP-3 | DP-4 | 14 | 11KV Line \& Substation Road Crossing | DP-3 \& DP-4 are at SubStation boundary wall |
| 6 | DP-4 | DP-5 | 49 | Substation Road | DP-4 \& DP-5 are coing beside Sub-Station road and Drain beside Sub-Station road |
| 7 | DP-5 | DP-6 | 43 | 11 KV \& LT Line Crossing. Substation Road \& APDCL's Staff colony | Previously this span was considered by UG cable. But now can take by Overhead |
| 8 | DP-6 | SP-1 | 35 | Substation Land | Inside Boundary wall of APDCL's staff colony |
| 9 | SP-1 | SP-2 | 45 | Substation Land | Inside Boundary wall of APDCL's staff colony |
| 10 | SP-2 | SP-3 | 36 | Substation Land | Inside Boundary wall of APDCL's staff colony |
| 11 | SP-3 | DP-7 | 35 | Substation Land | Inside Boundary wall of APDCL's staff colony |
| 12 | DP-7 | DP-8 | 46 | Tea Garden Colony Road |  |
| 13 | DP-8 | SP-4 | 50 | Tea Garden Colony Road |  |
| 14 | SP-4 | SP-5 | 44 | Tea Garden Colony Road |  |
| 15 | SP-5 | SP-6 | 37 | Tea Garden Colony Road |  |
| 16 | SP-6 | FP-2 | 39 | Tea Garden Colony Road |  |
| 17 | FP-2 | SP-7 | 43 | Beside ancotta Road | Dense Tree area. Poles are coing between Road \& Low land. |
| 18 | SP-7 | SP-8 | 41 | Beside ancotta Road |  |
| 19 | SP-8 | SP-9 | 40 | Beside ancotta Road |  |
| 20 | SP-9 | SP-10 | 40 | 11 KV \& LT Line Crossing beside ancotta Road | Poles are between Road \& Low land |
| 21 | SP-10 | SP-11 | 43 | Beside ancotta Road |  |
| 22 | SP-11 | DP-09 | 43 | Beside ancotta Road |  |
| 23 | DP-09 | SP-12 | 44 | 132 KV Line Crossing beside ancotta Road | Poles are between Road \& Low Land. |
| 24 | SP-12 | SP-13 | 44 | Beside ancotta Road | Poles are between Road \& Low Land |
| 25 | SP-13 | SP-14 | 47 | Beside ancotta Road | Poles are between Road \& Low Land |


| 26 | SP-14 | SP-15 | 44 | Beside ancotta Road | Poles are between Road \& Low Land |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 27 | SP-15 | SP-16 | 48 | Beside ancotta Road | Poles are between Road \& Low Land |
| 28 | SP-16 | DP-10 | 42 | LT Line Crossing beside ancotta Road | Poles are between Road \& Low Land |
| 29 | DP-10 | SP-17 | 42 | Beside ancotta Road | Poles are between Road \& Low Land |
| 30 | SP-17 | SP-18 | 41 | Beside ancotta Road | Poles are between Road \& Low Land |
| 31 | SP-18 | SP-19 | 44 | Beside ancotta Road | Poles are between Road \& Low Land |
| 32 | SP-19 | SP-20 | 45 | LT Line Crossing beside ancotta Road | Poles are between Road \& Low Land |
| 33 | SP-20 | SP-21 | 45 | LT Line Crossing beside ancotta Road | Poles are between Road \& Low Land |
| 34 | SP-21 | SP-22 | 44 | Beside ancotta Road | Poles are between Road \& Low Land |
| 35 | SP-22 | FP-3 | 29 | LT Line Crossing beside ancotta Road | Poles are between Road \& Low Land |
| 36 | FP-3 | SP-23 | 12 | 11 KV Line and ancotta Road Crossing | Poles are beside New ByPass Highway |
| 37 | SP-23 | SP-24 | 47 | Beside New Bypass Highway | Poles are between New <br> ByPass Highway \& LT Line |
| 38 | SP-24 | SP-25 | 46 | Beside New Bypass Highway | Poles are between New <br> ByPass Highway \& LT Line |
| 39 | SP-25 | DP-11 | 45 | Beside New Bypass Highway | Poles are between New <br> ByPass Highway \& LT Line |
| 40 | DP-11 | SP-26 | 48 | Beside New Bypass Highway | Poles are between New ByPass Highway \& LT Line |
| 41 | SP-26 | SP-27 | 50 | Beside New Bypass Highway | Poles are between New ByPass Highway \& LT Line |
| 42 | SP-27 | SP-28 | 49 | Beside New Bypass Highway | Poles are between New <br> ByPass Highway \& LT Line |
| 43 | SP-28 | SP-29 | 35 | Beside New Bypass Highway | Poles are between New ByPass Highway \& LT Line |
| 44 | SP-29 | SP-30 | 35 | Beside New Bypass Highway | Poles are between New ByPass Highway \& LT Line |
| 45 | SP-30 | SP-31 | 40 | Beside New Bypass Highway | Poles are between New ByPass Highway \& LT Line |
| 46 | SP-31 | SP-32 | 40 | Beside New Bypass Highway | Poles are between New ByPass Highway \& LT Line |
| 47 | SP-32 | SP-33 | 36 | Beside New Bypass Highway | Poles are between New ByPass Highway \& LT Line |
| 48 | SP-33 | DP-12 | 43 | 11 KV Line Crossing | Poles are between New ByPass Highway \& 11 KV Line |


| 49 | DP-12 | SP-34 | 50 | Beside New Bypass <br> Highway | Poles are between New <br> ByPass Highway \& 11 KV <br> Line |
| :--- | :--- | :--- | :--- | :--- | :--- |
| 50 | SP-34 | SP-35 | 50 | Beside New Bypass <br> Highway | Poles are between New <br> ByPass Highway \& 11 KV <br> Line |
| 51 | SP-35 | SP-36 | 45 | 11 KV Line Crossing | 11 KV Line \& Existing Gandhi <br> Udyan to be Disantle by <br> NHIDCL |
| 52 | SP-36 | SP-37 | 48 | Beside New Bypass <br> Highway | Poles are beside New ByPass <br> Highway |
| 53 | SP-37 | SP-38 | 44 | Beside New Bypass <br> Highway | Poles are beside New ByPass <br> Highway |
| 54 | SP-38 | SP-39 | 39 | Beside New Bypass <br> Highway | Poles are beside New ByPass <br> Highway |
| 56 | SP-39 | SP-40 | 35 | Beside New Bypass <br> Highway | Poles are beside New ByPass <br> Highway |
| 56 | SP-40 | SP-41 | 34 | 11 KV Line Crossing | Poles are between New <br> ByPass Highway and Tea <br> Garden |
| 57 | SP-41 | SP-42 | 47 | SP-15 | 11 |


| 67 | DP-15 | SP-49 | 50 | Beside New Bypass Highway | Poles are between New ByPass Highway and Tea Garden |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 68 | SP-49 | SP-50 | 41 | Existing 132 KV Line Crossing | Poles are between New ByPass Highway and Tea Garden |
| 69 | SP-50 | DP-16 | 50 | Beside New Bypass Highway | Poles are between New ByPass Highway and Tea Garden |
| 70 | DP-16 | SP-51 | 49 | Beside New Bypass Highway | Poles are between New ByPass Highway and Tea Garden |
| 71 | SP-51 | DP-17 | 34 | Beside New Bypass Highway | Poles are between New ByPass Highway and Tea Garden |
| 72 | DP-17 | SP-52 | 47 | Beside New Bypass Highway | Poles are between New ByPass Highway and Tea Garden |
| 73 | SP-52 | SP-53 | 47 | Beside New Bypass Highway | Poles are between New ByPass Highway and Tea Garden |
| 74 | SP-53 | SP-54 | 47 | Beside New Bypass Highway | Poles are between New ByPass Highway and Tea Garden |
| 75 | SP-54 | SP-55 | 47 | Beside New Bypass Highway | Poles are between New ByPass Highway and Tea Garden |
| 76 | SP-55 | SP-56 | 49 | Beside New Bypass Highway | Poles are between New ByPass Highway and Tea Garden |
| 77 | SP-56 | SP-57 | 47 | Beside New Bypass Highway | Poles are between New ByPass Highway and Tea Garden |
| 78 | SP-57 | DP-18 | 48 | Beside New Bypass Highway | Poles are between New ByPass Highway and Tea Garden |
| 79 | DP-18 | SP-58 | 43 | Beside New Bypass Highway | Poles are between New ByPass Highway and Tea Garden |
| 80 | SP-58 | SP-59 | 43 | Beside New Bypass Highway | Poles are between New ByPass Highway and Tea Garden |
| 81 | SP-59 | SP-60 | 42 | Beside New Bypass Highway | Poles are between New ByPass Highway and Tea Garden |
| 82 | SP-60 | SP-61 | 38 | Beside New Bypass Highway | Poles are between New ByPass Highway and Tea Garden |
| 83 | SP-61 | SP-62 | 50 | Beside New Bypass Highway | Poles are between New ByPass Highway and Tea Garden |


| 84 | SP-62 | DP-19 | 49 | Beside New Bypass <br> Highway | Poles are between New <br> ByPass Highway and Tea <br> Garden |
| :--- | :--- | :--- | :--- | :--- | :--- |
| 85 | DP-19 | SP-63 | 49 | Beside New Bypass <br> Highway | Poles are between New <br> ByPass Highway and Tea <br> Garden |
| 86 | SP-63 | SP-64 | 50 | Beside New Bypass <br> Highway | Poles are between New <br> ByPass Highway and Tea <br> Garden |
| 87 | SP-64 | SP-65 | 50 | Beside New Bypass <br> Highway | Poles are between New <br> ByPass Highway and Tea <br> Garden |
| 88 | SP-65 | SP-66 | 49 | Beside New Bypass <br> Highway | Poles are between New <br> ByPass Highway and Tea |
| 99 | SP-66 | SP-67 | 50 | SP-4 | SP-75 |


| 102 | SP-77 | SP-78 | 49 | Tea Garden Land | Poles are in Between Tea Garden Narrow Road |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 103 | SP-78 | SP-79 | 49 | Tea Garden Land | Poles are in Between Tea Garden Narrow Road |
| 104 | SP-79 | SP-80 | 50 | Tea Garden Land | Poles are in Between Tea Garden Narrow Road |
| 105 | SP-80 | DP-21 | 50 | Tea Garden Land | Poles are in Between Tea Garden Narrow Road |
| 106 | DP-21 | SP-81 | 47 | Tea Garden Land | Poles are in Between Tea Garden Narrow Road |
| 107 | SP-81 | SP-82 | 47 | Tea Garden Land | Poles are in Between Tea Garden Narrow Road |
| 108 | SP-82 | SP-83 | 45 | Tea Garden Land | Poles are in Between Tea Garden Narrow Road |
| 109 | SP-83 | DP-22 | 40 | Tea Garden Land | Poles are in Between Tea Garden Narrow Road |
| 110 | DP-22 | SP-84 | 47 | Tea Garden Land | Poles are in Between Tea Garden Narrow Road |
| 111 | SP-84 | SP-85 | 50 | Tea Garden Land | Poles are in Between Tea Garden Narrow Road |
| 112 | SP-85 | SP-86 | 49 | Tea Garden Land | Poles are in Between Tea Garden Narrow Road |
| 113 | SP-86 | SP-87 | 45 | Katcha Road | Poles are between PWD Village Road and Paddy Field |
| 114 | SP-87 | SP-88 | 37 | Katcha Road | Poles are between PWD Village Road and Paddy Field |
| 115 | SP-88 | DP-23 | 37 | Katcha Road | Poles are between PWD Village Road and Paddy Field |
| 116 | DP-23 | SP-89 | 50 | Katcha Road | Poles are between PWD Village Road and Paddy Field |
| 117 | SP-89 | SP-90 | 50 | Katcha Road | Poles are between PWD Village Road and Paddy Field |
| 118 | SP-90 | SP-91 | 49 | Katcha Road | Poles are between PWD Village Road and Paddy Field |
| 119 | SP-91 | SP-92 | 49 | Katcha Road | Poles are between PWD Village Road and Paddy Field |
| 120 | SP-92 | SP-93 | 48 | Katcha Road | Poles are between PWD Village Road and Paddy Field |
| 121 | SP-93 | SP-94 | 47 | Katcha Road | Poles are between PWD Village Road and Paddy Field |
| 122 | SP-94 | SP-95 | 47 | Katcha Road | Poles are between PWD Village Road and Paddy Field |
| 123 | SP-95 | SP-96 | 47 | Katcha Road | Poles are between PWD Village Road and Paddy Field |
| 124 | SP-96 | SP-97 | 44 | Katcha Road | Poles are between PWD Village Road and Paddy Field |
| 125 | SP-97 | DP-24 | 44 | Katcha Road | Poles are between PWD Village Road and Paddy Field |
| 126 | DP-24 | DP-25 | 11 | Katcha Road | PWD Village Road Crossing. |
| 127 | DP-25 | SP-98 | 38 | Katcha Road | Poles are between PWD |


|  |  |  |  |  | Village Road and Paddy Field |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 128 | SP-98 | SP-99 | 37 | 132 KV Line Crossing | Poles are between PWD Village Road and Paddy Field |
| 129 | SP-99 | SP-100 | 48 | Katcha Road | Poles are between PWD Village Road and Paddy Field |
| 130 | SP-100 | SP-101 | 46 | Katcha Road | Poles are between PWD Village Road and Paddy Field |
| 131 | SP-101 | SP-102 | 47 | Katcha Road | Poles are between PWD Village Road and Paddy Field |
| 132 | SP-102 | SP-103 | 47 | Katcha Road | Poles are between PWD Village Road and Paddy Field |
| 133 | SP-103 | SP-104 | 44 | Katcha Road | Poles are between PWD Village Road and Paddy Field |
| 134 | SP-104 | SP-105 | 43 | Katcha Road | Poles are between PWD Village Road and Paddy Field |
| 135 | SP-105 | SP-106 | 50 | Katcha Road | Poles are between PWD Village Road and Paddy Field |
| 136 | SP-106 | SP-107 | 49 | Katcha Road | Poles are between PWD Village Road and Paddy Field |
| 137 | SP-107 | DP-26 | 49 | Katcha Road | Poles are between PWD Village Road and Paddy Field |
| 138 | DP-26 | SP-108 | 35 | Katcha Road | Poles are between PWD Village Road and Paddy Field |
| 139 | SP-108 | SP-109 | 43 | Katcha Road | Poles are between PWD Village Road and Paddy Field |
| 140 | SP-109 | SP-110 | 44 | Katcha Road | Poles are between PWD Village Road and Paddy Field |
| 141 | SP-110 | SP-111 | 35 | Katcha Road | Poles are between PWD Village Road and Paddy Field |
| 142 | SP-111 | SP-112 | 39 | Katcha Road | Poles are between PWD Village Road and Paddy Field |
| 143 | SP-112 | SP-113 | 49 | Katcha Road | Poles are between PWD Village Road and Paddy Field |
| 144 | SP-113 | SP-114 | 48 | Road ( Railways) | Poles are between PWD Village Road and Paddy Field |
| 145 | SP-114 | SP-115 | 44 | 33 KV \& 11 KV Line Crossing | Poles are between PWD Village Road and Paddy Field |
| 146 | SP-115 | SP-116 | 37 | Road ( Railways) | Poles are between PWD Village Road and Paddy Field |
| 147 | SP-116 | SP-117 | 34 | Road ( Railways) | Poles are between PWD Village Road and Paddy Field |
| 148 | SP-117 | FP-5 | 34 | Road Crossing ( Railways ) | Poles are between of Railways Road and Low Land |
| 149 | FP-5 | SP-118 | 50 | Road ( Railways) | Poles are between of <br> Railways Road and Low Land |
| 150 | SP-118 | SP-119 | 40 | Road ( Railways) | Poles are between of Railways Road and Low Land |
| 151 | SP-119 | SP-120 | 36 | Road ( Railways ) | Poles are between of Railways Road and Low Land |


| 152 | SP-120 | SP-121 | 36 | Road ( Railways ) | Poles are between of Railways Road and Low Land |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 153 | SP-121 | SP-122 | 35 | Road ( Railways ) | Poles are between of Railways Road and Low Land |
| 154 | SP-122 | SP-123 | 44 | LT Line \& 11 KV Line Crossing | Poles are between of Railways Road and Low Land |
| 155 | SP-123 | FP-6 | 50 | Road ( Railways ) | Poles are between of Railways Road and Low Land |
| 156 | FP-6 | DP-27 | 49 | Railway Land | Railway Land. Low Land |
| 157 | DP-27 | DP-28 | 78 | Railway Track Crossing UG Cable | Railway Land. Low Land |
| 158 | DP-28 | SP-124 | 40 | Railway Land | Railway Land. Low Land |
| 159 | SP-124 | DP-29 | 33 | Railway Land | Railway Land. Low Land |
| 160 | DP-29 | FP-7 | 32 | Road Crossing ( Railways ) | Poles are between of Railways Road and Low Land |
| 161 | FP-7 | SP-125 | 43 | Road ( Railways ) | Poles are between of Railways Road and Low Land |
| 162 | SP-125 | SP-126 | 45 | Road ( Railways ) | Poles are between of Railways Road and Low Land |
| 163 | SP-126 | SP-127 | 44 | Road ( Railways ) | Poles are between of Railways Road and Low Land |
| 164 | SP-127 | SP-128 | 43 | Road ( Railways ) | Poles are between of Railways Road and Low Land |
| 165 | SP-128 | SP-129 | 45 | Road ( Railways ) | Poles are between of Railways Road and Low Land |
| 166 | SP-129 | SP-130 | 43 | Road ( Railways ) | Poles are between of Railways Road and Low Land |
| 167 | SP-130 | FP-8 | 40 | Road ( Railways ) | Poles are between of Railways Road and Low Land |
| 168 | FP-8 | SP-131 | 47 | PWD Road | Poles are between of Railways Road and Low Land |
| 169 | SP-131 | SP-132 | 48 | PWD Road | Poles are beside of PWD Road |
| 170 | SP-132 | SP-133 | 48 | PWD Road | Poles are beside of PWD Road |
| 171 | SP-133 | SP-134 | 45 | PWD Road | Poles are beside of PWD Road and Residential Building |
| 172 | SP-134 | SP-135 | 40 | LT Line Crossing PWD Road | Poles are beside of PWD Road and Residential Building |
| 173 | SP-135 | SP-136 | 31 | PWD Road | Poles are beside of PWD Road and Residential Building |
| 174 | SP-136 | DP-30 | 32 | PWD Road | Poles are beside of PWD Road and School Building |
| 175 | DP-30 | DP-31 | 26 | Road, LT Line \& 11KV Line Crossing |  |
| 176 | DP-31 | SP-137 | 46 | PWD Road | Poles are between of PWD Road and Low Land |


| 177 | SP-137 | SP-138 | 46 | PWD Road | Poles are between of PWD Road and Low Land |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 178 | SP-138 | SP-139 | 46 | PWD Road | Poles are between of PWD Road and Low Land |
| 179 | SP-139 | SP-140 | 46 | PWD Road | Poles are between of PWD Road and Low Land |
| 180 | SP-140 | SP-141 | 47 | PWD Road | Poles are between of PWD Road and Low Land |
| 181 | SP-141 | SP-142 | 48 | PWD Road | Poles are between of PWD Road and Low Land |
| 182 | SP-142 | SP-143 | 49 | PWD Road | Poles are between of PWD Road and Low Land |
| 183 | SP-143 | SP-144 | 45 | PWD Road | Poles are between of PWD Road and Low Land |
| 184 | SP-144 | SP-145 | 42 | PWD Road | Poles are between of PWD Road and Low Land |
| 185 | SP-145 | SP-146 | 41 | PWD Road | Poles are between of PWD Road and Residential Area |
| 186 | SP-146 | SP-147 | 41 | PWD Road | Poles are between of PWD Road and Residential Area |
| 187 | SP-147 | SP-148 | 42 | PWD Road | Poles are between of PWD Road and Residential Area |
| 188 | SP-148 | DP-32 | 40 | PWD Road | Poles are between of PWD Road and Residential Area |
| 189 | DP-32 | DP-33 | 17 | PWD Road | Poles are between of PWD Road and Residential Area |
| 190 | DP-33 | SP-149 | 34 | PWD Road | Poles are between of PWD Road and Residential Area |
| 191 | SP-149 | SP-150 | 20 | PWD Road | Poles are between of PWD Road and Residential Area |
| 192 | SP-150 | DP-34 | 43 | PWD Road | 11 KV Crossing |
| 193 | DP-34 | DP-35 | 21 | Road Crossing | Poles are between of PWD Road and Residential Area |
| 194 | DP-35 | SP-151 | 47 | Colony Road | Poles are between of PWD Road and Residential Area |
| 195 | SP-151 | SP-152 | 48 | Colony Road | Poles are between of PWD Road and Residential Area |
| 196 | SP-152 | DP-36 | 46 | Colony Road | Poles are between of PWD Road and Residential Area |
| 197 | DP-36 | DP-37 | 15 | 33 KV, 11KV Line \& Road Crossing | Poles are between of PWD Road and Residential Area |
| 198 | DP-37 | SP-153 | 45 | Tea Garden Land | Poles are at Tea Garden |
| 199 | SP-153 | SP-154 | 45 | Tea Garden Land | Poles are at Tea Garden |
| 200 | SP-154 | SP-155 | 45 | Tea Garden Land | Poles are at Tea Garden |
| 201 | SP-155 | FP-9 | 43 | Tea Garden Land | Poles are at Tea Garden |
| 202 | FP-9 | SP-156 | 50 | Tea Garden Land | Poles are at Tea Garden |
| 203 | SP-156 | SP-157 | 50 | Tea Garden Land | Poles are at Tea Garden |
| 204 | SP-157 | SP-158 | 50 | Tea Garden Land | Poles are at Tea Garden |
| 205 | SP-158 | SP-159 | 45 | 11KV Line Crossing | Poles are at Tea Garden |


| 206 | SP-159 | SP-160 | 50 | Tea Garden Land | Poles are at Tea Garden |
| :--- | :--- | :--- | :--- | :--- | :--- |
| 207 | SP-160 | DP-38 | 50 | Tea Garden Land | Poles are at Tea Garden |
| 208 | DP-38 | SP-161 | 50 | Tea Garden Land | Poles are at Tea Garden |
| 209 | SP-161 | SP-162 | 50 | Tea Garden Land | Poles are at Tea Garden |
| 210 | SP-162 | SP-163 | 50 | Tea Garden Land | Poles are at Tea Garden |
| 211 | SP-163 | SP-164 | 50 | Tea Garden Land | Poles are at Tea Garden |
| 212 | SP-164 | SP-165 | 50 | Tea Garden Land | Poles are at Tea Garden |
| 213 | SP-165 | DP-39 | 50 | Tea Garden Land | Poles are at Tea Garden |
| 214 | DP-39 | SP-166 | 50 | Tea Garden Land | Poles are at Tea Garden |
| 215 | SP-166 | SP-167 | 50 | Tea Garden Land | Poles are at Tea Garden |
| 216 | SP-167 | SP-168 | 47 | Tea Garden Land | Poles are at Tea Garden |
| 217 | SP-168 | FP-10 | 43 | Tea Garden Land | Poles are at Tea Garden |
| 218 | FP-10 | GANTR <br> Y | 10 | 33/11 kV New Dibrugarh <br> Substation | Poles are at Tea Garden |
|  | Total Span | 9341 |  |  |  |

Note : Pole Type, Span, No \& Qty may change as per site requireent and direction from PGCIL

Total location count- 218
Total Single Pole- 168
Total Double pole- 39
Total 4 pole- 10
Total SP76 pole Location- 42

# ANNEXURE - 5 

DETAILS OF PUBLIC CONSULTATION



Public Meeting, for 220 kV Tinsukia- Behicting line. Date: 14-10-2014.

SL.NUT
Name.
himanashu ratj cocol
1.
2. SritBrekegwor fonvior


$12 \% 10.024$
Cud
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 7399520205
6. Bri Nurna konowat. (Borlule kaehern $\frac{\text { Dsonowar phone No }}{14 \cdot 10 \cdot 2014-950809215}$
7. Mina Rum Lofai
8.
9. L. Dehiongior
10. Tírin Gogoi.
11. Clemate freduers
12. Casit-kuhuy
13. Kishore Ranjaw Dutt, Wuth
14. Pradip Boraon
15. Kamineherene
16. Parest ohetrice
17. 12hirud Senopos.
18. Sri fatix gogai
19. Dharme swror ehuhs
2. Eipaty Sopomi
21. Sipeswar khani kor
22. Babank Goyt
23. Rodali sthaund

24 . Chandan-k Drtta.
25. Prodio onts,

26. K-C.Barman
27. K. Gagoi
28. P. Rajxomear

- Dner for $A E G C l$

29. T. Baruath - for for $A E G C L$
30. It.R.Choudhury - AChondhery for PGCIL
"PUBITC MEETNGG"
Seetject
: Conotrudion of $132 \mathrm{leV} D / C$ Reepas- Chapalenowa T/L \& cesoociated distribution lineo (unver WORLD BANLe) asistance $t$ unvel North Eostan Regiou fower Bystem Improvevont prosject.
Venve :- 132 KU QRID sut-station at RUPAT (mod AEGCL) conference trall.
Qaced
$\therefore$ ह 17-06-2014.
(Rupai Development Block sist: TiNSUKiA, Assam)
Details of Mecting
Today daded the 1月xoune, 2014 at 11 AM , a pubtic Mecting hao boen convened at the confernce thar of 132 lev Rupai GRID sub-station of $A E G C L$ to disere the various issues againat the above nentioned Prejoat. Representatives of POWERGRID. AEGCL \& Local viruge Healmen \& some rommon preblic were also present at the mocting.

A brief of the North Eastern Pegion Power Syetem Iriprevement Projoct (NERPSIP) under dVe WORLD BANK assistance has been delibereated at the fegening of the moeting by powbrGRID representative. Imporlaner $\&$ necessity of the Projod, al necesoity for upgreatation of " exisling Trosomittion \& distribution néarork, various environment e Sodial issure associated with the preyjeat have been brébly diseused. and apprised fo the publie preoent in the raeting.

Subsequentey reeprepentalives from the puble aloo rerppon Lod and reaisad various concern about the proy' press \& cons of the Preoject. Ite various isoner reaised by the preblie all summan'sed as below

* Yo aroid habuitated \& plaixation areor dewring seurey of the line and abro to consult local village keadman for finalizging of cthe reonte cooridor.
* Io engage local Labourfonce daning conabruetion period. and to train thasm, it reequired.
* To experdide the process of disburoement of compensatiar. Agreed to the necesity and importance of the prey'ect and ospurad their coperatron dering implamentation of the preageot.

AEGCL/powERGRID have asplered that all the generine issuoo will be duely doting dolece care obing implementalion of the Precject Adequate proonsions have been kept in the MERPSIP fore addussing all compensation reclated roosures of the preoject-. The reeling hoobeen conolveded with a regurat to all publie Ger their Scepport in completion of the propeet \& rote of thantes fo the oregomizer.
Note: Alfendance shect enclosed .......

संrogerer sucor




 त्रकं, निल्ण : जितिक्वीयेश।














 Pins दrrae:








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सYজ Rスリ जब्y" "
 लाईन निझर्पन।
 (132 kv rupar - chapakhowa)


d) En Biren Moram
2) Sri Roki kishan, Gaon Burah. Dengagaon.

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a)Pelitua Sactuarshi

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(13)) Wandingh@ank;-Tonga galon
(14) Nif Sawanshi - No -

Photographs of Public Consultation held at Tinsukia on 14 ${ }^{\text {th }}$ Oct'2014 $^{\text {2 }}$


अभন বিদ্যুত त्रोड्ड निभন निजिढট৬ (ASSAM ELECTRICITY GRID CORPORATION LIMITED)

## "साइशता सधा"

বিষয়ঃ বিশ্ব বেংকব (WORLD BANK) সাহাय্যত বিদ্যুৎ পবিবহন লাইন নির্মান

স্থানः তিনিদুন্যা
তাबিখ: 28-20-2028


Photographs of Public Consultation held at Rupai, on 17 $^{\text {th }}$ June'2014


## PUBLIC AWARENESS MEETING

# Subject: Construction of 33 kV line from $220 / 132 \mathrm{kV}$ Behiating $\mathrm{S} / \mathrm{S}$ to $33 / 11 \mathrm{kV}$ New Bogibeel S/S under North Eastern Region Power System Improvement Project (NERPSIP), a World Bank funded Scheme. 

Venue: Khanikar Gaon Panchayat Office, Khanikar, Dibrugarh

Date \& Time: 25/04/2017, 11:30am onwards

A public awareness meeting was held at the office of Gaon Panchayat (Khanikar), Dist Dibrugarh, Assam on $25^{\text {th }}$ April 2017 from 11:30am onwards to apprise the public about Construction of a New 33 kV line from $220 / 132 \mathrm{kV}$ Behiating $\mathrm{S} / \mathrm{S}$ to $33 / 11 \mathrm{kV}$ New Bogibeel S/S under North Eastern Region Power System Improvement Project (NERPSIP), a World Bank funded Scheme and also to discuss the various issues associated with the proposed 33 kV line. The meeting was held in presence of representatives from Assam Power Distribution Company Limited along with officers of Power Grid Corporation Of India Ltd, Counselor (Gaon Panchayat), Secretary (Gaon Panchayat) and public of the nearby areas.

The meeting started with a detailed overview on the necessity of the NERPSIP Project, benefits of the project for the general public, various environment and socio-economic issues, various compensation related issues etc by Power Grid Officials. A leaflet termed "PROJECT SUMMARY" was also handed over to all the attendees of the meeting. Subsequently, after the brief from Power Grid and APDCL officials, it was requested to raise project related issues from the attendees so that appropriate clarification can be provided from the project proponent.

In this regard, various issues were raised by the public for proper execution of the project in their locality. The various issues raised were:

- Proper intimation to respective Land owner(s) prior to constructional activities on his/her land.
- Providing proper guard wires in lines passing through residential areas.
- Proper and uniform payment of compensation to all the eligible beneficiaries /land owners, where damage is incurred during construction of the line.
- Constructional Activities during paddy/wheat cultivation time in paddy field areas are to be avoided, as far as possible.

Officials from Power Grid Corporation Of India Ltd and Assam Power Distribution Company Limited (APDCL) assured that all the genuine issues raised by the public will be taken care of during execution of the project and also suitable lawful compensation will be paid for any damages caused during implementation of the project.Subsequently, all the attendees unanimously accepted the need for implementation of the project which will benefit the common public.

The meeting concluded with a request to all for providing full support while implementation of the project and a vote of thanks to the public and other officials for attending the meeting.

## PUBLIC AWARENESS MEETING

Subject: Construction of 33 KV line from $132 / 33 \mathrm{KV}$ Chapakhowa(new) $\mathrm{S} / \mathrm{S}$ to Existing 33/11KV S/S Chapakhowa under North Eastern Region Power System Improvement Project (NERPSIP), a world Bank funded Scheme.

Venue: POWERGRID Office, Chapakhowa
Date \& Time: $1 / 5 / 2017,10: 30 \mathrm{AM}$ onwards.
A public awareness meeting was held at POWERGRID Office Chapakhowa, Dist: Tinsukia, Assam on 1/5/2017 from 10:30AM onwards to aware the public about construction of 33 KV transmission line from 132 KV new $\mathrm{S} / \mathrm{S}$ to existing $33 / 11 \mathrm{KV} \mathrm{S} / \mathrm{S}$ under NERPSIP Scheme.

The meeting was held in the presence of representative from APDCL, President (gaon panchayat ),Secretary (gaon panchayat), Gao Buha, public of the nearby areas and the POWERGRID officials.

POWERGRID express brief details on the necessity of the NERPSIP project, benefits of the project for the general public and various environment \& socio-economic issues, compensation related issues etc. Subsequently, after the brief from POWERGRID and APDCL officials, it was requested to raise project related issue from the attendees so that appropriate clarification can be provided from the project proponent.

In this regard, various issues were raised by the public for proper execution of the project in their locality. The various issues raised were:

1) Proper intimation to respective land owner prior to constructional activities on his/her land.
2) Providing proper guard wires in line passing through residential areas
3) Proper and uniform payment of compensation to all the land owners where damage is incurred during construction of the line.
4) No constructional activities during paddy/wheat cultivation time in paddy field areas.

Officials from POWERGRID and APDCL assured that the entire genuine issues raise by the public will be taken care of during execution of the project and also suitable compensation will be paid for any damages caused during implementation of the project. Subsequently, all the attendees unanimously accepted the need for implementation of the project which will benefit the common public.
The meeting concluded with a request to all for providing full support while implementation of the project and a vote of thanks to the public and other officials for attending the meeting.


PRESENCE :- of Public Awarenern meeting - Regarding coustruction of $33 \mathrm{KV} T / 4$ from Chapakhowa APDCL( $s / 5$ ) existing to chapakhowa AEGCL, $S / S$ (new u/connt.) Approx, Length 2.7 kM .

1. Soi Biman Saikia (SDEI/e, APDEL).
2. Si tratukle Bure Gohain Ireatroai (Grox))
3. Thauba kishore Sangiany (Electrical ings, NECCON) Eite inchage
4. Ritupon Borgohain (satety ofticer, NECCON)
5. Anjutorra Gohain (Rocesidens) Na-Goan) Adowin
6. Sailun Hararika

Nogoan Gram Panchayat



9. chandrakonwar ASEB
10. Brisuajet Gogor.
11. Ramech Lego' Gaon Burha, 2ro Borgorah Deopani porgorah Majuli, Borgorah palck, Borgorah Llahkhati.
12. Prasengil Dutt- Borgorah Leahkh Powergrid
13. Arupatati rogai
14) Aruw Broagoline- Aresn Busagodien
15) Purina fanta Grasj Rnsgoil
16) Bitupan Sonowal. (PGCIL, FS (CIVI) Chinix
17) Ritupan Das (PGCM, FS (Electricul))
18) Ms. Banefanta Bureaghoain.
19) Indina Dconi (Bonjiya A.BM.) Sfori
20)
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## PUBLIC AWARENESS MEETING

# Subject: Construction of 33 kV line from 132 kV Dibrugarh (Kodomoni) $\mathrm{S} / \mathrm{S}$ to $33 / 11 \mathrm{kV}$ New Romai S/S under North Eastern Region Power System Improvement Project (NERPSIP), a World Bank funded Scheme. 

Venue: Near NH 37, Niz Moidumia Gaon, Mohanbari, Dibrugarh
Date \& Time: 16/05/2017, 11:00am onwards

A public awareness meeting was held near National Highway 37, Niz Moidumia Gaon, Mohanbari, Dist - Dibrugarh, Assam on $16^{\text {th }}$ May 2017 from 11:00am onwards to apprise the public about Construction of New 33kV line from 132kV Dibrugarh (Kodomoni) S/S to 33/11kV New Romai S/S under North Eastern Region Power System Improvement Project (NERPSIP), a World Bank funded Scheme and also to discuss the various issues associated with the proposed 33 kV line. The meeting held in the presence of representative from Assam Power Distribution Company Limited along with officers of Power Grid Corporation Of India Ltd and public of the nearby areas.

The meeting started with a introduction of the conducting officers and detailed overview by Power Grid Officials on the necessity of the NERPSIP Project, benefits of the project for the general public, various environment and socio-economic issues, various compensation related issues etc. A leaflet termed "PROJECT SUMMARY" was also handed over to all the attendees of the meeting. Subsequently, after the brief from Power Grid and APDCL officials, it was requested to raise project related issues from the attendees so that appropriate clarification can be provided from the project proponent.

In this regard, various issues were raised by the public for proper execution of the project in their locality. The various issues raised were:

- Proper intimation to respective Land owner(s) prior to constructional activities on his/her land.
- Proper and uniform payment of compensation to all the land owners where damage is incurred during construction of the line.
- To engage the local people in constructional activities wherever possible.

Officials from Power Grid Corporation Of India Ltd and Assam Power Distribution Company Limited (APDCL) assured that all the genuine issues raised by the public will be taken care of during execution of the project and also suitable compensation will be paid for any damages caused during implementation of the project. Subsequently, all the attendees unanimously accepted the need for implementation of the project which will benefit the common public.

The meeting concluded with a request to all for providing full support while implementation of the project and a vote of thanks to the public and other officials for attending the meeting.

Public Awareness Meeting for 33 kV line from 132 kV Dibrugarh (Kodomoni) $\mathrm{S} / \mathrm{S}$ to 33/11kV New Romai S/S under NERPSIP

Venue: Near Sunfeast Dhaba, Lahoal, Dibrugarh
Date \& Time: 16/05/2017, 11:00am onwards

List of Participants:

1. Ranubijon Sarceob
2. papu Baruch
3. Chandan Baruah
4. Rantu Baruah
5. Jatin

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8. 2) 保 R
1. Aphom BorrPalora
2. Sís kewon bes viecos Gounatr
3. Suman jyoti GoGoi
4. diva gogoi
5. Mori tha Gonoil
6. Ranu Boruah

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17 Rumal Barruah
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19 fish zबooy ।
7. kabita Barceah
8. Fहुл NiN.
9. निमलन येष आ यात
10. सनिक्ष Apentr
11. sururif aroisr
12. स्रान्यो zordr
13. यूुुण स्त्रो
14. Joti Gohann.
15. आनिनून रास्ता

29 D $d \theta$
30. दूgन6स सस पनित

31 Mnsideal Goboin
32 S.F. shah,
33. M. Bmagolacui APDCL

35: Bheskar Jyyte Das, FE, Powergid, Dibruganh
36. D.Naga Sainnm
37. Santana Baishya, FO (ESM), TOWERGRID, Gpmiahati

Photographs of Public Consultation held at Bogibil (Dibrugarh) on 25 ${ }^{\text {th }}$ Apr'2017


Photographs of Public Consultation held at Chapakhowa on $1^{\text {st }}$ May 2017


Photographs of Public Consultation held at Mohanbari (Dibrugarh) on $16^{\text {th }}$ May 2017



[^0]:    ${ }^{1}$ For the purpose of CPTD, AEGCL/APDCL and POWERGRID may be referred as SPCU and PPIU respectively. For further details, please refer chapter-vii on institutional arrangements.

[^1]:    2 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.

[^2]:    ${ }^{3}$ Vulnerable APs include scheduled tribes residing in scheduled areas/ physically handicapped/ disabled families etc.

[^3]:    ${ }^{4}$ For the purpose of CPTD, AEGCL/APDCL and POWERGRID may be referred as SPCU and PPIU respectively. For further details, please refer Chapter - VII Institutional arrangements.

[^4]:    ${ }^{5}$ 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

[^5]:    ${ }^{6}$ Total Line Length (kilometers) X Right of Way (meters)X1000/4,047= Area in Acre

[^6]:    ${ }^{7}$ Vulnerable APs include scheduled tribes residing in scheduled areas/ physically handicapped/disabled families etc.

