# COMPENSATION PLAN FOR TEMPORARY DAMAGES (CPTD)

**FOR** 

## T&D NETWORK IN DHALAI, UNAKOTI & NORTH TRIPURA DISTRICTS IN TRIPURA









**Prepared By** 

Environment and Social Management **POWER GRID CORPORATION OF INDIA LTD.** 

For

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TRIPURA/CPTD-2/2018 Sept. '18

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#### **LIST OF ABBREVIATIONS**

| ADC       |          | Autonomous District Council   |
|-----------|----------|---|
| AP        | :        | Affected Person   |
| 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       | Ė        | Environment Management Plan   |
| E&S       | Ė        | Environmental & Social  |
| ESPP      | ÷        | POWERGRID's Environmental and Social Policy & Procedures              |
| ESPPF     | -        | TSECL's Environmental and Social Policy & Procedures Framework        |
| Gol       | -        | Government of India   |
| 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       | Ė        | North Eastern Region  |
| NERPSIP   | Ė        | North Eastern Region Power System Improvement Project                 |
| O&M       | Ė        | Operation and Maintenance   |
| OP        | Ė        | Operational Policy  |
| PAP       |          | Project Affected Person   |
| POWERGRID | Ė        | Power Grid Corporation of India Limited                               |
| PPIU      | Ė        | PMC Project Implementation Unit                                       |
| RFCTLARRA |          | The Right to Fair Compensation and Transparency in Land, Acquisition, |
| A OIL MA  | •        | Rehabilitation and Resettlement Act, 2013                             |
| RoW       | :        | Right of Way  |
| RP        | Ė        | Resettlement Plan   |
| R&R       | <u> </u> | Resettlement and Rehabilitation                                       |
| S/c       | -        | Single Circuit  |
|           | <u> </u> |   |
| 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                             |
| TSECL  | : | Tripura State Electricity Corporation Limited |
| TTADC  | : | Tripura Tribal Autonomous District Council    |
| USD    | : | United States Dollar                          |
| WB     | : | The Word Bank                                 |

#### **GLOSSARY**

TTADC/ Autonomous District

Council/ Village Council

: An autonomous body/institution formed under the provisions of 6<sup>th</sup> Schedule of Constitution of India which provides tribal people freedom to exercise legislative, judicial, executive

and financial powers.

Zila/ District : It is the first administrative division at the State level.

Sub-division : A revenue sub-division, within a district.

Block : An administrative sub-division within a district.

Panchayat 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 Dhalai, Unakoti and North Tripura Districts of Tripura State under North Eastern Region Power System Improvement Project (NERPSIP) which is being funded by Govt. of India (GoI) 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 Govt. of India/ State Govt. viz. The Electricity Act, 2003; The Indian Telegraph Act, 1885; Ministry of Power (MoP) guidelines of Oct.' 2015 on RoW Compensation; Tripura State Electricity Corporation Limited (TSECL)'s Environmental and Social Policy & Procedures Framework (ESPPF) and the World Bank's Operational Policies.
- ii. The project components include construction of 2 nos.132kV D/C lines of 22.16 km length & 8 nos. 33kV distribution lines of total 80.473 km length along with associated 1 no. of new 132/33kV substation & 6 nos. new 33/11kV substations located in Dhalai, Unakoti & North Tripura districts of Tripura. 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. TSECL/ POWERGRID<sup>1</sup> 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 updating will be a continuous process during construction of line for which updated semi-annual CPTD monitoring report shall be submitted by TSECL/ POWERGRID.
- iii. The project components under the scope of present CPTD include following transmission/distribution lines and associated substations;

#### A. Transmission Scheme Components:

1. Kailasahar - Dharmanagar 132kV D/C line - 21.719 km

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<sup>&</sup>lt;sup>1</sup> For the purpose of CPTD, TSECL and POWERGRID may be referred as SPCU and PPIU, respectively. For further details, please refer Chapter - VII Institutional arrangements.

- 2. LILO of 132kV Ambassa PK Bari line at Manu substation 0.441 km
- 3. Establishment of 132/33kV new substation at Manu
- 4. Extension of 132/33kV Kailasahar & Dharmanagar
- 5. Augmentation of 132/33kV substation at Ambassa

#### **B.** Distribution Scheme Components:

- 1. 33kV line from 132/33kV Ambassa (Existing)-33/11kV Jawahar Nagar (New) substation 6.4 km
- 2. 33kV line from 33/11kV Jawahar Nagar (New)-33/11kV Dhumachhera (New) substation -20 km
- 3. 33kV line from 132/33kV Manu (New)-33/11kV Dhumachhera (New) substation 3.645 km
- 4. 33kV line from 132/33kV Manu (New)-33/11kV 82 Mile (New) substation 11.426 km
- 5. 33kV line from 132/33kV PK Bari (Existing)-33/11kV 82 Mile (New) substation 8.094 km
- 6. 33kV line from 132/33kV Kailasahar (Existing)-33/11kV Tilla Bazar (New) substation 8.945 km
- 7. 2x33kV line from 33/11kV Durgachowmohni-LILO of 33kV Salema-Kamalpur line 20.134 km
- 8. 2x33kV line from 33/11kV Chailengta-LILO of 33kV Chamanu-Manu line 1.829 km
- 9. Establishment of 33/11kV new substations at Jawahar Nagar, Dhumachhera, 82 Mile, Tilla Bazar, Durgachowmohni & Chailengta
- iv. As per existing law, land for tower/ pole and right of way is not acquired<sup>2</sup> 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 to 6 sq-ft. Thus, the actual impact is restricted to 4 legs of the tower. Further, line alignments are done in such a way so as to avoid settlements and/ or structures and hence no relocation of population on account of Transmission Line (TL)/ Distribution Line (DL) is envisaged. Most of the impacts are temporary in nature in terms of loss of standing crops/trees and other damages for which compensation will be paid to the affected persons/community for all damages including cost of land below tower to its owner without acquiring it as per the laws and provisions laid in ESPPF.
- v. For the temporary loss of crops, only agricultural land and private plantation land are considered for estimation. Though Right of Way (RoW) for 132kV & 33kV lines are 27 meter & 15 meter respectively, but average affected width/ corridor would be limited to maximum 20 meter for 132kV & 10 meter for 33kV line. Accordingly, actual impacted area for crops and other damages worked out to be approx. 71.62 acres. Total number of trees to be affected is 2747. Additionally 51 bamboos will be affected during construction of line. Private trees will be compensated as per the entitlement matrix. The total number of affected persons is estimated to be 244.

<sup>&</sup>lt;sup>2</sup> 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.

- vi. 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 TSECL & POWERGRID's site officials meet 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 sites. 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. TSECL & POWERGRID's 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. The executive summary of the CPTD/ Entitlement Matrix in local language will be placed at construction offices/ sites.
- vii. 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 GRC includes member from TSECL, POWERGRID, Local Administration, Village Panchayat Members, Affected Persons representative and reputed persons from the society and representative from the tribal autonomous district councils selected/decided on nomination basis under the chairmanship of project head. The composition of GRC has been 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 has in-built tree/ crop compensation in the 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.
- viii. The CPTD is based on the World Bank Safeguard Policies as well as TSECL'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) MoP Guidelines of

Oct.'2015 on RoW Compensation. The compensation principles adopted for the project shall comply with applicable laws and regulations of the Government of India, TSECL's ESPPF as well as the World Bank Safeguard Policies.

ix. 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. One time lump-sum assistance to vulnerable households on recommendation of State Authority. As an additional assistance, construction contractors are encouraged to hire local labor that has the necessary skills. TSECL/ 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           | Owner         | 100% land cost at market value as ascertained by          |
|      | tower base                |               | revenue authorities or based on negotiated settlement     |
|      |                           |               | without actual acquisition/title transfer.                |
| 2.   | Land coming in            | Owner         | 15% of land cost as decided by District Commissioner      |
|      | corridor of width of      |               | or any other competent authority                          |
|      | Right of Way (#)          |               |   |
| 3.   | Loss/damage to crops      | Owner/        | Compensation to actual cultivator at market rate for      |
|      | and trees in line         | Tenant/       | crops and 8 years income for fruit bearing trees*. APs    |
|      | corridor                  | sharecropper/ | will be given advance notice to harvest their crops.      |
|      |                           | leaseholder   | All timber* will be allowed to retain by the owner.       |
| 4    | Other damages             | All APs       | Actual cost as assessed by the concerned authority.       |
|      | (if applicable)           | 7117113       |   |
| 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/       | Individual/   | Cash compensation plus Rs. 10000/- for construction       |
|      | Cattle shed               | Titleholders  | of working shed/shop plus transition benefits as per      |
|      |                           |               | category-5 below  |
| 6.   | Losses during             | Family/unit   | Provision of transport or equivalent cash for shifting of |
|      | transition under (i) &    |               | material/ cattle from existing place to alternate place   |
|      | (ii) above for Shifting / |               |   |
|      | Transport                 |               |   |

| SI. | Type of Issue/ Impact  | Beneficiary | Entitlement Options                       |    |                    |    |     |            |     |
|-----|------------------------|-------------|---|----|--------------------|----|-----|------------|-----|
| 7.  | Tribal/ Vulnerable APs | Vulnerable  | One tir                                   | me | additional lump su |    | sum | assistance | not |
|     |                        | APs3        | exceeding 25% of total compensation       |    | mpensation         | on |     |            |     |
|     |                        |             | recommendation of State Authority/ADC/VC. |    |                    |    |     |            |     |

<sup>(#)</sup> Compensation for land value as per MoP guidelines dated 15.10.2015 shall be paid once Govt. of Tripura adopts the said guidelines for implementation.

- x. 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 TSECL/ POWERGRID and APs is to be done and verified by revenue official for actual damages. Hence, compensation is paid in parallel 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 475.342 Lakhs equivalent to USD 0.659 million.
- xi. 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, GoI. CPIU shall also assist MoP, GoI in monitoring project progress and in its coordination with The Bank.
- xii. Public consultation and internal monitoring will be continued in an intermittent basis for the entire duration of the project. Monitoring will be the responsibility of both TSECL & IA. TSECL/POWERGRID will submit semi-annual monitoring reports on their implementation performance and submit the reports to The World Bank. If required, TSECL/POWERGRID will engage the services of an independent agency/ external monitoring for which necessary provisions have been kept in the budget.

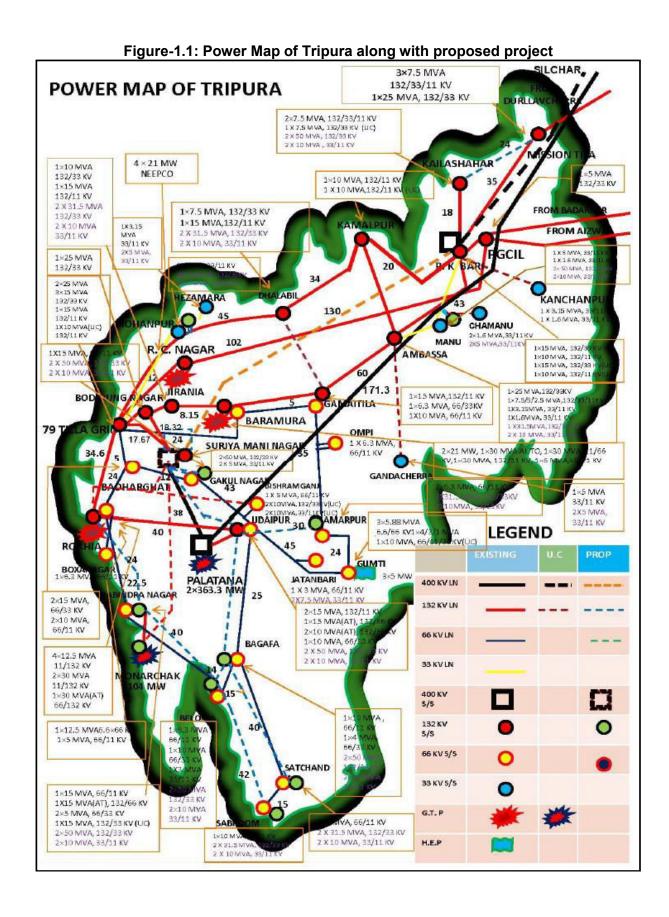
<sup>\*</sup> Assistance/help of Forest department for timber yielding trees and Horticulture department for fruit bearing trees shall be taken for assessing the true value.

<sup>&</sup>lt;sup>3</sup> Vulnerable APs include scheduled tribes residing in scheduled areas/ physically handicapped/ disabled families etc.

#### 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 Tripura. The project being funded on 50:50 (World Bank loan: Gol) basis except the component of capacity building for Rs.89 crore, which Gol will bear entirely. The scheme is to be taken up under a new Central Sector Plan Scheme of Ministry of Power (MoP).
- 3. Ministry of Power, GoI 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 the state of Tripura includes construction of 261 km of 132kV transmission lines & associated 16 Nos. (09 Nos. New & 07 Nos. Extension) and 1091 ckm of 33kV distribution lines & associated 61 Nos. distribution substations (34 Nos. New & 27 Nos. Extension/ Augmentation/ Strengthening) spread across the State. The power map of Tripura indicating the existing intra-state transmission network along with proposed project under Tranche-1 of NERPSIP is presented in **Figure-1.1**.



#### 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 Dhalai, Unakoti & North Tripura districts of Tripura State;

#### A. Transmission Scheme Components:

- 1. Kailasahar Dharmanagar 132kV D/C line 21.719 km
- 2. LILO of 132kV Ambassa PK Bari line at Manu substation 0.441 km
- 3. Establishment of 132/33kV new substation at Manu
- 4. Extension of 132/33kV Kailasahar & Dharmanagar
- 5. Augmentation of 132/33kV substation at Ambassa

#### **B. Distribution Scheme Components:**

- 1. 33kV line from 132/33kV Ambassa (Existing)-33/11kV Jawahar Nagar (New) substation- 6.4 km
- 2. 33kV line from 33/11kV Jawahar Nagar (New)-33/11kV Dhumachhera (New) substation- 20 km
- 3. 33kV line from 132/33kV Manu (New)-33/11kV Dhumachhera (New) substation- 3.645 km
- 4. 33kV line from 132/33kV Manu (New)-33/11kV 82 Mile (New) substation- 11.426 km
- 5. 33kV line from 132/33kV PK Bari (Existing)-33/11kV 82 Mile (New) substation- 8.094 km
- 6. 33kV line from 132/33kV Kailasahar (Existing)-33/11kV Tilla Bazar (New) substation- 8.945 km
- 7. 2x33kV line from 33/11kV Durgachowmohni-LILO of 33kV Salema-Kamalpur line- 20.134 km
- 8. 2x33kV line from 33/11kV Chailengta-LILO of 33kV Chamanu-Manu line 1.829 km
- 9. Establishment of 33/11kV new substations at Jawahar Nagar, Dhumachhera, 82 Mile, Tilla Bazar, Durgachowmohni & Chailengta
- 7. The schematic diagram of proposed transmission and distribution network under Tranche-1 of NERPSIP is shown in **Figure-1.2**.

33 KV 132 KV AMBASA S/S 33 KV CHAWMANUS/S CHAILENGTA 5/S 33 KV MANUS/S 132 KV 33 KV DHUMACHHERA SVS MANU S/S 132 KV DURLLAVCHERA 33 KV 82 MILES 33 KV TILABAZAR 132 KV 132/33 KV 132 KV P. K. BARI S/S DHARMANAGAR KAILASAHAR S/S 132 KV LINE (NEW) 132 KV LINE (EXISTING) 33 KV SALEMA S/S 33 KV DURGACHOWMOHNI 132/33 KV KAMALPUR S/S EXISTING STATE OWNED S/S EXISTING STATE OWNED LINE NAME AND DESCRIPTION OF NEW S/S PROPOSED UNDER NERPSIP NEW 132 KV T/L PROPOSED UNDER NERPSIP

Figure-1.2: Proposed T & D Network in Dhalai, Unakoti & North Tripura Districts under NERPSIP

NEW 33 KV LINE PROPOSED UNDER NERPSIP

AUGMENTATION OF EXISTING S/S

PROPOSED UNDER NERPSIP

#### 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, MoP guidelines of 15<sup>th</sup> October 2015 on RoW Compensation, TSECL'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. TSECL/ POWERGRID<sup>4</sup> 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 updating will be a continuous process during construction of line for which updated semi-annual CPTD monitoring report shall be submitted by TSECL/ POWERGRID.

<sup>&</sup>lt;sup>4</sup> For the purpose of CPTD, TSECL and POWERGRID may be referred as SPCU and PPIU respectively. For further details, please refer Chapter - VII institutional arrangements.

#### 1.5. Measures to Minimize Impact

- 10. In keeping with provisions of ESPPF and Bank's Safeguard Policies, TSECL/ POWERGRID has selected and finalized the routes of transmission line with due consideration of the avoidance or minimization of impacts toward temporary damages on crops/ trees/ structures, if any coming in the Right of Way (RoW) during construction. Similarly, the route of all the 33kV 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 Dept. of Power, Govt. of Tripura vide notification dated 20<sup>th</sup> June 2014, TSECL have 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, TSECL/ 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, TSECL/ POWERGRID undertake route selection for individual line in close consultation with representatives of concerned Forest Department and the Department of Revenue. Although under the law, TSECL has 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 Tripura and project districts in particular i.e. Dhalai, Unakoti & North Tripura through which the various lines will traverse. It may be noted that Unakoti district was carved out from North Tripura district in January 2012 and due to non-availability of socio-economic information of this district separately, data of undivided North Tripura district has been provided. Following section briefly discuss socio-economic profile of the State and project area districts in particular.

#### 2.2. Socio-Economic Profile

#### 2.2.1. Land Use

21. Tripura, is situated in the north eastern part of the country and shares international border with Bangladesh from three sides The area of the State is 10,491 sq. km which forms 0.32% of country's geographical area. The State lies between latitude 22°57' N and 24°33' N and longitude 91°10' and 92°20' E in North Eastern Region physiographic zone. The general land use pattern of the State is given in **Table-2.1**.

**Table-2.1: Land Use Pattern** 

| Land Use                                   | Area in '000 ha | Percentage |
|--|-----------------|------------|
| Total geographical area                    | 1,049           |            |
| Reporting area for land utilization        | 1,049           | 100.00     |
| Forests                                    | 629             | 59.96      |
| Not available for cultivation              | 141             | 13.44      |
| Permanent pastures and other grazing lands | 02              | 0.19       |
| Land under misc. tree crops & groves       | 14              | 1.33       |
| Cultivable wasteland                       | 04              | 0.38       |
| Fallow lands other than current fallows    | 02              | 0.19       |
| Current Fallows                            | 02              | 0.19       |
| Net area sown                              | 256             | 24.40      |

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

22. Unakoti district was created from North Tripura district in January 2012. Erstwhile North Tripura district (including the area of newly created Unakoti district) lies between latitude 24°36′N and longitude 92°19′E. Total Geographical area of the district is 1422.19 sq. km. The district is bounded by Bangladesh in North, by Assam in the west, by Unakoti & Dhalai districts in the East and by Mizoram & Bangladesh in the south.

23. Dhalai district situated approximately between latitude 23°56′N and longitude 91°51′E.Total geographical area of the district is 2426 sq. km. It is bounded by Bangladesh in both North and South, by Khowai, Gomati and South Tripura districts in the west and by North Tripura & Unakoti districts in the east.

#### 2.2.2. Climate

- 24. The State has a tropical savanna type climate, designated under the Köppen climate classification. The undulating topography leads to local variations, particularly in the hill ranges. The four main seasons are winter from December to February, pre-monsoon or summer from March to April, monsoon from May to September and post-monsoon from October to November. During the monsoon season the south west monsoon brings heavy rains, which cause frequent floods.
- 25. The climate of North Tripura district is characterized by moderate temperature and is highly humid in nature. There are three prominent seasons summer, rainy and winter. The summer season spans from March to May and is followed by S W monsoon lasting till September. Winter season starts from November and lasts till the end of February. Dhalai district has tropical climate with hot & humid summers, a prolonged rainy season and warm winters.
- 26. The annual rainfall of the State varies between 2,250 mm to 2,500 mm. Average annual rainfall in Dhalai and North Tripura districts is about 2200 mm and 2430 mm, respectively.

#### 2.2.3. Water Resources

- 27. The State of Tripura has rich water resources with the presence of as many as ten major rivers, including Gumti, Manu-Deo and Khowai. All rivers are rain-fed and ephemeral in nature. All major rivers originate from hill ranges and show a typical drainage pattern called trelis, except a few instances of dendrite pattern. A study of basin characteristics by CSME (1989) indicate that eight of the ten basins are within the territorial limit of Tripura while basin areas of river Fenni and Langai are shared by two Indian States viz. Tripura and Mizoram and Bangladesh. Collectively basin area of ten major rivers and other minor streams covers nearly 10,500 sq. km. In terms of percentage of the basin of individual rivers vis-a-vis, total basin Gumti (22.66%), is followed by Manu-Deo (18.36%) and Khowai.
- 28. The main rivers flowing through Dhalai district are Dhalai, Khowai, Gomati and Manu, while Deo, Mnu, Longai and Juri are the prominent rivers of North Tripura district.

#### 2.2.4. Soil

29. The soil in Tripura can be classified into five distinct categories i.e.1) Red loamy soil and sandy soil (cover 43.07% of the total land area of the State) 2) Reddish yellow brown sandy soil (cover 33.06% of the land area of the State). The three other types of soil that prevail in the region are the 3) Lateritic soil 4) Younger Alluvial soil 5) Older alluvial soil. The factors influencing the prevalence of different types of soil in Tripura include topographical changes, climate changes, prevalent rock materials and the vegetation. Soil erosion caused by chemical weathering of the soil in the State of Tripura has led to the bed rock of the region being revealed.

#### 2.2.5. Ecological Resources

30. The total forest area is 6292.618 km² in the whole state. Reserved forest is 3588.183 km², unclassified Government forest is 2195.473 km², while proposed reserved forest is 509.025 km². The forests in the state are mainly tropical evergreen, semi evergreen, and moist deciduous. Sizeable area is covered with bamboo brakes which virtually form a "Sub climax" resulting from shifting cultivation from time immemorial. Bamboo plays a very vital role in the economy of the State as it serves the artisan & non artisan users of the state. The Dhalai and North Tripura districts are rich in forest resources with forest cover of 79.02% and 71.55% of total geographical area, respectively. The state has two National Parks and four Wildlife Sanctuaries covering an area of 603.64 sq.km constituting 5.75% of the total geographical area of the State. The proposed transmission/ distribution lines are not passing through any protected area like national parks, sanctuaries, and biosphere reserves etc, as all such areas have been completely avoided through careful route selection.

#### 2.2.6. Crops

31. Tripura is an agrarian State with more than half of the population dependent on agriculture and allied activities. However, due to hilly terrain and forest cover, only 27% of the land is available for cultivation. Rice, the major crop of the state, is cultivated in 91% of the cropped area. According to the Directorate of Economics & Statistics, Government of Tripura, in 2014-15, potato, sugarcane, pulses and jute were the other major crops cultivated in the State. Jackfruit and pineapple top the list of horticultural products. Traditionally, most of the indigenous population practiced jhum method (a type of slash-and-burn) of cultivation. The number of people dependent on jhum has declined over the years.

#### 2.2.7. Human and Economic Development

32. Tripura being a farming state, paddy is the major crop cultivated in 91% of total crop area

across the State. Besides potato, sugarcane, pulses and jute also contribute significantly to the State agriculture. Pisciculture has made significant advances in the State. Tripura ranks second only to Kerala in the production of natural rubber in the country. The State is known for its handicraft, particularly hand-woven cotton fabric, wood carvings, and bamboo products. High quality timber including sal, garjan, teak and gamar are found abundantly in the forests of Tripura. The industrial sector of the State continues to be highly underdeveloped - brickfields and tea industry are the only two organised sectors. Tripura has considerable reservoirs of natural gas. According to estimates by Oil and Natural Gas Corporation (ONGC), the State has 400 billion cum reserves of natural gas, with 16 billion cum is recoverable. ONGC produced 480 million cum natural gas in the State, in 2006-07. In 2011 and 2013, new large discoveries of natural gas were announced by ONGC.

- 33. The economy of Tripura can be characterized by rate of poverty, low capital formation in-adequate infrastructure facilities, Geographical isolation and communication bottleneck, in-adequate exploration and use of forest and mineral resources, slow industrialization and high unemployment. More than 50% of the population depends on agriculture for sustaining their livelihood. However, share of agriculture and allied activities in Gross State Domestic Production (GSDP) is only 23% primarily due to low capital base in the sector.
- 34. An overwhelming 76% of the total workers in Dhalai district are dependent on agriculture for their livelihood. Practice of Jhum cultivation still continues in many parts of the district. Around 25% of the households in the district are classified as Below Poverty Line (BPL), which indicates the weak economic base of the district. Industries are by and large absent in the district, except for few Handloom and Handicraft units. There are no Industrial Estates, no Industrial Growth centres and only one Industrial Area present in the district.
- 35. Agriculture is the main source of livelihood of the North Tripura district, with 31,921.6 Ha of agricultural land under cultivation. Tea processing is the single largest industry in the district. There are 23 tea gardens with ten processing factories. Total production of tea is about 23 million kg. Food Processing, Light Engineering, Brick kilns, Wood Processing, natural rubber based units, spices, Distilleries, Handloom & Handicrafts are the other industries present in the district.

#### 2.2.8. Demography Features

#### 2.2.8.1. Total Population

36. Total population in Tripura stands at 36,73,917 of which 27,12,464 (73.83%) population belong to rural area and 9,61,453 (26.17%) population belong to urban area. The Dhalai district has a total of 3,78,230 population of which 89.29% resides in rural areas and 10.71% belongs to urban areas. North Tripura has a total population of 6,93,947 with 82.67% and 17.33% of rural and urban population of the district, respectively. Details are given in **Table-2.2**.

**Table-2.2: Details on Total Population** 

| Name           | Total Population | Total (Rural) | Total (Urban) | Percentage<br>(Rural) | Percentage<br>(Urban) |
|----------------|------------------|---------------|---------------|-----------------------|-----------------------|
| Tripura        | 36,73,917        | 27,12,464     | 9,61,453      | 73.83                 | 26.17                 |
| Dhalai         | 3,78,230         | 3,37,731      | 40,499        | 89.29                 | 10.71                 |
| North Tripura* | 6,93,947         | 5,73,662      | 1,20,285      | 82.67                 | 17.33                 |

Source: Census of India, 2011

#### 2.2.8.2. Male and Female Population

37. Out of total population 36,73,917 of the State, male population constitutes 18,74,376 (51.0%) and female population is 17,99,541 (49.0%). Total population in Dhalai district stands at 3,78,230 of which male population stands at 1,94,544 (51.44%) and female population stands at 1,83,686 (48.56%) with sex ratio 944 which is lower than State's average of 960. The total population of North Tripura is 6,93,947 which covers male population 3,52,860 (50.84%) and female population 3,41,087 (49.16%) with sex ratio of 967. Details are given in **Table-2.3**.

Table 2.3: Details on Male/ Female Population

| Name          | Total      | Total Male | Total     | Total Percentage Percentage |          | Sex   |  |  |
|---------------|------------|------------|-----------|-----------------------------|----------|-------|--|--|
| /Particulars  | Population | TOTAL MAIE | Female    | (Male)                      | (Female) | Ratio |  |  |
| Tripura       | 36,73,917  | 18,74,376  | 17,99,541 | 51.0                        | 49.0     | 960   |  |  |
| Dhalai        | 3,78,230   | 1,94,544   | 1,83,686  | 51.44                       | 48.56    | 944   |  |  |
| North Tripura | 6,93,947   | 3,52,860   | 3,41,087  | 50.84                       | 49.16    | 967   |  |  |

Source: Census of India, 2011

#### 2.2.8.3. Scheduled Caste (SC) and Scheduled Tribe (ST) Population

38. As per census 2011, the Scheduled Caste (SC) & Scheduled Tribe (ST) population of the State stands at 6,54,918 (17.83%) and 11,66,813 (31.76%), respectively. The Dhalai district has a total SC population of 61,688 (16.31.0%) and ST population of 2,10,608 (55.68%). The SC and ST population of North Tripura district stand at 1,14,968 (16.57%) and 1,79,426 (25.86%) respectively. Details are given in **Table-2.4**.

Table-2.4: Details on Percentage SC/ST

| Name/<br>Particulars | Total<br>Population | Total SC Population | Percentage of SC Population | Total ST<br>Population | Percentage of ST Population |
|----------------------|---------------------|---------------------|-----------------------------|------------------------|-----------------------------|
| Faiticulais          | •                   | •                   | 30 Population               | •                      | •                           |
| Tripura              | 36,73,917           | 6,54,918            | 17.83                       | 11,66,813              | 31.76                       |

<sup>\*</sup>Since Unakoti district was derived from North Tripura district in 2012, the census data of this district was merged with North Tripura district as per the 2011 census. Therefore the demographic data given here for North Tripura district as per 2011 census would be considered as the combined demographic data of the two districts viz. North Tripura and Unakoti.

| Dhalai        | 3,78,230 | 61,688   | 16.31 | 2,10,608 | 55.68 |
|---------------|----------|----------|-------|----------|-------|
| North Tripura | 6,93,947 | 1,14,968 | 16.57 | 1,79,426 | 25.86 |

Source: Census of India, 2011

#### 2.2.8.4. Literacy

39. The literacy rate of Dhalai district stands at 73.03% which is lower than State's average (76.34%). The North Tripura district has 75.0% of literacy rate. However, the female literacy rate of Dhalai & North Tripura districts are 45.09% & 47.03% respectively. Details are given in **Table-2.5**.

**Table-2.5: Literate and Illiterate Population** 

| Name/Particulars | Total      | Total     | Percentage  | Percentage | Percentage |  |
|------------------|------------|-----------|-------------|------------|------------|--|
|                  | Population | Literate  | of Literate | (Male)     | (Female)   |  |
| Tripura          | 36,73,917  | 28,04,783 | 76.34       | 53.53      | 46.47      |  |
| Dhalai           | 3,78,230   | 2,76,217  | 73.03       | 54.91      | 45.09      |  |
| North Tripura    | 6,93,947   | 5,20,402  | 75.00       | 52.97      | 47.03      |  |

Source: Census of India, 2011

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

40. Total population into work in Tripura stands at 14,69,521 of which total Male (work) population stands at 10,45,326 (71.13%) and total female (Work) population stands at 4,24,195 (28.87%). The Dhalai district has a total work population of 1,55,831 of which total Male (work) population stands at 1,05,657 (67.80%) and total female (Work) population stands at 50,174 (32.20%). Whereas in North Tripura district, the total population at work stands at 2,48,667 of which Male (work) population stands at 1,86,034 (74.81%) and total female (Work) population stands at 62,633 (25.19%). Details are given in **Table-2.6**.

Table-2.6: Details on Workers

| Name/         | <b>Total Population</b> | Total Male | Total Female | Percentage | Percentage |
|---------------|-------------------------|------------|--------------|------------|------------|
| Particulars   | (Work)                  | (Work)     | (Work)       | (Male)     | (Female)   |
| Tripura       | 14,69,521               | 10,45,326  | 4,24,195     | 71.13      | 28.87      |
| Dhalai        | 1,55,831                | 1,05,657   | 50,174       | 67.80      | 32.20      |
| North Tripura | 2,48,667                | 1,86,034   | 62,633       | 74.81      | 25.19      |

Source: Census of India, 2011

#### 2.3.8.6. Households

41. Total Households in Tripura stands at 8,55,556 of which 6,16,582 (72.07%) households belong to rural area and 2,38,974 (27.93%) households belong to urban area. Dhalai district has a total of 84,509 households of which 74,404 (88.04%) households belong to rural area and 10,105 (11.96%) households belong to urban area. The total households in North Tripura district stands at

1,52,355 of which 1,23,624 (81.14%) belong to rural area and 28,731 (18.86%) 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) |
|----------------------|---------------------|------------------|------------------|-----------------------|-----------------------|
| Tripura              | 8,55,556            | 6,16,582         | 2,38,974         | 72.07                 | 27.93                 |
| Dhalai               | 84,509              | 74,404           | 10,105           | 88.04                 | 11.96                 |
| North Tripura        | 1,52,355            | 1,23,624         | 28,731           | 81.14                 | 18.86                 |

Source: Census of India, 2011

#### III. LEGAL & REGULATORY FRAMEWORK

#### 3.1. Overview

42. 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<sup>st</sup>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 compensation for all damages is 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) MoP guidelines on 15<sup>th</sup> October, 2015 for payment of compensation toward damages in regard to RoW. 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 TSECL's ESPPF.

#### 3.2. Statutory Requirements

- 43. 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 TSECL has been vested with the powers of Telegraph Authority vide Dept. of Power, Govt. of Tripura notification dated 20<sup>th</sup> June 2014, under Section 164 of the Electricity Act. As per the provision of Indian Telegraph Act, 1885 under section 10 (b), TSECL 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.
- 44. 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): |  |

<sup>&</sup>lt;sup>6</sup> 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

- (3) A licensee shall, in exercise of any of the powers conferred by or under this section and the rules made there under, cause as little damage, detriment and inconvenience as may be, and 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 15<sup>th</sup> October, 2015 for payment of compensation toward damages in regard to RoW

45. Ministry of Power (MoP) vide its order No. 3/7/2015-Trans dated 15<sup>th</sup> 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<sup>th</sup> Oct'15 has issued guidelines for payment of compensation for damages in regard to RoW (**Annexure-2**). As per the said guidelines, followings compensation shall be paid to all affected farmers/land owners as per norms in addition to normal tree and crop damage compensation;

- i) **Tower base**: Compensation @ 85% of land value as determined by District Magistrate or any other competent authority based on Circle rate/ Guideline value/ Stamp Act rates 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 Magistrate or any other competent authority based on Circle rate/ Guideline value/ Stamp Act.
- 46. 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. However, till date Govt. of Tripura has not adopted the said guidelines for implementation.

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

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

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

#### 3.4. TSECL's ESPPF

- 48. To address the environmental and social issues related to its power transmission and distribution projects under NERPSIP, TSECL 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.
- 49. 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.
- 50. 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 the project.
- (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

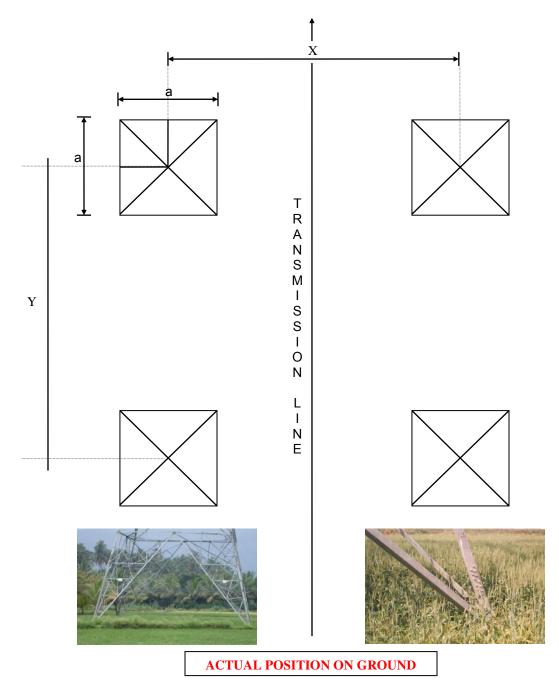
- 51. The basic principles adopted for the Project are;
- (i) Avoid negative impacts of land acquisition and involuntary resettlement on persons affected by the Project to the extent possible.
- (ii) Where negative impacts cannot be avoided, assist affected persons (AP), in improving or at least regaining 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.
- 52. Additionally, the issues related to the Right of Way (RoW) for the transmission/ distribution 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

- 53. 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 including major crossings along with maps of proposed route alignment is placed as Annexure-3. 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/ check 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 132kV D/C transmission line is 27 meter whereas, the 33kV distribution lines it is considered as 15 meter.
- 54. 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.
- 55. 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 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 33kV 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 current land use is not altered and resumed after construction. As per present practices, full

Figure-4.1: Typical Plan of Transmission Line Tower Footing

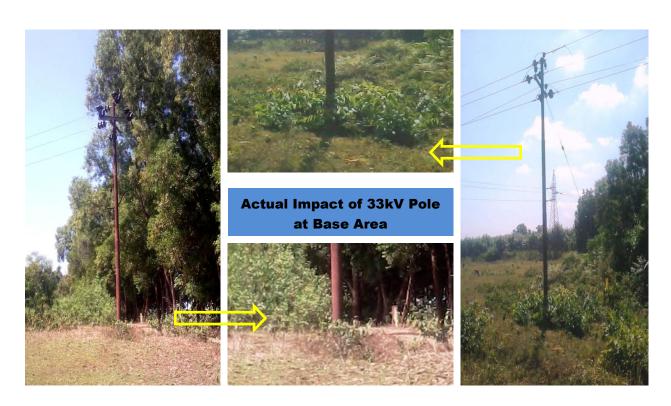


#### INDICATIVE MEASURES

X & Y = 5-10 METERS

a = 200 - 300 mm

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









33kV (H Pole) line inside substation

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. Once Govt. of Tripura adopt the MoP guidelines dated 15<sup>th</sup> Oct,'15, compensation toward damages in regard to RoW shall be paid as per the norms in addition to normal crop and tree damages.

- 56. 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.
- 57. 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 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 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.
- 58. 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 assess 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/TSECL pay 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

59. The project components consists of establishment of 01 no. of new 132/33kV substation & 06 nos. new 33/11 kV substations as well as extension work of 132/33kV Kailasahar & Dharmanagar substation and augmentation work of Ambassa substation located in Dhalai, Unakoti & North Tripura districts of Tripura. Land for all new substations are already in possession with TSECL. Further, extension of the proposed substations will be done within the existing substations campus and the land belongs to TSECL. Since no fresh land 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 | Temporary     | Impact   | Remarks |
|--|-----------|---------------|----------|---------|
|  | Impact on | Impact on     | on Loss  |         |
|  | Land Use  | loss of crops | of Trees |         |
| 132/33kV new substation at Manu                | No        | Nil           | Nil      |         |
| Extension of 132/33kV substation at Kailasahar | No        | Nil           | Nil      |         |
| Ext. of 132/33kV substation at Dharmanagar     | No        | Nil           | Nil      |         |
| Augm. of 132/33kV substation at Ambassa        | No        | Nil           | Nil      |         |
| 33/11kV new substation at Jawahar Nagar        | No        | Nil           | Nil      | TSECL   |
| 33/11kV new substation at Dhumachhera          | No        | Nil           | Nil      | Land    |
| 33/11kV new substation at 82 Mile              | No        | Nil           | Nil      |         |
| 33/11kV new substation at Tilla Bazar          | No        | Nil           | Nil      |         |
| 33/11kV new substation at Durgachowmohni       | No        | Nil           | Nil      |         |
| 33/11kV new substation at Chailengta           | No        | Nil           | Nil      |         |

#### 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

60. The line corridor will pass through mixed land uses which are generally agricultural land, private plantation/forest land, govt. 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 102.633 kilometres (km) which will impact an estimated of 446.106 acres<sup>7</sup> of land. These include 10.688 km of line passing through agricultural land (71.306 acres of agricultural land), 3.805 km of private plantation (25.38 acres of private plantation), 7.667 km of forest land (51.15 acre of forest land) and 80.473 km of government/ barren land (298.27acres of government/ barren 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 Km/Hectares)

| SI. | Name of the              | RoW      | Agricultural  | Private      | Forest       | Govt/  | Total          |
|-----|--------------------------|----------|---------------|--------------|--------------|--------|----------------|
| No. | Line                     | (in mtr) | land          | Plantation   |              | Barren |                |
| A.  | <b>Transmission Lin</b>  | е        |               |              |              |        |                |
| 1   | Kailasahar -             |          | 10.688 km     | 3.364 km     | 7.667 km     | Nil    | 21.719 km      |
|     | Dharmanagar              |          | (71.306 acre) | (22.44 acre) | (51.15 acre) |        | (144.896 acre) |
|     | 132kV D/C                | 27       | , ,           | ,            | ,            |        | ĺ              |
| 2   | LILO of 132kV            |          | Nil           | 0.441 km     | Nil          | Nil    | 0.441 km       |
|     | Ambassa - PK             |          |               | (2.94 acre)  |              |        | (2.94 acre)    |
|     | Bari line at Manu        |          |               | ,            |              |        | ,              |
|     | s/s                      |          |               |              |              |        |                |
| B.  | <b>Distribution Line</b> |          |               |              | ·            | •      |                |

<sup>&</sup>lt;sup>7</sup> Total Line Length (kilometers) X Right of Way (meters)X1000/4,047= Area in Acre

| Total |   |    | (71.306 acre) | (25.38 acre) | (51.15 acre) | (298.27acre)              | (446.106 acre)            |
|-------|---|----|---------------|--------------|--------------|---------------------------|---------------------------|
|       | Total   |    | 10.688 km     | 3.805 km     | 7.667 km     | 80.473 km                 | 102.633 km                |
| 10    | Chailengta - LILO<br>point of Chamanu<br>- Manu |    | Nil           | Nil          | Nil          | (6.78 acre)               | (6.78 acre)               |
| 10    | - LILO of Salema -<br>Kamalpur 33kV             |    | Nil           | Nil          | Nil          | (74.63 acre)              | (74.63 acre)              |
| 9     | Durgachowmohni                                  |    |               |              |              | 20.134 km                 | 20.134 km                 |
| 8     | Kailasahar<br>(Existing) - Tilla<br>Bazar 33kV  | 15 | Nil           | Nil          | Nil          | 8.945 km<br>(33.15 acre)  | 8.945 km<br>(33.15 acre)  |
| 7     | PK Bari (Existing)<br>- 82 Mile 33kV            |    | Nil           | Nil          | Nil          | 8.094 km<br>(30.0 acre)   | 8.094 km<br>(30.0 acre)   |
| 6     | Manu - 82 Mile<br>33kV                          |    | Nil           | Nil          | Nil          | 11.426 km<br>(42.35 acre) | 11.426 km<br>(42.35 acre) |
| 5     | Manu -<br>Dhumachhera<br>33kV                   |    | Nil           | Nil          | Nil          | 3.645 km<br>(13.51 acre)  | 3.645 km<br>(13.51 acre)  |
| 4     | Jawahar Nagar -<br>Dhumachhera<br>33kV          |    | Nil           | Nil          | Nil          | 20.0 km<br>(74.129 acre)  | 20.0 km<br>(74.129 acre)  |
| 3     | Ambassa-<br>Jawahar Nagar<br>s/s 33kV           |    | Nil           | Nil          | Nil          | 6.4 km<br>(23.72 acre)    | 6.4 km<br>(23.72 acre)    |

Source: Detailed Survey

## 4.3.2. Total loss of crop area (RoW Corridor)

- 61. 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 (27 m for 132kV D/C) but mostly restricted to tip to tip of the conductor and tower base area where average affected width/ corridor would be limited to 20 meter (maximum). In 33kV distribution lines, damages are minimal (mostly near bi-pole/ quad-pole structure) however, 10 meter corridor is considered for accessing 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.
- 62. 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 71.62 acres. Details of estimated impacted area for crop damages are given in **Table-4.3**.

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

| Name of the line   | Width Considered for Estimation of Loss of Crops &other impacts (Meter) | Total<br>Agricultural<br>Land (km) | (km)   | Total Line Length Considered for Crop Compensation (km) | Total Land Area considered for Crop Compensation (Acre) |
|--|---|------------------------------------|--------|---|---|
| Kailasahar - Dharmanagar<br>132kV D/C                      | 20  | 10.688                             | 3.364  | 14.052  | 69.44   |
| LILO of 132kV Ambassa - PK<br>Bari line at Manu substation | 20  | Nil                                | 0.441  | 0.441   | 2.18  |
| Ambassa (Existing) - Jawahar<br>Nagar (New) s/s 33kV       |   | Nil                                | Nil    | Nil   | Nil   |
| Jawahar Nagar-Dhumachhera 33kV                             |   | Nil                                | Nil    | Nil   | Nil   |
| Manu -Dhumachhera 33kV                                     |   | Nil                                | Nil    | Nil   | Nil   |
| Manu (New) - 82 Mile (New)<br>33kV                         | 10  | Nil                                | Nil    | Nil   | Nil   |
| PK Bari (Existing) - 82 Mile (New) 33kV                    | 10  | Nil                                | Nil    | Nil   | Nil   |
| Kailasahar (Existing) - Tilla<br>Bazar (New) 33kV          |   | Nil                                | Nil    | Nil   | Nil   |
| Durgachowmohni (New) -LILO of Salema-Kamalpur 33kV         |   | Nil                                | Nil    | Nil   | Nil   |
| Chailengta (New) - LILO point of Chamanu - Manu            |   | Nil                                | Nil    | Nil   | Nil   |
| Total  | 10.688  | 3.805                              | 14.493 | 71.62   |   |

Source: Detailed Survey

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

63. 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 132kV T/L tower and one pole for 33kV D/L is approx. 0.25 sq. m & 0.092 sq. m. respectively. Based on above, total land lost for construction of 22.16 km of 132kV transmission line and 80.473 km of 33kV distribution line proposed under the present scheme is estimated to be 0.070 acre. However, compensation toward loss of land shall be provided to APs which is part of RoW compensation. Detail of land loss for tower base & pole is given in **Table-4.4**.

Table 4.4: Estimation of Actual Loss of Land for Crop 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 area for tower & pole base (sq.m.) |
|---|------------------------|-------------------------------|--|--|
| Kailasahar -Dharmanagar 132kV D/C                       | 21.719                 | 79                            | 0.25   | 19.75  |
| LILO of 132kV Ambassa - PK Bari line at Manu substation | 0.441                  | 05                            | 0.25   | 1.25   |
| Ambassa (Existing) - Jawahar Nagar (New) s/s 33kV       | 6.4                    | 23                            | 0.092  | 2.116  |

| Jawahar Nagar (New) -<br>Dhumachhera (New) 33kV line  | 20.0                    | 720 | 0.092 | 66.24  |
|---|-------------------------|-----|-------|--------|
| Manu - Dhumachhera 33kV                               | 3.645                   | 141 | 0.092 | 12.972 |
| Manu (New) - 82 Mile (New) 33kV                       | 11.426                  | 394 | 0.092 | 36.248 |
| PK Bari (Exi.)-82 Mile (New) 33kV                     | 8.094                   | 285 | 0.092 | 26.22  |
| Kailasahar(Exi.)-Tilla Bazar(New) 33kV                | 8.945                   | 322 | 0.092 | 29.624 |
| Durgachowmohni (New) - LILO of Salema - Kamalpur 33kV | 20.134                  | 725 | 0.092 | 66.7   |
| Chailengta (New) - LILO point of Chamanu - Manu       | 1.829                   | 73  | 0.092 | 6.716  |
| Тс  | 267.836 ≅ 0.070<br>acre |     |       |        |

## 4.3.4. Land area for RoW compensation as per MoP Guidelines

64. As per the MoP guidelines on RoW compensation, provisional land area to be considered for land compensation has been calculated for proposed 132kV D/C lines. However, land compensation @ 85% land value for tower base & @ maximum 15% land value for width of RoW corridor will be paid to land owners/farmer, if the said guideline is adopted by Govt. of Tripura for implementation. Details of calculation of land areas to be considered for such compensation are given in **Table-4.5**.

Table-4.5 Land area for RoW Compensation

| Name of the line                                   | Line<br>length<br>(km) | of | Land area<br>for Tower<br>base per<br>km<br>(in acre) | Total land<br>area for<br>tower base<br>(In acre) | *RoW<br>Corridor<br>area per<br>km<br>(In acre) | Total land<br>area for<br>RoW<br>Corridor<br>(In acre) | Total Land<br>area<br>(In acre) |
|--|------------------------|----|---|---|---|--|---------------------------------|
| Kailasahar-<br>Dharmanagar 132kV D/o               | 21.719                 | 79 | 0.036   | 0.782   | 6.635   | 144.106  | 144.89                          |
| LILO of 132kV Ambassa<br>-PK Bari line at Manu s/s | 0 441                  | 05 | 0.036   | 0.016   | 6.635   | 2.926  | 2.94                            |
| Total  |                        |    |   |   |   | 147.83   |                                 |

<sup>\*</sup> Effective RoW corridor area has been considered after excluding tower base area.

#### 4.3.5. Loss of Trees

65. Total numbers of trees likely to be affected due to construction of 22.16 km of 132kV line and for 80.473 km of 33kV distribution line is approx. 2747 which are private trees and none of the trees are encountered in govt. land. Additionally, 51 nos. private bamboo trees are likely to be affected. The major species to be affected are Bamboo (*Bambusa vulgaris*) & Betel nut (*Areca catechu*). During construction, private trees will be compensated as per the entitlement matrix.

Details on number of trees for each line are given **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 Trees<br>(Numbers) |
|---|------------------------------------|----------------------------------|--------------------------|
| Kailasahar -Dharmanagar<br>132kV D/C                      | 2185 + 51 Bamboo                   | Nil                              | 2185 + 51 Bamboo         |
| LILO of 132kV Ambassa- PK<br>Bari line at Manu substation | 562 + 0 Bamboo                     | Nil                              | 562 + 0 Bamboo           |
| Ambassa (Existing) - Jawahar<br>Nagar (New) s/s 33kV      | Nil                                | Nil                              | Nil                      |
| Jawahar Nagar (New) -<br>Dhumachhera (New) 33kV line      | Nil                                | Nil                              | Nil                      |
| Manu (New) -Dhumachhera (New) 33kV                        | Nil                                | Nil                              | Nil                      |
| Manu (New) - 82 Mile (New)<br>33kV                        | Nil                                | Nil                              | Nil                      |
| PK Bari-82 Mile (New) 33kV                                | Nil                                | Nil                              | Nil                      |
| Kailasahar (Existing) - Tilla<br>Bazar (New) 33kV         | Nil                                | Nil                              | Nil                      |
| Durgachowmohni (New) - LILO of Salema - Kamalpur 33kV     | Nil                                | Nil                              | Nil                      |
| Chailengta (New) - LILO point of Chamanu - Manu           | Nil                                | Nil                              | Nil                      |
| Total   | 2747 + 51 Bamboo                   | Nil                              | 2747 + 51 Bamboo         |

Source: Detailed Survey

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

66. It has been observed during survey that approximately 13 numbers of small structures exist along the right of way of proposed 132kV line only. 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  | Total no. of storage sheds/huts |
|---|---------------------------------|
| Kailasahar -Dharmanagar 132kV D/C                       | 13                              |
| LILO of 132kV Ambassa - PK Bari line at Manu substation | Nil                             |
| Ambassa (Existing) - Jawahar Nagar (New) s/s 33kV       | Nil                             |
| Jawahar Nagar (New) - Dhumachhera (New) 33kV            | Nil                             |
| Manu (New) - Dhumachhera (New) 33kV                     | Nil                             |
| Manu (New) - 82 Mile (New) 33kV                         | Nil                             |
| PK Bari (Existing) - 82 Mile (New) 33kV                 | Nil                             |
| Kailasahar (Existing) - Tilla Bazar (New) 33kV          | Nil                             |

| Durgachowmohni (New) - LILO of Salema - Kamalpur 33kV | Nil |
|---|-----|
| Chailengta (New) - LILO point of Chamanu - Manu       | Nil |
| Total   | 13  |

Source: Detailed Survey

#### 4.4. Details on Affected Persons

67. It is estimated that total number of affected persons which may be impacted temporarily will be approximately 244. 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 |
|---|-----------|
| Kailasahar - Dharmanagar 132kV D/C                      | 239       |
| LILO of 132kV Ambassa - PK Bari line at Manu substation | 05        |
| Ambassa (Existing) - Jawahar Nagar (New) s/s 33kV       | Nil       |
| Jawahar Nagar (New) -Dhumachhera (New) 33kV line        | Nil       |
| Manu (New) -Dhumachhera (New) 33kV                      | Nil       |
| Manu (New) - 82 Mile (New) 33kV                         | Nil       |
| PK Bari (Existing) - 82 Mile (New) 33kV                 | Nil       |
| Kailasahar (Existing) - Tilla Bazar (New) 33kV          | Nil       |
| Durgachowmohni (New) - LILO of Salema - Kamalpur 33kV   | Nil       |
| Chailengta (New) - LILO point of Chamanu - Manu         | Nil       |
| Total   | 244       |

Source: Detailed Survey

### 4.5. Other Damages

68. As far as possible damages to bunds, water bodies, fish ponds, approach paths, drainage & 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. TSECL/POWERGRID pay 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

- 69. 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; &
- (v) social and economic backwardness before notifying them as a Scheduled Tribe.
- 70. 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. The Sixth Schedule of the Constitution applies to a large part of the Tripura state, which is under the jurisdiction of the "Tripura Tribal Areas Autonomous District Council" (TTAADC). Out of the total geographical area of 10,491 sq. km, 7,344 sq. km (about 70%) is under the TTAADC. The Sixth Schedule areas are governed through "Autonomous District Councils" (ADC) that has wide-ranging legislative and executive powers.
- 71. The instant project is being implemented in Dhalai, Unakoti and North Tripura districts which are also part of TTAADC area. Its council and assembly are situated in Khumulwng, a town 26 km away from Agartala, the state capital. Since, the project under NERPSIP is envisaged for economic uplifting of the NE region, hence, no indigenous population will be negatively impacted in the project area. 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 TSECL's ESPPF.

## 4.7. Summary of Impacts

72. 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 of Transmission/ Distribution Line (km)                    | 22.16/ 80.473 km |
| Number of Towers/ Poles (Nos.)                                    | 84/ 2683         |
| Total Area under RoW (in acre)                                    | 446.106          |
| Total APs (Nos.)  | 244              |
| Affected Structures (Small Sheds for agricultural purpose (Nos.)) | 13               |
| Area of Temporary Damages for crop compensation (in acre)         | 71.62            |
| Total Trees (Nos.)  | 2747 + 51 Bamboo |

Source: Detailed Survey

## V. ENTITLEMENTS, ASSISTANCE AND BENEFITS

#### 5.1. Entitlements

- 73. 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 land loss 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.
- 74. 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

75. 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               | Owner         | 100% land cost at market value as ascertained by       |
|     | tower base                    |               | revenue authorities or based on negotiated settlement  |
|     |                               |               | without actual acquisition/title transfer.             |
| 2.  | Land coming in                | Owner         | 15% of land cost as decided by District Commissioner   |
|     | corridor of width of          |               | or any other competent authority                       |
|     | Right of Way (#)              |               |  |
| 3.  | Loss/damage to                | Owner/        | Compensation to actual cultivator at market rate for   |
|     | crops and trees in            | Tenant/       | crops and 8 years income for fruit bearing trees*. APs |
|     | line corridor                 | sharecropper/ | will be given advance notice to harvest their crops.   |
|     |                               | leaseholder   | 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.                                      |

| SI.  | Type of Issue/ Impact           | Beneficiary  | Entitlement Options                                       |  |  |  |  |
|------|---------------------------------|--------------|---|--|--|--|--|
| (ii) | Shop/ Institutions/ Individual/ |              | Cash compensation plus Rs. 10000/- for construction       |  |  |  |  |
|      | Cattle shed                     | Titleholders | of working shed/shop plus transition benefits as per      |  |  |  |  |
|      |                                 |              | category-5 below  |  |  |  |  |
| 6.   | Losses during                   | Family/unit  | Provision of transport or equivalent cash for shifting of |  |  |  |  |
|      | transition under (i) &          |              | material/ cattle from existing place to alternate place   |  |  |  |  |
|      | (ii) above for Shifting         |              |   |  |  |  |  |
|      | / Transport                     |              |   |  |  |  |  |
| 7.   | Tribal/ Vulnerable              | Vulnerable   | One time additional lump sum assistance not               |  |  |  |  |
|      | APs                             | APs8         | exceeding 25% of total compensation on                    |  |  |  |  |
|      |                                 |              | recommendation of State Authority/ADC/VC.                 |  |  |  |  |

<sup>(#)</sup> Compensation for land value as per MoP guidelines dated 15.10.2015 shall be paid once Govt. of Tripura adopts the said guidelines for implementation.

## 5.3. Procedure of Tree/ crop compensation

- 76. In exercise of the powers conferred by section 164 of the Electricity Act, 2003, Dept. of Power, Govt. of Tripura vide notification dated 20<sup>th</sup> June 2014, has authorized TSECL 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, TSECL/ 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:
- 77. TSECL 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 possible in such cases:
- 78. 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 centre 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

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

<sup>&</sup>lt;sup>8</sup> Vulnerable APs include scheduled tribes residing in scheduled areas/ physically handicapped/ disabled families etc.

- 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.
- 79. 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 Tripura Govt. for the purpose of assessment/valuation and disbursement of compensation to the affected parties.
- 80. 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.
- 81. The Mouja list contained 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 was 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 issue a tree cutting permission to TSECL to enable removal/ damage to the standing tree/crop identified in the line corridor.
- 82. Once the tree/ crop is removed/ damaged, TSECL 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 Centre 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.
- 83. On approval of compensation, the revenue officer shall further intimate the amount payable to the different landowners and TSECL/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

84. 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. However, TSECL/ POWERGRID shall pay the land compensation for tower footing and RoW corridor as per prescribed norms once Govt. of Tripura adopt MoP guidelines of Oct,'15 for implementation in State.

## 5.5. Compensation for Structure

85. 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, 13 number 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 TSECL/ 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 parallel with the construction activity of line.

## 5.6. Compensation Disbursement Module

86. In order to streamline the compensation process, a disbursement module has been developed (**Table-5.2**) specifying the 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          | Serving of Notice (Cut-off date) | 0 date                                |
| Foundation/    | Verification of Ownership by     | 15 days                               |
| Erection/      | Revenue Dept.                    |                                       |
| Stringing      | Assessment/Verification of       | 45 days                               |
|                | damages by Revenue Dept.         | •                                     |
|                | Online disbursement*             | 60 days**                             |

<sup>\*</sup> 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.

Walk over / preliminary survey of route alignment Detailed / Check Survey of final route alignment to fix the angle point and tower spotting If the line passing through private cultivable/ jute land/ areas As per land document/ Khaitan produced by Land owner, compensation notice served to land Owner with copies to SDM & Tahasildar of Sid-Mouja for verification Preparation of Mouja list by Revenue official at site in presence of landowner, TSECL and two witnesses Inspection/verification of plot by SDM/DC or his authorized representative to assess the plot being affected& its rate etc. Issue of tree cutting permit, if any by DC Cutting of trees by TSECL and issue of cutting certificate to land owner and revenue official by TSECL **Grievance Procedure** Input: Govt. /Local rate APs may represent if not satisfied with Preparation of checklist and Association of assessment to revenue valuation statement by revenue Horticulture/ Forest Dept. to SDM/ DC for revision official for assessment of fruit /review bearing trees & value of timber respectively. If he/ she Despite land Approval of valuation statement by is still not compensatio SDM/DC either individual or group basis satisfied. n if owner do they may not permit to move to installation Disbursement of compensation of of tower Court Crops/ trees/ land to affected farmers/ TSECL shall owner and acknowledgement approach SDM/ DC for Local resolution Court

Figure-5.1: Tree/ Crop Compensation Process

## VI. INFORMATION DISCLOSURE, CONSULTATION & PARTICIPATION

#### 6.1. Consultations

- 87. 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 TSECL & 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 TSECL approach to minimizing and solving them; &
  - Trees and crop compensation process.
- 88. 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 TSECL & 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-4**.

**Table-6.1 Details of Consultations** 

| Date of meeting        | Venue of Meeting                                      |    | of Persons<br>ttended | Persons Attended   |  |  |  |
|------------------------|---|----|-----------------------|--|--|--|--|
| <b>Public Cons</b>     | ultation Meeting                                      |    |                       |  |  |  |  |
| 19.12.2014             | BDO Office Conference<br>Hall (Gournagar RD<br>Block) |    | 34                    | BDO, Representatives of Panchayat including Chairman & Vice Chairman, local villagers & public in general. |  |  |  |
| Informal Group Meeting |   |    |                       |  |  |  |  |
| 12.10.2018             | Radhapur Gr   | am | 7                     | Local villagers including Project  |  |  |  |

|            | Panchayat, North Tripura |   | Affected Persons were interacted |
|------------|--------------------------|---|----------------------------------|
| 12.10.2018 | Manu, North Tripura      | 9 | during meeting                   |
|            |                          |   |                                  |

- 89. During consultations/ interaction processes with people of the localized areas, TSECL/ POWERGRID field staffs explained benefit of the project & impacts of transmission/ distribution line. People more or less welcomed the construction of the proposed project.
- 90. Various issues inter alia raised by the people during public consultation and informal group meetings are as follows;
  - The employment for local people & procedure for the same;
  - The width of ROW for cutting trees & compensation for the same; &
  - If these lines passes through heavily populated/ house area.
  - Early disbursement of compensation
- 91. TSECL & POWERGRID representative replied their queries satisfactorily and it was assured that all the genuine issues would be dully taken care during the implementation of the project.

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

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

## 6.3. Information Disclosure

93. The CPTD will be disclosed to the affected households and other stakeholders by placing it on website. TSECL & POWERGRID site officials have been visiting 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 also issued to APs after the detailed/ checks survey and finalization of tower location during the construction. Affected persons also visited site/construction offices of TSECL & 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 the World Bank website. TSECL & 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

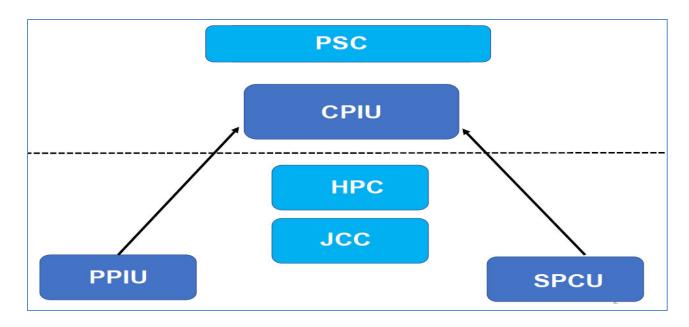
### 7.1. Administrative Arrangement for Project Implementation

94. Ministry of Power (MoP), GoI 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, GoI. CPIU shall also assist MoP, GoI in monitoring project progress and in its coordination with The Bank.



## 7.2. Review of Project Implementation Progress:

- 95. 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, GoI and The Bank may join as and when needed. Minutes of the meeting will be shared with all concerned and if required, with GoI 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 GoI and

The Bank.

**D.** A review will be held among MoP, GoI, 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 GoI/ State Government level. Minutes of the meeting shall be prepared by IA and shared with all concerned.

## 7.3. Arrangement for Safeguard Implementation

- 96. 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.
- 97. 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.
- 98. In the instant subprojects, POWERGRID will implement the CPTD in close co-ordination with TSECL 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 updating 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                  |                      |  |  |  |  |  |
|--|-------------------------------------|----------------------|--|--|--|--|--|
| Activity   | Primary                             | Secondary            |  |  |  |  |  |
| Implementing CPTD  | Field staffs of POWERGRID & TSECL   |                      |  |  |  |  |  |
| Updating the CPTD  | POWERGRID                           | TSECL                |  |  |  |  |  |
| Review and Approval of CPTD  | TSECL                               | POWERGRID            |  |  |  |  |  |
| Verification survey for identification of APs  | POWERGRID, TSECL field staffs       | Revenue Officials    |  |  |  |  |  |
| Survey for identification of plots for<br>Crop/Tree/ other damages<br>Compensation   | POWERGRID, TSECL                    | Revenue Officials    |  |  |  |  |  |
| Consultation and disclosure of CPTD to APs   | POWERGRID, TSECL                    | Revenue Officials    |  |  |  |  |  |
| Compensation award and payment of compensation   | Revenue Dept. / Competent Authority | POWERGRID,<br>TSECL  |  |  |  |  |  |
| Fixing of replace cost and assistance  | Revenue Dept. / Competent Authority | POWERGRID,<br>TSECL  |  |  |  |  |  |
| Payment of replacement cost compensation   | POWERGRID & TSECL                   | Revenue Dept.        |  |  |  |  |  |
| Takeover temporary possession of land/houses   | POWERGRID & TSECL                   | Revenue Dept.        |  |  |  |  |  |
| Hand over temporary possession land to contractors for construction  | POWERGRID & TSECL                   | Contractor           |  |  |  |  |  |
| Notify construction starting date to APs   | POWERGRID, TSECL Field Staff        | Contractor           |  |  |  |  |  |
| Restoration of temporarily acquired land to its original state including restoration of private or common property resources | Contractor                          | POWERGRID &<br>TSECL |  |  |  |  |  |
| Development, maintenance and updating of Compensation database   | POWERGRID & TSECL                   |                      |  |  |  |  |  |
| Development, maintenance and updating of central database  | POWERGRID &TSECL                    |                      |  |  |  |  |  |
| Internal monitoring  | POWERGRID & TSECL                   | _                    |  |  |  |  |  |
| External monitoring, if required   | POWERGRID & TSECL                   |                      |  |  |  |  |  |

## 7.4. Responsibility Matrix to manage RoW Compensation

99. 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                | Respons                | Time Schedule   |                             |  |  |
|---------------------------|------------------------|-----------------|-----------------------------|--|--|
|                           | Primary                | Secondary       |                             |  |  |
| Identification of APs     | Contractor             | TSECL& IA field | In 3 different Stages i.e.  |  |  |
| (During Tower spotting &  |                        | staffs          | before start of Foundation, |  |  |
| Check Survey)             |                        |                 | Erection & Stringing Works  |  |  |
| Serving Notice to APs     | TSECL& IA field staffs | Revenue Dept.,  | 0 date                      |  |  |
| Verification of ownership | TSECL, IA &            | ADC             | 0-15 days                   |  |  |
|                           | Revenue Dept.          | (if applicable) |                             |  |  |
| Joint Assessment of       | Revenue Dept. & APs    | TSECL/ IA       | 16-45 days                  |  |  |
| damages                   |                        |                 |                             |  |  |
| Payment (online/DD) of    | TSECL& IA              |                 | 46-60 days                  |  |  |
| compensation to AP*       |                        |                 |                             |  |  |

## b) WTB for Land Compensation\*\* for Tower base and RoW corridor

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

<sup>\*</sup> AP can approach to DC for any grievance on compensation.

Note: Both a and b activities shall run parallel

<sup>\*\*</sup> Discussion for release of certain % as advance is also under progress with Utilities.

## VIII. GRIEVANCE REDRESS MECHANISM

- 100. 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 were 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) at two levels, i.e. project/scheme level and Corporate/HQ level have been constituted. The project level GRCs include members from TSECL, 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.
- 101. 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.
- 102. The corporate level GRC shall function under the chairmanship of Director (Transmission) who will nominate other members of GRC including one representative from corporate ESMC who is conversant with the environment & social issues. The meeting of Corporate GRC shall be convened within 7-10 days of receiving the reference from project GRC or complainant directly and pronounce its decision within next 15 days.
- 103. 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, TSECL & 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**:

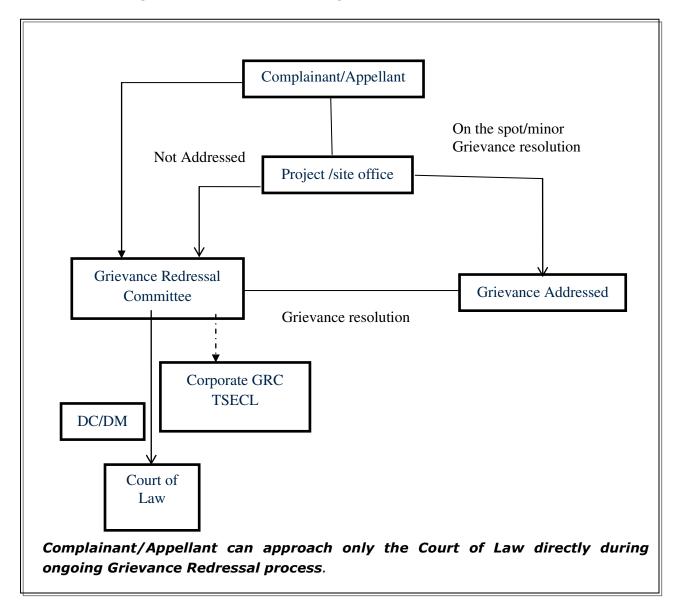


Figure-8.1: Flow Chart showing Grievance Redress Mechanism

## IX. BUDGET

104. 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. Though Govt. of Tripura has not yet adopted MoP guidelines for RoW compensation for implementation, a budget provision has been made for compensation for Tower Base (@ 85% of the land cost) and RoW Corridor (max. @15% of the land cost) as per the norms. Accordingly the cost has been estimated for proposed 132kV line 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 TSECL & 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 TSECL & 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 of 20 meter & 10 meter maximum for 132kV & 33kV line, respectively.

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

105. The land area for 132kV tower base is estimated as 0.036 acre per km. Similarly, for RoW corridor the area is estimated 6.635 acre per km. 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. 340.997 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) | for RoW | Land  | Total in Lakhs<br>(Tower base @<br>85% & Corridor<br>@15%) |
|--|------------------------|---------------------------------------|---------|-------|--|
| Kailasahar-Dharmanagar<br>132kVD/c                 | 21.719                 | 0.782                                 | 144.106 | 15.00 | 334.209  |
| LILO of 132kV Ambassa- PK<br>Bari line at Manu s/s | 0.441                  | 0.016                                 | 2.926   | 15.00 | 6.788  |
|  | 340.997                |                                       |         |       |  |

<sup>\*</sup> Effective RoW corridor has been considered after excluding tower base area

## 9.2. Compensation for Crops and Trees

106. The crop compensation is calculated 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. Detail 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) |     | Total compensation cost for Crops & trees (Lakh) |
|-----------|--|----------------------|-----|--|
| 1.        | Kailasahar-Dharmanagar 132kV D/C                           | 21.719               | 5.0 | 108.595  |
| 2.        | LILO of 132kV Ambassa - PK<br>Bari line at Manu substation | 0.441                | 5.0 | 2.205  |
|           | Total  | 110.80               |     |  |

## 9.3. Summary of Budget

107. The total indicative cost is estimated to be **INR 475.34 Lakhs** equivalent to **USD 0.659 million**. Details are given in **Table-9.3**. The following estimated budget is part of complete project cost as on date. However, actual updating of the estimated cost shall be done during execution.

**Table-9.3: Summary of Budget** 

| Item  | Amount in<br>Lakh (INR) | Amount in (Million USD) |
|---|-------------------------|-------------------------|
| A. Compensation   | •                       |                         |
| A-1: Loss of Crops and Trees  | 110.80                  | 0.154                   |
| A-2: Land Compensation for Tower Base and RoW Corridor <sup>9</sup> | 340.997                 | 0.473                   |
| Sub Total-A   | 451.797                 | 0.627                   |
| B: Implementation Support Cost                                      |                         |                         |
| B-1: Man-power involved for CPTD Implem. & Monitoring               | 4.70                    | 0.0065                  |
| B-2: External Monitoring, if required                               | 5.00                    | 0.0069                  |
| Sub Total- B  | 9.70                    | 0.0134                  |
| Total (A+B)   | 461.497                 | 0.640                   |
| Contingency (3%)  | 13.845                  | 0.0192                  |

<sup>&</sup>lt;sup>9</sup> Payment of Compensation subject to adoption/implementation of MoP guidelines of Oct.'15 by Govt. of Tripura

|             | 475.040 | 0.050 |
|-------------|---------|-------|
| Grand Total | 475.342 | 0.659 |

## X. IMPLEMENTATION SCHEDULE

108. 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** 

|         | •  | 2017 |   |   |   | 2018 |   |   |   | 2019 |   |   |   |
|---------|--|------|---|---|---|------|---|---|---|------|---|---|---|
| SI. No. | Activity                                       | Q    | Q | Q | Q | Ю    | Q | Q | Q | Q    | Q | Q | Q |
|         |  | 1    | 2 | 3 | 4 | 1    | 2 | 3 | 4 | 1    | 2 | 3 | 4 |
| 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

- 109. 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.
- 110. Internal monitoring will include: (i) administrative monitoring: daily planning, implementation, feedback and troubleshooting, maintenance, and progress reports and (ii) socioeconomic 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.
- 111. 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.
- 112. TSECL is well equipped to implement and monitor its environment and social management plan including CPTD. Organizational Support Structure of TSECL for monitoring of above is given in **Figure-11.1**.

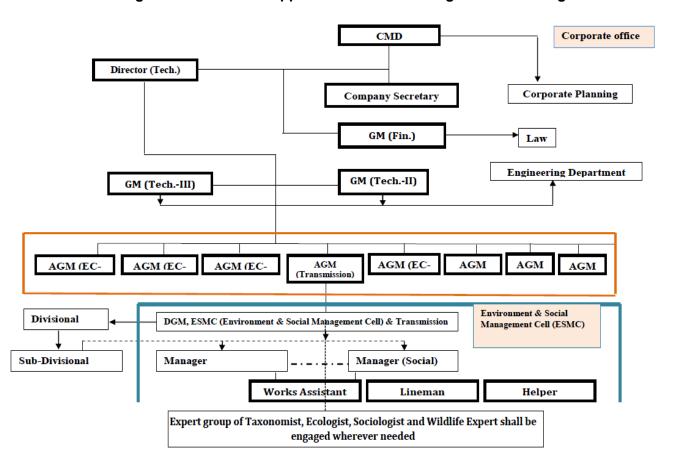


Figure-11.1: TSECL Support Structure for Safeguard Monitoring

# **ANNEXURE – 1**

# EVALUATION OF ALTERNATIVES ROUTE ALIGNMENT

## **EVALUATION OF ALTERNATIVES ROUTE ALIGNMENT**

## 1. Kailasahar - Dharmanagar 132kV D/C line

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:

| S.N   | Description   | Alternative-I   | Alternative-II  | Alternative-III  |
|-------|---|---|---|--|
| 1.    | Route particulars   | 1   |   |  |
| i.    | Route Length (km)   | 21.72   | 23.4  | 24.4   |
| ii.   | Terrain   |   |   |  |
|       | Hilly (Gentle slope)  | 50%   | 60%   | 70%  |
|       | Plain   | 50%   | 40%   | 30%  |
| 2.    | Environmental Impact  |   |   |  |
| i.    | Name of District<br>through which the<br>line passes  | Unakoti & North<br>Tripura  | Unakoti & North<br>Tripura  | Unakoti & North<br>Tripura   |
| ii.   | Towns in alignment  | Kailasahar &<br>Dharmanagar   | Kailasahar &<br>Dharmanagar   | Kailasahar &<br>Dharmanagar  |
| 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 in Ha/km   | 15.7 ha/5.8 km  | 18.9 ha/7 km  | 21.6 ha/8 km   |
| V.    | Type of Forest (RF/PF/Mangrove/ Wildlife Area/ Elephant corridor/ Biodiversity Hotspots/Biosphere Reserve/Wetlands or any other environmentally sensitive area. | Reserved Forest   | Reserved Forest   | Reserved Forest  |
| vi.   | Density of Forests  | Moderate  | Moderate  | Moderate   |
| Vii.  | Type of flora   | Mainly Sal<br>(Shorea<br>robusta), Teak<br>(Tectona grandis),<br>Rubber (Hevea<br>Brasiliensis),<br>Terminalia<br>bellirica, Bamboo<br>(Bambusa indica)<br>etc. | Mainly Sal<br>(Shorea<br>robusta), Teak<br>(Tectona grandis),<br>Rubber (Hevea<br>Brasiliensis),<br>Terminalia<br>bellirica, Bamboo<br>(Bambusa indica)<br>etc. | Mainly Sal (Shorea robusta), Teak (Tectona grandis), Rubber (Hevea Brasiliensis), Terminalia bellirica, Bamboo (Bambusa indica) etc. |
| viii. | Type of fauna   | Crow (Corvus culminates),   | Crow (Corvus culminates),   | Crow (Corvus culminates),  |

| ix.  | Endangered species,           | Sparrow ( <i>Passer</i> sp), Fox ( <i>Vulpes</i> benghalensis) and various species of Monkeys, Cat, Snakes, Pigeon and Lizards, etc.       | Sparrow (Passer sp), Fox (Vulpes benghalensis) and various species of Monkeys, Cat, Snakes, Pigeon and Lizards, etc. | Sparrow ( <i>Passer</i> sp), Fox ( <i>Vulpes</i> benghalensis) and various species of Monkeys, Cat, Snakes, Pigeon and Lizards, etc. |
|------|-------------------------------|--|--|--|
|      | if any                        |  |  |  |
| X.   | Historical/cultural monuments | Nil  | Nil  | Nil  |
| 3.   | Compensation Cost (Es         | timated)   |  |  |
| i.   | Crop (Non Forest)             | Rs 81.00 lakhs<br>(Approx.)  | Rs. 82.5 lakhs<br>(Approx.)  | Rs. 82 lakhs<br>(Approx.)  |
| ii.  | Forest (CA, NPV etc.)         | Rs. 3.14 Crores<br>(Approx.)   | Rs. 3.78 Crores<br>(Approx.)   | Rs. 4.32 Crores<br>(Approx.)   |
| 4.   | Major Crossings               | , , , ,  | , , , ,  | , , , , , , , , , , , , , , , , , , ,  |
| i.   | Highway<br>(National/State)   | 1 (SHH)  | Nil  | Nil  |
| ii.  | Power line                    | Nil  | Nil  | Nil  |
| iii. | Railway line                  | Nil  | Nil  | Nil  |
| iv.  | River crossing                | Nil  | Nil  | Nil  |
| 5.   | Overall Remarks               | Preferred route as lesser degree of construction and O&M problems are expected due to involvement of more plain area and better approaches | Higher degree of construction and O&M problems are expected  | Higher degree of construction and O&M problems are expected  |

From the comparative analysis provided above it is evident that all the three alternatives studied have forest area involvement, as complete avoidance of forest area is not possible, since, reserved forest invariably intercepts with all the three alternatives studied around the bee line. However, Alternative Route-I is not only shorter in length as compared to Alternative-II and Alternative-III but also involves least forest area. Additionally, it is passing through mostly plain area, hence, minimum construction and O&M problems are expected. Therefore, Alternative-I found to be the most optimum and recommended for detailed survey.

## 2. Jawaharnagar (New) - Dhumachhera (New) substation 33 kV line

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:

| S.N. | Description       | Alternative-I | Alternative-II | Alternative-III |
|------|-------------------|---------------|----------------|-----------------|
| 1.   | Route particulars |               |                |                 |
| i.   | Route Length (km) | 20.0          | 28.7           | 24.3            |

| ii.      | Terrain   |  |   |   |
|----------|---|--|---|---|
|          | Hilly (Gentle slope)  | 60%  | 80%   | 90%   |
|          | Plain   | 40%  | 20%   | 10%   |
| 2.       | <b>Environmental Impact</b>   |  |   | <u>.                                      </u>  |
| i.       | Name of District<br>through which the<br>line passes  | Dhalai   | Dhalai  | Dhalai  |
| ii.      | Towns in alignment  | Ambasa   | Ambasa  | Ambasa  |
| 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 in Ha/km   | NIL  | 13.5 Ha/9 km  | 12 Ha/8 km  |
| V.       | Type of Forest (RF/PF/Mangrove/ Wildlife Area/ Elephant corridor/ Biodiversity Hotspots/Biosphere Reserve/Wetlands or any other environmentally sensitive area. | N/A  | Reserved Forest   | Reserved Forest   |
| vi.      | Density of Forests  | N/A  | Dense   | Dense   |
| vii.     | Type of flora   | Mainly Sal<br>(Shorea<br>robusta), Teak<br>(Tectona grandis),<br>Rubber (Hevea<br>Brasiliensis),<br>Bamboo<br>(Bambusa<br>indica) etc. | Mainly Sal<br>(Shorea<br>robusta), Teak<br>(Tectona grandis),<br>Rubber (Hevea<br>Brasiliensis),<br>Terminalia<br>bellirica, Bamboo<br>(Bambusa indica)<br>etc. | Mainly Sal<br>(Shorea<br>robusta), Teak<br>(Tectona grandis),<br>Rubber (Hevea<br>Brasiliensis),<br>Terminalia<br>bellirica, Bamboo<br>(Bambusa indica)<br>etc. |
| viii.    | Type of fauna   | Crow (Corvus culminates), Sparrow (Passer sp), and various species of Monkeys, Cat, Pigeon and Lizards, etc.                           | Crow (Corvus culminates), Sparrow (Passer sp), Fox (Vulpes benghalensis) and various species of Monkeys, Cat, Snakes, Pigeon and Lizards, etc.                  | Crow (Corvus culminates), Sparrow (Passer sp), Fox (Vulpes benghalensis) and various species of Monkeys, Cat, Snakes, Pigeon and Lizards, etc.                  |
| ix.      | Endangered species, if any  | Nil  | Nil   | Nil   |
|          | lii airy  |  |   |   |
| X.       | Historical/cultural monuments   | Nil  | Nil   | Nil   |
| X.<br>3. | Historical/cultural   |  | Nil   | Nil   |

|      |                 | (Approx.)           | (Approx.)         | (Approx.)         |
|------|-----------------|---------------------|-------------------|-------------------|
| ii.  | Forest (CA, NPV | Nil                 | Rs. 2.7 Crores    | Rs. 2.4 Crores    |
|      | etc.)           |                     | (Approx.)         | (Approx.)         |
| 4.   | Major Crossings |                     |                   |                   |
| i.   | Highway         | 1(NH-44)            | Nil               | Nil               |
|      | (NH/SH)         |                     |                   |                   |
| ii.  | Power line      | Nil                 | Nil               | Nil               |
| iii. | Railway line    | NF Railway          | NF Railway        | NF Railway        |
| iv.  | River crossing  | Nil                 | Nil               | Nil               |
| 5.   | Overall Remarks | Preferred Route     | Not preferred due | Not preferred due |
|      |                 | as it avoids forest | to forest         | to forest         |
|      |                 | and passes along    | involvement.      | involvement.      |
|      |                 | NH-44.              |                   |                   |

From the above comparative analysis, it is clear that Alternative-I is not only the shortest in length compared to the other two alternatives studied, but also doesn't involve any forest area. Additionally, it is passing along the National Highway-44. Hence, Alternative-I is found most optimum and recommended for detailed survey.

## 3. Manu (New) - 82 Mile (New) substation 33 kV line

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:

| S.N. | Description   | Alternative-I                              | Alternative-II                             | Alternative-III                            |
|------|---|--|--|--|
| 1.   | Route particulars   |  |  |  |
| i.   | Route Length (km)   | 11.43                                      | 13.0                                       | 14.6                                       |
| ii.  | Terrain   |  |  |  |
|      | Hilly (Gentle slope)  | 60%  | 80%  | 90%  |
|      | Plain   | 40%  | 20%  | 10%  |
| 2.   | <b>Environmental Impact</b>   |  |  |  |
| i.   | Name of District through which the line passes  | Dhalai                                     | Dhalai                                     | Dhalai                                     |
| ii.  | Towns in alignment  | Manu                                       | Manu                                       | Manu                                       |
| 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 in Ha/km   | NIL  | 12 Ha/8 km                                 | 13.5 Ha/9 km                               |
| V.   | Type of Forest (RF/PF/Mangrove/ Wildlife Area/ Elephant corridor/ Biodiversity Hotspots/Biosphere Reserve/Wetlands or any other | N/A  | Reserved Forest                            | Reserved Forest                            |

|       | environmentally               |  |  |   |
|-------|-------------------------------|--|--|---|
|       | sensitive area.               |  | _  | _   |
| vi.   | Density of Forests            | N/A  | Dense  | Dense   |
| vii.  | Type of flora                 | Mainly Sal (Shorea robusta), Teak (Tectona grandis), Rubber (Hevea Brasiliensis), Bamboo (Bambusa indica) etc. | Mainly Sal (Shorea robusta), Teak (Tectona grandis), Rubber (Hevea Brasiliensis), Terminalia bellirica, Bamboo (Bambusa indica) etc.           | Mainly Sal<br>(Shorea<br>robusta), Teak<br>(Tectona grandis),<br>Rubber (Hevea<br>Brasiliensis),<br>Terminalia<br>bellirica, Bamboo<br>(Bambusa indica)<br>etc. |
| viii. | Type of fauna                 | Crow (Corvus culminates), Sparrow (Passer sp), and various species of Monkeys, Cat, Pigeon and Lizards, etc.   | Crow (Corvus culminates), Sparrow (Passer sp), Fox (Vulpes benghalensis) and various species of Monkeys, Cat, Snakes, Pigeon and Lizards, etc. | Crow (Corvus culminates), Sparrow (Passer sp), Fox (Vulpes benghalensis) and various species of Monkeys, Cat, Snakes, Pigeon and Lizards, etc.                  |
| ix.   | Endangered species, if any    | Nil  | Nil  | Nil   |
| Χ.    | Historical/cultural monuments | Nil  | Nil  | Nil   |
| 3.    | Compensation Cost (E          | stimated)  |  |   |
| i.    | Crop (Non Forest)             | Rs 5.72 lakhs<br>(Approx.)   | Rs. 6.5 lakhs<br>(Approx.)   | Rs. 7.3 lakhs<br>(Approx.)  |
| ii.   | Forest (CA, NPV etc.)         | Nil  | Rs. 2.4 Crores<br>(Approx.)  | Rs. 2.7 Crores<br>(Approx.)   |
| 4.    | Major Crossings               |  |  |   |
| i.    | Highway<br>(National/State)   | 01(NH-44)  | Nil  | Nil   |
| ii.   | Power line                    | Nil  | Nil  | Nil   |
| iii.  | Railway line                  | NF Railway   | NF Railway   | NF Railway  |
| iv.   | River crossing                | Nil  | Nil  | Nil   |
| 5.    | Overall Remarks               | Preferred Route due to no forest involvement.  | Not preferred due to forest involvement.   | Not preferred due to forest involvement.  |

From the above comparative analysis, it is vivid that the length of Alternative-I is equal to Alternative-II and less that the length of Alternative-III. However, while Alternative-II and Alternative-III have forest involvement, Alternative-I completely avoids Forest. Additionally, it is passing along the National Highway-44. Therefore, Alternative-I is found most optimum and recommended for detailed survey.

## **ANNEXURE – 2**

# MOP GUIDELINES DATED 15<sup>TH</sup> OCTOBER, 2015 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, 15th October, 2015

To

- Chief Secretaries/Administrators of all the States/UTs (As per list attached)
- Chairperson, CEA, New Delhi with the request to disseminate the above guidelines to all the stakeholders.
- CMD, PGCIL, Gurgaon.
- CEO, POSOCO, New Delhi.
- Secretary, CERC, New Delhi.
- 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:

- Secretaries of Government of India (Infrastructure Ministries/Deptt including MoEF - As per attached list)
- Prime Minister's Office (Kind Attn: Shri Nripendra Mishra, Principal Secretary to PM).
- 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

# TOWER/ POLE SCHEDULE OF PROPOSED LINES

#### Tower Schedule: LILO of 132kV Ambassa - PK Bari line at Manu substation

|    |           | 4                       |           |         |         |             |         |                  |        |      |                  |                    |        |             |                          | LIMITED       |               |                    |
|----|-----------|-------------------------|-----------|---------|---------|-------------|---------|------------------|--------|------|------------------|--------------------|--------|-------------|--------------------------|---------------|---------------|--------------------|
|    |           |                         | 132KV     | D/C I   | P.K.BAF | RI - AMBAS  | SA TR   | ANSMIS           | SION   | LINE | TAPP             | ING A              | RRAN   | GMEN.       | T FOR L                  | ILO AT MAN    | IU S/S        |                    |
|    |           |                         | DE        | TAIL    | SURVE   | Y REPO      | RT E    | XISTIN           | G LO   | C N  | 0- 22            | 9 To               | EXIS   | TING        | -OC-2                    | 32 (0.830K    | m)            |                    |
| SI | LOCATION  | TYPE OF                 | ANGLE OF  | SPAN IN | SECTION | CUMULATIVE  | Section | SUM OF           | WIND   | нот  | WEIGHT           | SPAN               | COL    | D WEIGHT    | SPAN                     | CO-OR         | DINATE        |                    |
| NO | NO        | TOWER                   | DEVIATION |         |         | CHAINAGE    | RL      | ADJACENT<br>SPAN | SPAN   | LEFT | RIGHT            | TOTAL              | LEFT   | RIGHT       | TOTAL                    | E             | N             | REMARKS            |
| 1  | EXIST-229 | DA+3                    |           |         |         |             | 84.50   |                  |        |      | 192              | 192                |        | 205.56      | 205.56                   | 92" 00'17.46" | 24" 00'55.61" | RUBBER PLANTATIO   |
|    |           |                         |           | 344     |         |             |         |                  |        |      |                  |                    |        | 200         |                          |               |               |                    |
| 2  | EXIST-230 | DB+3                    | 00,00,00  |         | 344     | 328         | 80.60   | 380              | 190    | 152  | 274              | 426                | 138.44 | 315.91      | 454.35                   | 92" 00'10.26" | 24* 00'47.03" | RUBBER PLANTATIO   |
|    |           |                         |           | 36      |         |             |         |                  |        |      |                  |                    |        | NEW L       |                          |               |               |                    |
| 3  | AP-1/0    | DD+3                    | 90*00'00" |         | 380     | 380         | 76.98   | 207              | 103.5  | 0    | 11               | 11                 | ò      | 11          | 11                       | 92*00'09.40*  | 24*00'45.65*  | RUBBER PLANTATIO   |
|    |           |                         |           | 155     |         |             |         |                  |        | 1    |                  |                    |        |             |                          | 2             |               |                    |
| 4  | AP-1B/0   | DB+0                    | 00'00'00" |         | 535     | 535         | 73.98   | 450              | 225    | 275  | 23               | 298                | 349    | -17         | 332                      | 92"00'06.11"  | 24"00"41.50"  |                    |
|    |           |                         |           | 295     |         |             | -       | 1                |        |      |                  |                    |        |             | -                        | Flar          |               | NH 08 , 11 KV & LT |
| 5  | EXIST-232 | . DA+0                  |           | 10      | 830: -  | - 9 830     | 53.45   | - 1 92           | 1113 P | Ó    | '-'20'           | 20                 | 0      | -54         | 54                       | 92*00'00,18"  | 24*00'34.00*  |                    |
|    | 100.00    |                         | FO        | R EMC L | IMITED  | 100         | رالم    | Jolal            | _      | A    |                  |                    |        |             | FOR P                    | GCIL          |               | 4                  |
| Ag | Cintro    | Alexander of the second | CLWIT     |         |         | Q           | Ach     | [hhelai          | (A     | dh   | osh/5            | मोष                | यन्ता  | 3           | 7313                     | 9             | 1 8           | 30/29              |
|    | PREP      | AFFE B                  | , ,       | ☆       |         | SUBMITTED E | BY      |                  |        | CHE  |                  |                    |        |             | MMEND                    | ED BY         | APP           | ROVED BY           |
|    |           | 1                       | MARGH     |         |         |             |         |                  | Field  | owe  | rgrid/<br>rghat/ | बावरात्र<br>कुमारा | วัน    | सह<br>Assit | 1,61 ·<br>11,120<br>11gl | grid          |               |                    |

|           |          |  |              | _                |                   | LO LINE OF             |        |         |                |               |                       |                  |                   |                        |                         |                   |
|-----------|----------|--|--------------|------------------|-------------------|------------------------|--------|---------|----------------|---------------|-----------------------|------------------|-------------------|------------------------|-------------------------|-------------------|
|           |          |  |              | C                | HECK S            | URVEY F                | REPORT | AP- 1/0 | To AP-         | GANTE         | RY (0.345 K           | (M)              |                   |                        |                         |                   |
| NO AP NO. | LOCATION | TYPE OF TOWER  | ANGLE OF     | SPAN IN<br>METER | SECTION<br>LENGTH | CUMULATIVE<br>CHAINAGE | SL NO  | AP NO.  | LOCATION<br>NO | TYPE OF TOWER | ANGLE OF<br>DEVIATION | SPAN IN<br>METER | SECTION<br>LENGTH | CUMULATIVE<br>CHAINAGE | BENCHING &<br>REVETMENT | REMARKS           |
|           |          | 155000000  |              |                  | 100000            |                        |        |         |                |               | AS                    | PER CHECK        | SURVEY            |                        |                         | 1                 |
|           |          |  | ETAIL SURVEY |                  | _                 |                        | 1      | 1       | 1/0            | DD+3          | 90,00,00              | 7.8              |                   |                        | Required*               | RUBBER PLANTATI   |
| 1 1       | 1/0      | DD+3   | 90,00,00     |                  |                   |                        | -      |         |                |               | 1                     | 25               | 2                 |                        |                         |                   |
| (         |          |  |              | 25               | 25                | 25                     | 2      | 2       | 2/0            | DD+6          | 39*02'00" LT          | 15               | 25                | 25                     | Required*               | RUBBER PLANTATION |
| 2 2       | 2/0      | DD+6   | 39*02'00" LT |                  | 25                | 23                     | -      |         |                |               |                       | 140              |                   |                        |                         |                   |
|           |          |  |              | 140              |                   | 165                    | 3      | 3       | 3/0            | DD+0          | 32*39'45" LT          | 11               | 140               | 165                    | Required*               | RUBBER PLANTATI   |
| 3 3       | 3/0      | DD+0   | 32*39'45" LT |                  | 140               | 165                    | ,      | -       |                |               |                       | 94               |                   |                        |                         |                   |
|           |          |  |              | 94               |                   |                        | 4      | 4       | 4/0            | DDE+9         | 19°43'10" LT          | 10               | 94                | 259                    | Required*               |                   |
| 4 4       | 4/0      | DDE+9  | 19*43'10" LT |                  | 94                | 259                    | 1      |         |                |               |                       | 86               |                   |                        |                         |                   |
|           |          |  |              | 86               | 86                | 345                    | 5      | GANTRY  | GANTRY         | 0             | 100                   | 1                | 86                | 345                    |                         |                   |
|           | M        |  | MCLIMITED    |                  |                   |                        |        | z Hz    | वास            |               | 3                     | FOR PO           | E 177             | 9                      |                         |                   |
|           | Bur      | 130 V  | Tal.         | Dhees            | endo              | l                      |        | CHE     | CKED BY        |               | अ. दक्षि              | V Das            | D BY              |                        | APPROV                  | ED BY             |
| PREI      | PARED BY | The state of the s | AMPRO .      | SOBMI            | TEDBI             | frei fo                | `6     |         | 40             | 1/0           | Assit. G.             | margh            | A                 | are pa                 | yo form                 | and the second    |

#### Pole Schedule: LILO of 33kV Chamanu - Manu line at 33/11 Chailengta substation

| Trip  | ura State  | Associated CC-CS | d with NER Power S<br>6/86-NER/REW-2987/1/0 | 32/NOA - I & II | rovement Proje | et (DMS PAC | CKAGE 05 |  |  |  |  |  |
|-------|--|------------------|---|-----------------|----------------|-------------|----------|--|--|--|--|--|
|       | LINK NAME :- CHHAMANU-MANU LINE LILO CHAILENGTA LOOP IN LOOP OUT |                  |   |                 |                |             |          |  |  |  |  |  |
|       | TOTAL LINE LENGTH - 1.829 KM                                     |                  |   |                 |                |             |          |  |  |  |  |  |
| -     | 10 100   |                  | -37-37-                                     |                 | .OZS KIVI      |             |          |  |  |  |  |  |
|       |  | SL NO.           | TYPE OF POLE                                | EXT             | POLE QT.       |             |          |  |  |  |  |  |
|       | e de Trabal  | 1                | SP (G.A 01)                                 | 0               |                | 12 (M)      | 14.5 (M) |  |  |  |  |  |
| 17.7  | A No. 12 A   | 2                |   | 2.5             | 20             | 20          |          |  |  |  |  |  |
| -     |  | 3                |   | 2.0             |                | 1           | 1        |  |  |  |  |  |
| 33.57 | 4 44   | 4                | SP(G.A 02)                                  | 0               | 8              | 0           |          |  |  |  |  |  |
|       |  | 5                |   | 2.5             | - 0            | 8           |          |  |  |  |  |  |
|       |  | 6                |   |                 |                | 12.5        |          |  |  |  |  |  |
|       | *VI - 20   | 7                | DP(G.A03)                                   | . 0             | 11             | 22          | -        |  |  |  |  |  |
|       | 15,677   | 8                |   | 2.5             | 1              | 22          | 2        |  |  |  |  |  |
|       | 1.1  | 9                |   |                 |                |             |          |  |  |  |  |  |
|       | -11  | 10               | FP(G.A04)                                   | 0               | 3              | 12          |          |  |  |  |  |  |
|       |  | 11               |   | 2.5             | 1 2            | 1           | 8        |  |  |  |  |  |
|       |  | 12               |   |                 | // /           |             |          |  |  |  |  |  |
|       |  |                  |   | TOTAL           | 100            | 62.         | 11       |  |  |  |  |  |

Prodip Mita 501. Engli (Technolab Evg. LH)

Dy. General Manage Transmission Division Kurramphet (P.K. Bart) A Proper de la Constitución de l

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OWNER-TSECL CLIENT: PGOL

| _  |       | $\overline{}$ | TYPE OF | EXT.    | ANGLE OF     | SPAN | SEC.   | CUMLTV. | CROSSING      | VILLAGE NAME       | GPS COORE   | OINATE(WGS-84) | REMARKS |
|----|-------|---------------|---------|---------|--------------|------|--------|---------|---------------|--------------------|-------------|----------------|---------|
| SL | AP NO | POLE NO.      | POLE    | of Mtr. | DEVIATION    | STAN | LENGTH | LENGTH  |               |                    | NORTHIE     | EASTING        | newark) |
| NO | _     |               | TOWER   |         |              | -    |        |         |               | UTTAR DHUMA CHERRA | 23*56'19.7" | 91*59'52.7"    |         |
| 1  | EXT   | EX.TNO-       | TOVILI  |         |              | (53) |        |         |               |                    |             | 2.0            |         |
|    |       |               | FP+2.5  | 2.5     | 62°48'2"LT   | 0    | 53     | 53      |               |                    | 23°57'20.3' | 91*59'51.2"    |         |
| 2  | AP-1A | 1A            | FF+2.5  | 2.0     | V2 102 21    | 45   |        |         |               |                    |             | 72.00          |         |
| -  |       |               | SP+0    | 0       |              | -    |        |         | 1             |                    |             | _              |         |
| 3  |       | LOC-1A/1      | 5P+0    | 0       |              | 30   | 105    |         |               |                    |             | _              |         |
| -  |       |               | 00.0    | 0       |              | -    |        |         |               |                    | _           |                |         |
| 4  |       | LOC-1A/2      | SP+0    | U       |              | 30   |        |         |               |                    | _           |                |         |
| _  |       |               | 22.0    | _       | 3°23'3"RT    | -    |        | 158     |               |                    | 23°56'18.5' | 91°59'48.0"    |         |
| 5  | AP.1  | 1             | SP+0    | 0       | 3 233 KI     | (48) |        | 130     |               |                    | 10 30 10.3  | 91 59 40.0     |         |
| ·  |       |               |         |         |              | (48) |        |         |               |                    | _           |                |         |
| 6  |       | LOC-1/1       | SP+0    | 0       |              | -    |        |         |               | <u> </u>           | -           |                |         |
| ·  |       |               |         |         |              | 45   |        |         |               |                    | -           |                |         |
| 7  |       | LOC-1/2       | SP+0    | 0       |              | _    |        |         |               |                    | <del></del> |                |         |
| ÷  |       |               |         | 1       |              | 45   |        |         |               |                    | -           |                |         |
| 8  | _     | LOC-1/3       | SP+0    | 0       | 11.31        |      | 273    | -       |               |                    | -           |                |         |
| -  | _     |               |         |         | 1 1 10 1     | 45   |        |         |               |                    |             |                |         |
| 8  | _     | LOC-1/4       | SP+0    | 0       |              |      |        |         |               |                    |             |                |         |
| ÷  |       |               | 1       |         |              | 45   |        |         |               |                    |             |                |         |
| 10 | - 1   | LOC-1/5       | SP+0    | 0       |              |      |        |         |               |                    |             |                |         |
| 10 | _     | 1.00          |         |         |              | 45   |        |         |               |                    |             |                |         |
|    | AP-2  | 2             | DP+0    | 0       | 28°15'46"RT  |      |        | 431     |               | UTTAR DHUMA CHERRA | 23°56'14.3° | 91*59'39.5"    |         |
| 11 | N-Z   | -             |         |         |              | 38   |        |         | FOOTPATH 11KV |                    |             |                |         |
| 40 |       | LOC-2/1       | SP+0    | 0       |              |      | 1      |         |               |                    |             |                |         |
| 12 |       | LUGZI         | UI TO   | _       |              | 40   | 1      |         | POND          |                    |             |                |         |
| -  | -     | LOC-2/2       | SP+0    | 0       |              | 1.0  | 1      |         |               |                    |             |                |         |
| 13 | -     | 10002         | 3F TU   | -       |              | 45   | 204    |         |               |                    |             |                | 1       |
|    | -     | 10000         | 07.0    | _       |              | 40   | 207    |         |               |                    |             | _              |         |
| 14 | _     | LOC-2/3       | SP+0    | 0       |              | (57) | -      |         | DITCU         | -                  |             | _              |         |
|    |       |               |         | _       |              |      | -      |         | DITCH         |                    |             |                |         |
| 15 | _     | LOC-2/4       | SP+0    | 0       |              | V    |        |         |               |                    |             |                |         |
| _  |       |               |         |         |              | 24   |        |         |               |                    |             |                |         |
| 16 | AP-3  | 3             | DP+0    | 0       | 44°48'30"RT  | _    |        | 635     |               | UTTAR DHUMA CHERRA | 23°56'14.3' | 91*59'32.3*    |         |
|    |       |               |         |         |              | (47) |        |         |               |                    |             |                |         |
| 17 |       | LOC-3/1       | SP+2.5  | 2.5     |              |      | 92     |         |               |                    |             |                |         |
|    |       |               |         |         |              | 45   |        |         | VILL-ROAD,LT  |                    |             |                |         |
| 18 | AP-4  | 4             | DP+0    | 0       | 25°31'44"RT  | _    |        | 727     |               |                    | 23°56'16.4" | 91°59'30.0"    |         |
|    |       |               |         |         |              | (59) | 59     |         |               |                    |             |                |         |
| 9  | AP-5  | 5             | DP+2.5  | 2.5     | 21°17'51"LT  | 0    |        | 786     |               |                    | 23°56'18.2" | 91°59'29.3"    |         |
|    |       |               |         |         |              | 40   |        |         |               |                    | 1           |                |         |
| 0  |       | LOC-5/1       | SP+0    | 0       |              | 10   | 73     |         |               |                    | +           |                |         |
|    |       | -0001         | OF TO   | U       |              | 33   | ,,,    |         |               | -                  | +-          |                |         |
| 1  | AP-6  | 6             | DP+0    | _       | 000001401117 | 33   | -      | 050     |               |                    | 22050120.01 | 91*59'27.6"    |         |
|    |       | v             | DP+U    | 0       | 23°35'19"LT  | (    |        | 859     |               | UTTAR DHUMA CHERRA | 23°56'20.0" | 31 33 27.0     | 1       |
| 2  | AP-7  |               |         |         |              | (50) | 50     |         | BRICK ROAD    | 1                  |             | 91*59'26.0"    | w 15    |
| 4  | 11.1  | 7             | DP+0    | 0       | 00°00'00"    |      |        | 909     | /             | Nec'ho             | 23°56'20.7" | 91 39 20.0     | 212     |

SUBMITTED BY SOT. ENGR. (Denneral TECHNOFAB

Dy. General Manage.
Transmission Division
Managhat (P.K. Bart)
Lisabell, Tribina

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| 1  | PNO   | POLE NO.    | TYPE OF |         | ANGLE OF     | SPAN | SEC.   | CUNLTV.  | CROSSING   | THE LACE WAVE        | GPS CO-08                               | DINATE(WGS-84) | 200000000 |
|----|-------|-------------|---------|---------|--------------|------|--------|----------|--|----------------------|---|----------------|-----------|
|    | 9200  | 110077      |         | of Mir. | DEVIATION    | 0.00 | LENGTH | LENGTH   | CHUSSING   | VILLAGE NAME         | NORTHING                                | EASTING        | REMARKS   |
| _  | EXT.  | 25          | TOWER   |         | 00,00,00,    |      |        |          | TAXABLE STORE OF THE PARTY OF T | UTTAR DHUMA CHERRA   | 21'56'29 59"                            | 91"59'42 95"   |           |
|    | AP-1  | 1           | FP+2.5  | 2.5     | 65°4'19"RT   | 15   | 15     |          | METAL ROAD   |                      | Contraction of                          |                |           |
| -  | Apr-1 |             | 14450   | 2.5     | 65'4'19'RT   | -    | -      | 15       |  |                      | 23,26,53 13,                            | 91"59'43.10"   |           |
| t  |       | LOC-1/1     | SP+0    | 0       |              | 40   |        |          |  |                      |   |                |           |
| Ī  |       |             |         | -       |              | 40   | 80     |          |  |                      | -                                       |                |           |
| Т  | AP-2  | 2           | DP+0    | 0       | 31'4'52'RT   | -    | -      | 95       |  |                      | 23"56'27.7"                             |                |           |
| Ι  |       |             |         |         |              | 33   | 33     |          | METAL ROAD   |                      | 25 36 27.7                              | 91'59'40.7"    |           |
| 1  | AP-3  | 3           | DP+0    | 0       | 10102581LT   | a    |        | 128      |  |                      | 23'56'28.8"                             | 91"59'39.3"    |           |
| 1  | -     |             |         |         |              | (48) |        |          |  |                      | 10000                                   | 1              |           |
| ŀ  | -     | LOC-3/1     | \$0+0   | 0       |              | 4    |        |          |  |                      |   |                |           |
| t  |       | LOC-3/2     | SP+0    | 0       | -            | (47) | 142    |          |  |                      |   |                |           |
| t  |       | - Section 2 | 00.40   | u.      |              | (47) | -      |          |  |                      |   |                |           |
| 1  | AP-4  | 4           | SP+0    | 0       | 4°12'32'RT   | 1    |        | 270      |  |                      |   |                |           |
| I  |       |             | 1       |         |              | 44   | 98.0   | 2.0      |  |                      | 23'56'26.8"                             | 91*59'34.6"    |           |
| 4  |       | LDC-4/1     | SP+0    | D       |              |      | 88     |          |  |                      |   |                |           |
| +  | 40.0  |             | -       |         |              | 44   |        |          |  |                      |   |                |           |
| -  | AP-5  | 5           | SP+0    | 0       | 1'0055'LT    | -    |        | 358      |  |                      | 23"56"25.6"                             | 91"59'31.5"    |           |
| +  |       | 100-51      | SP+0    | D       | -            | 33   | 73     | 101      |  |                      | 2000000                                 | 200000         |           |
| 1  |       | 200-21      | 37.40   | 1 0     | _            | 40   | 13     | 431      | SORA RIVER   |                      |   |                |           |
|    | AP-6  | 6           | SP+0    | 0       | 6°2713°LT    | 1 70 | -      |          | SOMA RIVER   | UTTAR THA MAA CUTTON | 23W-024-44                              |                |           |
| 1  |       |             | 1000    | 18      |              | 36   | 1000   |          |  | UTTAR DHUMA CHERRA   | 21.26.56.2.                             | 91"59'28.9"    |           |
| 3  |       | 100-61      | 5P+0    | 0       |              |      | 72     |          | 7. 5.7 5.5   |                      |   |                |           |
|    | AP.T  | 7           | -       | -       |              | 30   |        |          |  |                      |   |                |           |
|    | AP-1  | -           | SP+0    | 0       | 1"00'46"LT   | 40   | -      | 503      |  |                      | 23"56"26.12"                            | 91"59"26.40"   |           |
| 5  |       | LOC-7/1     | SP+0    | 0       |              | 40   | 80     | -        |  |                      | 0.0000000000000000000000000000000000000 | Service -      |           |
|    |       |             | -       | 1       |              | 40   |        |          |  | _                    |   |                |           |
|    | AP-0  | - 8         | DP+0    | b       | 11'376'RT    | 100  | 1.70.7 | 563      |  |                      | 23"56'25.74"                            | 91"59"23.61"   |           |
| 7  | 10.0  |             |         | -       |              | 21   | 31     | 7 - 28 5 |  |                      | 20.30 23.74                             | 91.29.13.61    |           |
| -  | AP-9  | 9           | FP+0    | 0       | 81°35'48'LT  | 29   | 29     | 614      |  |                      | 21"56'25.80"                            | 91"59'22.51"   |           |
| 8. | AP-10 | 10          | SP+0    | 0       | 1"126"LT     | 29   | 29     | 643      | METAL ROAD   |                      |   |                |           |
| Ξ  |       |             | 1       | 1       | 1,160,61     | 47   | 7.47   | -        |  |                      | 23'56'24.9"                             | 91'59'22.3"    |           |
| 9  | AP-11 | - 11        | DP+0    | - 0     | 19"11"10"RT  |      |        | 690      |  |                      | 23*56723.4*                             | 91'59'22 0"    |           |
| 10 | AP-12 | 1 40        | 40.1    | -       | 1            | 28   | 28     |          |  |                      | 23.20.22.6                              | 91.39.17.0     |           |
| 44 | aF-12 | 12          | SPH     | 0       | 1'00'26'LT   | 29   | 29     | 718      |  |                      | 23'56'22.6'                             | 91'59'21.5"    |           |
| 21 | AP-1  | 3 13        | FP+C    | 0       | 88"13"43"LT  |      | co.    | 747      |  |                      |   |                |           |
|    |       |             | 1       |         | 15 15 45 21  | 33   | 33     | 131      | 2NOS BRICK ROAD  |                      | 23"56'21.8"                             | 91'59'21.0"    |           |
| 22 | AP-1  | 4 14        | DP+0    | 0       | 11'48'39'LT  |      |        | 780      | - Committee in the second  |                      | harrest at                              |                |           |
| 23 | -     | 100 11      |         |         | 2 11/12/2011 | 43   | -22    | 0.00     |  |                      | 23"56'21.2"                             | 91"59"22.0"    |           |
| £3 |       | LOC-14      | 1 SP+0  | 3 (     |              | - 55 | 73     |          |  |                      |   |                |           |
| 24 | Ap.   | 15 15       | SPH     | 1 6     | 9'3226'RT    | 30   |        | 853      |  |                      | New York                                |                |           |
|    |       |             |         | 1       |              | 39   | 39     | 000      |  |                      | 23'56'20.37"                            | 91'59'14.39"   |           |
| 2  | AD.   | 16 18       | FP+     | 0       | 69'45'18'LT  |      |        | 892      |  |                      | 200                                     |                |           |
| 2  | S AP. | 17 47       | -       |         |              | 28   | 28     |          | BRICK ROAD   | UTTAR DISUMA DHERBA  | 23"56"19.73"                            | 91"59'25.60"   |           |
| -  | 1     | 17 17       | De+     | 0 0     |              | -    |        | 920      | /  |                      | 23,28,50.35.                            | SAME AND ADD   |           |
|    |       | _           |         | _       |              |      |        |          | 1  | 19                   | 43 36 60 32                             | 91"59'26.37"   |           |

Son Europe Mitera 20 108/2078
Son Europe Meerral Manager Transmission Division Manager Manager Manager Manager (P. K. Bari) Unakou. Tdrawa

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### **ANNEXURE – 4**

### **DETAILS OF PUBLIC CONSULTATION**

### DETAILS OF PUBLIC CONSULTATION MEETING/জন মন্ত্রনা সভার বিবরণ

### Subject/বিষ্ম

Construction of 132kV D/C Kailasahar – Dharmanagar T/L & associated distribution lines(with financial assistance of WORLD BANK) under NERPSIP Project

NERPSIP প্রকল্পের আওতায়(বিশ্ব ব্যাংকের আর্থিক সহায়তায়) 132kV ডি / সি ধর্মনগর -কৈলাসহর পরিবাহী লাইন এবং সংযুক্ত বন্টন লাইন নির্মাণ

### Place of Meeting/সভাব স্থান

Gournagar RD Block(BDO Office Conference Hall)/ গৌরনগর ব্লক (BDO অফিস কনফারেন্স হল)

### Date of Meeting/সভার তারিথ

19/12/2014-(55/57/2058)

### Name of the dignitary present in the meeting/ সভায় উপস্থিত মর্যাদাপূর্ণ বাক্তিদের নাম

### A. Tripura Government/ ত্রিপুরা সরকার

- 1. Sh. Anupam Chakraborty, BOD, Gournagar Block.
- 2. Ms. Santi Singa, Chairman, Gournagar Panchayet
- 3. Md. Inus Mia Kadhim, Vice Chairman, Gournagar Panchayet.

### в. TSECL Officials/TSECL কর্মকর্তারা

1. Sh. Ratan Das, DGM, TSECL

### c. POWERGRID Officials/ পাওয়ার গ্রিড কর্মকর্তারা

- 1. Sh. Uttam Debnath, Sr. Engineer, POWERGRID
- 2. Sh. S. B. Dewan, Tech, POWERGRID

### People present in the meeting/ সভায় উপস্থিত জনসাধারণ

**40-50** nos. of local village and some common public .(Attendance Sheet Enclosed)

40-50 জন স্থানীয় গ্রাম এবং কিছু সাধারণ পাবলিক ( উপস্থিত বাক্তিবর্গের সাক্ষর)

### Point addressed to the people/ জানা সাধারণের উদেশ্য ভাসন:

A brief of the NORTH EASTERN REGION POWER SYSTEM IMPLEMENTATION PROJECT(NERPSIP) under the world bank assistance has been deliberated at the beginning of the meeting by Sh. Rattan Das, DGM, TSECL. Importance & necessity of the project, necessity for upgradation of existing transmission & distribution network, various environment & Social issues associated with the project have been briefly discussed and appraised to the public present in the meeting. আলোচনা সভার শুরুতে TSECL এর ডেপুটি জেনারেল ম্যানেজার শ্রী রতন দাস মহাস্য বিশ্ব ব্যাংকের আর্থিক সহায়তায় উত্তর পূর্ব ক্ষেত্র বিদ্যুৎ বাবস্থা উল্লভিকরণ প্রকল্প(NERPSIP) সমন্ধে জনসাধারনের উদ্দেশ্যে সংক্ষিপ্ত তথ্য দিলেন। তাছাড়া প্রকল্পের প্রয়োজনীয়তা ও গুরুত্ব, বিদ্যুৎ পরিবাহী লাইন এবং বন্টন লাইন এর ক্ষমতা বৃদ্ধির প্রয়োজনীয়তা, প্রকল্পের সঙ্গে যুক্ত বিভিন্ন পরিবেশ ও সামাজিক বিসয়, সমন্ধে সংক্ষিপ্ত জানামন্ত্রানা উত্থাপন করলেন উপস্থিত জনসাধারনের উদ্দেশ্যে।

### Response from Public/ জানা সাধারণের থেকে প্রতিক্রিয়া

Representatives from the public also responded and raised various concerns about the project. The various issues raised by public are summarised as below:-

- ✓ What about employment for local people and procedure for same?
- ✓ What is the width of ROW for cutting trees? How much compensation
  for the trees will be given and when?
- ✓ Will these line passes through heavily populated area/house area?

জনসাধারণের পক্ষ্য থেকেও প্রতিনিধিরা প্রতিক্রিয়া এবং প্রকল্প সম্পর্কে বিভিন্ন উদ্বেগ উত্থাপিত করলেন। জনসাধারণ দ্বারা উত্থাপিত কিছু গুরুত্বপূর্ণ বিষয় নীচের সংক্ষিপ্ত করা হলো:-

- এই প্রকল্পের জন্য স্থানীয় মানুষ এর কর্মসংস্থান এবং নিয়োগ নীতির কি নিয়ম হবে ?
- লাইন বানানোর সময় গাছ কাটার করিডোর/প্রস্থ কি হবে ? কখন এবং কি পরিমান স্কৃতিপরণ দেওয়া হবে গাছের জন্য ?
- বিদ্যং লাইন রুট ঘনবসতি পূর্ণ এলাকা তথা কারোর ঘর এর উপর দিয়ে যাবে কিনা?

#### Conclusion/উপসংহাব

However all the public present have unanimously agreed to the necessity and importance of the project and assured their co-operation during the implementation of the project.

TSECL/POWERGRID has assured that all the genuine issues will be duly taken care of during the implementation of the project.

Further in response to the question of people-

- Local people will be engaged during the construction of line and the engagement will be as per their skill.
- ➤ The width of ROW of cutting trees will be 27 M and sufficient compensation will be given as per the rate provided by district revenue authority during the construction.
- Heavily populated area/house will be avoided finalization of route of Line.

The meeting has been concluded with a request to all public for their support in completion of the project.

তবে সবশেষে উপস্থিত জনসাধারণ সর্বসম্মতিক্রমে প্রকল্পের প্রয়োজনীয়তা এবং গুরুত্ব নিয়ে একমত প্রকাশ করেছেন এবং প্রকল্প বাস্তবায়ন সময় তাদের সহযোগিতা নিশ্চিত করেছেন। TSECL / পাওয়ার গ্রিড কর্মকর্তারা সমস্ত বাস্তব সমস্যা উপর প্রকল্প বাস্তবায়নের সময় যথাযত নজর দেয়ার আশ্বাস দিয়েছেন. তাছাড়া জনসাধারণের প্রশ্নের উত্তরে,

- প্রকল্পর কাজের রুপায়ালের সময় গ্রামের তথা স্থানীয় কারিগর/ শ্রমিক দের তাদের
  য়ৢগ্যতা অনুয়ায়ী নিয়োগ করা হবে
- লাইন বানানোর সময় গাছ কাটার প্রস্থ হবে ২৭ মিটার এবং ক্ষতিগ্রস্ত গাছ এর জন্য জেলা রাজস্ব কর্তৃপক্ষ দ্বারা উপলব্ধ হার অনুযায়ী ক্ষতিপূরণ দেওয়া হবে।
- বিদ্যং লাইন রুট ঘনবসতি পূর্ণ এলাকা এড়ানোর চেষ্টা করা হবে

প্রকল্প বাস্তবায়নে জনসাধারণের সহযোগিতার অনরোধের সঙ্গে সভা সমাপ্তির ঘোসনা করা হয়েছে

#### **Attendance Sheet**



## TRIPURA STATE ELECTRICITY CORPORATION LTD

(A GOVERNMENT OF TRIPURA ENTERPRISE)

# Public Consultation Meeting ATTENDENCE SHEET

NAME OF LINE: - 132kV Kailasahar to Dharmanagar Line alongwith associated Distribution Line

Date: 19/12/2014

| SI. | Name of the<br>Villager      | Name of<br>Village/Address | Work/Profession | Signature       |
|-----|------------------------------|----------------------------|-----------------|-----------------|
| 上.  | Alachun Nessa                | SoinaTupur                 | Samitee         | Denn            |
| 2.  | Monla Min                    | 71                         | Upa pradhar     | Dies            |
| 3.  | Aleha Began                  | )1                         | Pradhan         | Aleyanega       |
| 4.  | Anumaha sin                  | Joya y                     | Member          | अनुदार्धा कि ४३ |
| 5.  | Sukummi Sink                 | "                          | Pradhan         | Suklamoni       |
| 6.  | Gopacay                      | Zalai                      | Business        | (S) 13/12/0     |
| 7.  | Ranga costi<br>Gita Suxlabad | x Rangaoti                 | House wife      | -               |
| 8.  |                              |                            | 11              | Noon            |
| ۶.  | Bépul ch De                  | * Karlikov                 | Farmer          | By              |
| 10  | Hasena Began                 | . Ishafpur                 | HW              | अधिम विभाद्री   |



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Date: 19/12/2014

| SI.<br>no. | Name of the<br>Villager      | Name of<br>Village/Address | Work/Profession | Signature       |
|------------|------------------------------|----------------------------|-----------------|-----------------|
| 11         | Saira Begann                 | Fulbani Kandi              | HW              | 67 6721 60281   |
| 12         | Md, Ma sahid Ali             | Fulbari Kandi              | Business        | Md. Masahid Ahi |
| 13         | Parbati Detrato              | Halli Kura                 | HIW             | Parbuli Debruth |
| 14         | <i>०६७३५</i> व               | yuban nagar                | Faremen         | 66-63 Ga        |
| 15         | Sono Les vince               | Thomasadel                 | <i>)</i> )      | Sue bestron     |
| 16         | Grydri Malakor               | Laxmipus                   | House wife.     | orcellamor      |
| 17         | Grandin Malastor Abdul Mukut | Magunuli                   | Faremen         | Abdel Muker     |
| Iç         | Mahaliel Alongo              | Fort yozak                 | Farener         | Mohabel Alen    |
| 15.        | Mr. Taline Bli               | East 7.2.15                | Farmer          | Md. Salvered,   |
| 20         | Pomin Link                   | Laxmon<br>Jakoni Negy      | Business        | Pomin Sily      |



### TRIPURA STATE ELECTRICITY CORPORATION LTD

(A GOVERNMENT OF TRIPURA ENTERPRISE)

# Public Consultation Meeting ATTENDENCE SHEET

NAME OF LINE: - 132kV Kailasahar to Dharmanagar Line alongwith associated Distribution Line

Date: 19/12/2014

| SI. | Name of the<br>Villager        | Village/Address | Work/Profession | Signature       |
|-----|--------------------------------|-----------------|-----------------|-----------------|
| 24  | Md. Ramu Mia                   | Noon pury       | Business        | Md. Rares noc   |
| 22_ | Fakar Uddhin                   | grani efp       | Foodhan         | Fakon U Ali     |
| 23  | 4 2                            | Goldhaypuy      | Member          | Drima De (Da    |
| 24  | Shayamali Sinha                | Bhazubannagaz   | Housewife       | Shpamali Sin    |
| 25  | Lat chuthorngi Darloy          | xxkhitheytarly  | Farmy           | Latch Thought y |
| 26  | Monohor Al.                    | Gocisnagaz4/2   | Business        | Monohov A       |
| 27  | ASING AC                       | Gour nagar      | Business        | Alone Ac        |
| 28  | serik si                       | Bhogglion       | trz Business    | Acixali         |
| 29  |                                |                 | Member          | John "          |
| 30  | Nuclify Early<br>Moraidins Air | Seldo Des des   | pradhan         | Haz a Gml       |



### TRIPURA STATE ELECTRICITY CORPORATION LTD

(A GOVERNMENT OF TRIPURA ENTERPRISE)

## Public Consultation Meeting ATTENDENCE SHEET

# NAME OF LINE: - 132kV Kailasahar to Dharmanagar Line alongwith associated Distribution Line

Date: 19/12/2014

| SI. | Name<br>Villager | of  | the   | Name of<br>Village/Address | Work/Profession | Signature |
|-----|------------------|-----|-------|----------------------------|-----------------|-----------|
| 31  | Rafik A          | ALi |       | Baber Bazar                | Prodhan         | BHEATHA   |
| 32  | Basit            | Ali |       | East Bajahor               | Member          | Pasit Ari |
| 33  | Anjan            | Ali |       | 4                          | prachan         | Arjonal.  |
| 34  | Dipa             | Das | (Bail | Gaisnagas                  | Member          | Avjout C. |
|     |                  |     |       |                            |                 |           |
|     |                  |     |       |                            |                 |           |
|     |                  |     |       |                            |                 |           |
|     |                  |     |       |                            |                 |           |
|     |                  |     |       |                            |                 |           |
|     |                  |     |       |                            |                 |           |

## Photographs of Public Consultation Meeting held on 19<sup>th</sup> December, 2014 at Gouranagar Block













## "LEAFLET" COMPRISING PROJECT DETAILS UNDER NERPSIP IN DHALAI, UNAKOTI AND NORTH TRIPURA DISTRICTS OF TRIPURA

### **PROJECT SUMMARY**



## প্রকল্পের সারমর্ম



In order to strengthen the power scenario of the North Eastern States including Tripura, the Government of India with the financial assistance of the WORLD BANK, has formulated the North Eastern Region Power System Improvement Project (NERPSIP) which envisages in construction of new power Sub-stations, Transmission & Distribution lines and simultaneously augmentation/expansion of the existing Sub-stations and Transmission lines.

#### The NERPSIP in the state of Tripura broadly aims at:-

- Load enhancement of the transmission and distribution network of Tripura as well as reducing the transmission and distribution (T & D) loss.
- To adequately address the demand side management for ensuring adequate supply of electricity.

For implementation of project under North Eastern Region Power System Improvement Project (NERPSIP) construction of different 132 kV substation and transmission & distribution line have been planned to be taken up in this area. For construction of transmission line under this project, any damage caused will be compensated as per the Government norms.

We hope that implementation of the North Eastern Power System Improvement Project (NERPSIP) in the state of Tripura will definitely contribute in the socio-economic development of the state.

ত্রিপুরা সহ উত্তর-পূর্ব রাজ্যগুলির বিদ্যুৎ ব্যাবস্থার উন্নতির জন্য ভারত সরকার-বিশ্ববাদ্ধের আর্থিক সহায়তায় উত্তর-পূর্ব ক্ষেত্র বিদ্যুৎ ব্যাবস্থা উন্নতিকরণ প্রকল্প (NERPSIP) গঠন করেছে, যার মূল উদ্দেশ্য হল নতুন বিদ্যুৎ সাবস্টেশন, নতুন বিদ্যুৎ পরিবাহী ও বন্টন লাইন তৈরী করা এবং পাশাপাশি বর্তমান সাবস্টেশন এবং লাইনগুলির ক্ষমতা বৃদ্ধি ও সম্প্রসারন করা।

উত্তর-পূর্ব ক্ষেত্র বিদ্যুৎ ব্যাবস্থা উন্নতিকরণ প্রকল্প (NERPSIP) ত্রিপুরাতে আনার উদ্দেশ্য হল ঃ-

- বিদ্যুৎ পরিবাহী ও বন্টন লাইনের ক্ষমতা বৃদ্ধি করা তথা পরিবাহী ও বন্টন বাবদ অপচয় হ্রাস করা।
  - চাহিদার উপযোগী বিদ্যুৎ যোগান দেওয়া।

উত্তর-পূর্ব ক্ষেত্র বিদ্যুৎ বাবস্থা উন্নতিকরণ প্রকল্পের (NERPSIP) অধীনে ত্রিপুরা রাজ্যের প্রকল্প গুলি বাস্তবায়নের লক্ষে এই এলাকায় ১৩২ কেভি সাবস্টেশন, বিদ্যুৎ পরিবাহী ও বন্টন লাইন তৈরী করার উদ্দোগ নেওয়া হয়েছে। এই প্রকল্পটি বাস্তবায়নে সরকারী নিয়ম অনুযায়ী নির্ধারিত ক্ষতিপূরণ প্রদান করা হবে।

আমরা আশা করি ত্রিপুরার সামাজিক ও অর্থনৈতিক উন্নয়নে। উত্তর-পূর্ব ক্ষেত্র বিদ্যুৎ ব্যাবস্থা উন্নতিকরণ প্রকল্প (NERPSIP) অনন্য অবদান রাখবে।

TRIPURA STATE ELECTRICITY CORPORATION LTD (A Government of Tripura Enterprise)

ত্রিপুরা রাজ্য বিদ্যুৎ নিগম লিমিটেড (ত্রিপুরা সরকারের অধিনস্ত একটি সংস্থা)

#### **Details of Informal meeting enroute of lines**

| Date of meeting | No. of villagers<br>Interacted<br>during<br>meeting | Location of<br>Public<br>Consultation  | District      | Remarks   |
|-----------------|---|--|---------------|---|
| 12/10/2018      | 7   | Near Radhapur Gram<br>Panchayat enroute of<br>Kailasahar - Dharmanagar<br>132kV D/C line | North Tripura | Local villagers<br>including<br>Project Affected<br>Persons |
| 12/10/2018      | 9   | Rastarmatha Manu enroute of LILO of 132kV Ambassa - PK Bari line                         | North Tripura | were interacted during meeting                              |



