

# **Semi-Annual Social Safeguard Monitoring Report**

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**Loan Number : 3521-IND & 8325-IND**

**Reporting Period : July-December 2019**

## **Solar Transmission Sector Project**

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**Implementing Agency : POWERGRID**

**Executing Agency : POWERGRID**

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## ABBREVIATIONS

ADB	-	Asian Development Bank
CEA	-	Central Electricity Authority
CPTD	-	Compensation Plan for Temporary Damages
CSS	-	Country Safeguard System
CTU	-	Central Transmission Utility
DFO	-	Divisional Forest Officer
EAMP	-	Environmental Assessment Management Plan
ESPP	-	Environment and Social Policy & Procedures
ESMD	-	Environment & Social Management Department
EMP	-	Environmental Management Plan
GHGs	-	Green House Gases
GRM	-	Grievances Redressal Mechanism
GRC	-	Grievance Redressal Committee
HVDC	-	High Voltage Direct Current
IEAR	-	Initial Environmental Assessment Report
ISTS	-	Inter State Transmission Scheme
Km	-	Kilometers
MoEFCC	-	Ministry of Environment, Forest and Climate Change
PAL	-	POWERGRID Academy of Leadership
PAPs	-	Project Affected Persons
POWERGRID	-	Power Grid Corporation of India Ltd.
PMU	-	Project Management Unit
RAP	-	Resettlement Action Plan
RE	-	Renewable Energy
RoW	-	Right of Way
S/s	-	Substation
SAMP	-	Social Assessment Management Plan
SPS	-	Safeguard Policy Statement of ADB
TPDP	-	Tribal People Development Plan
UMSPP	-	Ultra Mega Solar Power Parks
USD	-	United States Dollar

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## **Executive Summary**

POWERGRID, the Central Transmission Utility (CTU) of the country has been implementing various Inter State Transmission System (ISTS) in 7 States associated with 9 Ultra Mega Solar Power Parks on compressed time schedule basis. The Solar Transmission Sector Project (“The Project”) comprising of different transmission systems associated with Solar Power Parks at Bhadla (Rajasthan), Banaskantha (Gujarat), Tumkur (Karnataka) and refurbishment work of HVDC Rihand-Dadri Project being implemented with financial assistance of USD 225 million from ADB under loan no. 3521-IND & 8325-IND. The said loan was signed on 5 April, 2017 and became effective from 9 May, 2017 with loan closing date of 31 May, 2022. The objective is to improve import capability of Northern, Southern & Western regions through transmitting harnessed solar power, which is another sustainable alternative, renewable and non-polluting form of energy.

This Project is being implemented and monitored in line with the POWERGRID’s Environmental and Social Policy & Procedures (ESPP) and the Action Plan for Safeguards prepared for the use of CSS so as to ensure that ESPP achieve and maintain full equivalence with ADB’s SPS, 2009. The Project is categorized as “B” and “C” for Involuntary Resettlement & Indigenous People aspects respectively as per ADB’s SPS.

The Project components include construction of about 639.61 km of new 765kV/400 kV D/c transmission lines (in 5 segments) and associated substations (1 new 765kV/400/220 kV substations and extension works at 8 substations). The project components are spread across 4 different States i.e. Rajasthan, Gujarat, Karnataka and Uttar Pradesh. For construction of new substation at Bhadla, encroachment free govt. land measuring 130.91 acres was secured from State Govt. through transfer. However, required lands for proposed extension at Bikaner, Tumkur (Pavagada), Tumkur (Vasanthnarsapur) & Mysore substation are already available in respective existing substations of POWERGRID and no fresh land was secured for this purpose. Since no involuntary acquisition of land and no Project Affected Persons (PAPs) involved issues related to Rehabilitation & Resettlement/ Rehabilitation Action Plan not envisaged in the instant project.

As per law of land, no land is acquired for transmission line but damages are compensated as per provisions of Electricity Act, 2003 and Indian Telegraph Act, 1885. POWERGRID is taking all possible efforts to avoid damage to standing crops and trees during construction of transmission lines, However, in case of damages, compensation is being paid to affected land owners/farmers for damage to standing crops/tree after due assessment of revenue authority/competent authority. During reporting period of July-December 2019, Rs 34.20 million in compensation was paid towards crop & tree damages. As of December, 2019, the project has paid a total of Rs. 294.552 million to affected farmers/land owners: Rs. 43.254 million during foundation and Rs. 41.676 million during erection & Rs.209.622 million during stringing. Within the current reporting period, 2172 of a total of 8457 persons were issued notices for 421.71 ha. of land, of a total of

1219.28 ha. notified. Further, POWERGRID has already started paying land compensation for tower footing and RoW Corridor in compliance to Ministry of Power guidelines on RoW compensation dated 15<sup>th</sup> October, 2015 and subsequent govt. order/notification with by Govt of Gujarat and Tamilnadu for its implementation. Accordingly, till December, 2019, an amount of Rs. 637.27 million has been paid towards land compensation for tower base and RoW corridor in Karnataka and Gujarat—Rs. 282.19 million within the reporting period. A summary of overall progress is also given in Table 1.5

The project specific mitigation measures in enlisted in EMP, which is also part of contract documents are being applied appropriately in different stage of project and regularly monitored for proper implementation. Apart from identified impacts as mentioned in EMP, no other unanticipated impacts were observed/ reported in the reporting period due to implementation of projects.

The two-tier grievance redress mechanism has been addressing/resolving the concerns and grievances of the complainant effectively. All concerns/grievances of affected persons/public including minor nature are also recorded and regularly tracked for early resolution within stipulated timeframe. As part of tree and crop compensation process, POWERGRID officials also listen to the complaints of affected farmers and takes necessary action to mitigate the concerns of the affected persons. As of December 2019, the project has received a total 48 complaints, of which 10 are newly received within the reporting period. 23 cases remain open/are being negotiated. Details of the grievances received is given in Table 4.

POWERGRID endeavors to minimize the social impacts started right from the selection of land for the proposed substations by completely avoiding the socially sensitive areas. Besides, all efforts have been made to minimize the social impacts associated with the project. POWERGRID is also undertaking various need based Community Development Works under its Corporate Social Responsibility (CSR) activities in and around its areas of operations for socio-economic and integral development of areas and communities at large. The instant investment for infrastructure development shall have a positive impact on several socio-economic indicators in the nearby community in long run and will ward off any temporary offset faced due to said project.

## **SECTION 1: INTRODUCTION**

Power Grid Corporation of India Ltd. (POWERGRID), the Central Transmission Utility (CTU) of the country, is engaged in power transmission with the mandate for planning, co-ordination, supervision and control over complete Inter-State transmission system. It has been contributing significantly towards development of Indian power sector by undertaking coordinated development of power transmission network along with effective and transparent operation of regional grids and through continuous innovations in technical & managerial fields.

Government of India has taken up the initiative for development of Ultra Mega Solar Power Parks (UMSPP) in various parts of the country. Keeping in view short gestation period of solar generation project and time required for development of evacuation system, it is proposed that the transmission scheme may be implemented in different phases commensurate to the power transfer requirement. MoP vide letter dated 08.01.15 & 04.08.15 intimated POWERGRID for taking up of transmission system for evacuation of power from 9 solar generating parks being set up in 7 States along with pooling stations as ISTS Scheme, including subject Tumkur (Pavagada) UMSPP on compressed time schedule basis.

As part of above initiative, an ultra-mega solar power park of 2000 MW capacity is being developed by M/s Karnataka Solar Power Development Corporation Ltd. (KSPDCL) (JVC of SECI & KREDL) at Pavagada in Tumkur district of Karnataka in two phases with 1000MW in each phase. A Ultra-Mega Solar Power Park is also being developed by M/s Surya Urja Company of Rajasthan Ltd (JVC of Govt. of Rajasthan and IL&FS) for 1000MW capacity and M/s Adani Renewable Energy Park Rajasthan Ltd. (JVC of Govt. of Rajasthan and AREPL) for 500MW capacity as well as by M/s Essel Surya Company of Rajasthan Ltd (JVC of Govt. of Rajasthan and Essel Infra Projects Ltd) for 750 MW in/near Bhadla, Jodhpur district, Rajasthan. Further, setting up of ultra-mega solar park of 700 MW capacities has been envisaged by M/s Gujarat Power Corporation Limited (GPCL) at Radhanesda district Banaskantha in Gujarat. Ministry of Power (MoP) has assigned POWERGRID to implement transmission system for various solar parks including Banaskantha UMSPP (700 MW) in Gujarat on compressed time schedule basis.

Besides, Rihand-Dadri HVDC system is an important link of Northern Region and is responsible for evacuation of major power out of 3000MW generated at Rihand Generating station. Reliable operation of Rihand-Dadri HVDC is of most importance for smooth operation of Northern Grid as power interruption in the link results in back down of generators in Rihand/Singrauli generating complex and also affects power supply to Delhi/Punjab. Though the system was running satisfactorily till last 3-4 years, problems started arising in different areas of HVDC resulting in outage of HVDC system as well as interruption of power flow. These failures are due to ageing of the equipment as Rihand-Dadri HVDC system has already completed its useful life of 25 years. The project involves refurbishment of Rihand & Dadri HVDC systems which will enhance its life and improve reliability as Rihand-Dadri HVDC system.

The above Inter-State Transmission Scheme (ISTS) for Bhadla, Tumkur (Pavagada) & Banaskantha UMSPP were discussed and agreed in the respective Regional Standing committee meetings on Power system Planning held on 20.01.16, 05.03.2016 & 20.01.16 respectively.

To meet the funding requirement for the proposed project, Asian Development Bank (ADB) has accepted POWERGRID's proposal to finance a loan of USD 225 million for implementation of transmission system for three UMSPP at Bhadla, Pavagada and Banashkantha and some package of refurbishment of HVDC Rihand-Dadri Project. Moreover, ADB selected the instant project to be implemented and monitored in line with the POWERGRID's Environmental and Social Policy & Procedures and the Action Plan for Safeguards prepared for the use of CSS so as to ensure that ESPP achieve and maintain full equivalence with ADB's SPS, 2009. The funding for the remaining part will be met from POWERGRID's own Internal Resources (IR). The loan no. 3521-IND & 8325-IND were signed on 5 April, 2017 and became effective from 9 May, 2017. The loan closing date is 31 May, 2022.

## **1.1 OVERALL PROJECT DESCRIPTION**

The Solar Transmission Sector Project covered under Loan No. 3521-IND and 8325-IND involves following projects:

- (i) Transmission System associated with Solar Park at Bhadla, Rajasthan
  - Bhadla (POWERGRID) – Bikaner (POWERGRID) 765kV D/c line;
  - Bhadla (POWERGRID)- Bhadla (RVPN) 400kV D/c (Quad) line;
  - Establishment of 765/400/220kV Bhadla (POWERGRID) substation;
  - Extension of 765/400kV Bikaner (POWERGRID) substation;
  - Extension of 400/220kV Bhadla (RVPN) substation.
- (ii) Transmission system for Ultra Mega Solar power park (2000 MW) at Tumkur (Pavagada), Karnataka - Phase-II (Part- A & B)
  - a) Transmission system for Ultra Mega Solar power park (2000 MW) at Tumkur (Pavagada), Karnataka - Phase-II (Part-A)
    - Hiriyur – Mysore 400kV D/C line;
    - Extension of 400/220kV Tumkur (Pavagada) Pooling station;
    - Extension of 400/220kV Mysore (POWERGRID) substation;
    - Extension of 400/220kV Tumkur (Vasantnarsapur) substation;
  - b) Transmission system for Ultra Mega Solar power park (2000 MW) at Tumkur (Pavagada), Karnataka - Phase-II (Part-B);
    - Tumkur (Pavagada) Pooling station-Devanahally(KPTCL) 400kV D/c (Quad) Line;
    - Extension of 400/220kV Tumkur (Pavagada) Pooling Station;
    - Extension of 400/220kV Devanahally (KPTCL) substation
- (iii) Transmission system for Ultra Mega Solar Power Park (700 MW) at Banaskantha (Radhanesda), Gujarat

- Banaskantha (Radhanesda) Pooling Station– Banaskantha 400kV D/c Line;
- 400kV Bay Extension at 765/400kV Banaskantha (POWERGRID) substation.

(iv) Refurbishment of HVDC Rihand-Dadri Project

- Replacement of HVDC Control, Protection, SCADA and Valve Cooling System for ±500kV, 1500 MW HVDC Rihand-Dadri Bi-Pole Terminals under Add-Cap for Rihand- Dadri HVDC System
- Supply & Erection of Bushings for Converter Transformers & Smoothing Reactors at Rihand and Dadri HVDC terminals
- Upgradation of SVC Control & Protection & Automation, Surge Arresters, Wall Bushings, Thyristor Valves and Valve cooling System for SVC at Kanpur; including one spare coupling transformer

## **1.2 PROJECT OBJECTIVES**

The objective is to improve import capability of Northern, Southern & Western regions through transmitting harnessed solar power, which is another sustainable alternative, renewable and non-polluting form of energy and does not emit any Green House Gases (GHGs) or harmful wastes.

## **1.3 SAFEGUARD CATEGORY**

As per ADB's safeguard classification of projects on the basis of potential impacts, the Solar Transmission Sector Project is categorized as "B" and "C" for Involuntary Resettlement & Indigenous People aspects respectively.

## **1.4 SOCIAL PERFORMANCE INDICATOR:**

The following parameters are considered as key indicators for this project which need to be monitored to evaluate the social performance.

- i) Selection of optimum route/substation site having least social impacts and also avoiding socially sensitive areas like human habitations, places of cultural/historical significance;
- ii) Taking due care of Project Affected Persons (PAPs) including timely payment of compensation and addressing their grievances, if any;
- iii) Compliance to CSS Action Plan for Safeguards & Loan Covenants;
- iv) Compliance to provisions mentioned in Compensation Plan for Temporary Damages (CPTD)/Environment Management Plan (EMP).

## **1.5 OVERALL PROJECT PROGRESS, AGREED MILESTONES & COMPLETION SCHEDULES**

Name of project	Project Details	Progress as on December, 2019	Completion Schedule
Transmission System associated with Solar Park at Bhadla, Rajasthan	<p><b>Transmission Line:</b></p> <ul style="list-style-type: none"> <li>Bhadla (POWERGRID)-Bikaner (POWERGRID) 765kV D/c line</li> <li>Bhadla (POWERGRID)- Bhadla (RVPN) 400kV D/c (Quad)</li> </ul> <p><b>Substation:</b></p> <ul style="list-style-type: none"> <li>Establishment of 765/400/220kV Bhadla (POWERGRID) substation</li> <li>Extension of 765/400kV Bikaner (POWERGRID) Substation</li> <li>Extension of 400/220kV Bhadla (RVPN) Substation</li> </ul>	All work completed (Progress during reporting period of July-December 2019 Tower foundation – 1%, Erection- 7 % & Stringing- 47% )	Commissioned in September 2019
Transmission system for Ultra Mega Solar power park (2000 MW) at Tumkur (Pavagada), Karnataka - Phase-II (Part-A & B)	<p><b>Transmission Line:</b></p> <ul style="list-style-type: none"> <li>Hiriyur – Mysore 400kV D/C line;</li> <li>Tumkur (Pavagada) Pooling station-Devanahally (KPTCL) 400kV D/c (Quad) Line</li> </ul> <p><b>Substation:</b></p> <ul style="list-style-type: none"> <li>Extension of 400/220kV Tumkur (Pavagada) Pooling station</li> <li>Extension of 400/220kV Mysore (POWERGRID) Substation</li> <li>Extension of 400/220kV Tumkur (Vasanthnarsapur) Substation</li> <li>Extension of 400/220kV Tumkur (Pavagada) Pooling station</li> <li>Extension of 400/220kV Devanahally (KPTCL) Substation</li> </ul>	<p>Approx. 93% of Tower foundation, 90% of Erection &amp; Stringing- 86 % completed.</p> <p>(Progress during reporting period of July-December 2019 Tower foundation – 6%, Erection- 7 % &amp; Stringing- 25% )</p> <p>Approx. 99.25% civil work completed and 98.5% equipment erection completed.</p> <p>(Progress during reporting period of July-December 2019, 2.25% civil work and 18.5 % equipment erection )</p>	December 2019
Transmission system for Ultra Mega Solar Power Park (700 MW) at Banaskantha (Radhanesda), Gujarat	<p><b>Transmission Line:</b></p> <ul style="list-style-type: none"> <li>Banaskantha (Radhanesda) Pooling Station – Banaskantha (PG) 400kV D/c.</li> </ul> <p><b>Substation:</b></p> <ul style="list-style-type: none"> <li>400kV Bay Extension at 765/400kV Banaskantha (PG) Substation</li> </ul>	100% of Tower foundation, 100% of Erection & 83% Stringing completed.	September 2019

		Approx. 90% civil work completed and 85% equipment erection completed. (Progress during reporting period of July-December 2019, 10% civil work and 65 % equipment erection )	
Refurbishment of HVDC Rihand-Dadri Project	<ul style="list-style-type: none"> <li>• Control &amp; Protection Upgradation (Replacement of existing Control &amp; Protection including SCADA System with latest new Control &amp; Protection including SCADA System);</li> <li>• Valve Cooling Upgradation (Replacement of existing wet type Valve Cooling System with new Valve Cooling System).</li> </ul>	Contract awarded in August 2019. Design and engineering work is under progress.	March 2021

## SECTION 2: COMPLIANCE STATUS WITH MAJOR LOAN COVENANTS

POWERGRID has complied with various social safeguards as agreed in the loan covenants. The point wise compliance status is presented in the table below;

<b>Project Specific Covenants</b>	<b>Reference</b>	<b>Status of Compliance</b>
The Borrower shall ensure, to ADB's satisfaction, prior to any disbursement of Loan proceeds for the relevant Subproject, the following requirements, as outlined in the PAM: (a) each Subproject meets the Subprojects selection criteria for ADB appraisal; (b) project relevant information of each of the Subprojects is disclosed to affected persons during consultation and prior to ADB appraisal; (c) draft and final EAR, EAMP and SAMP (CPTDT RAP and/or TPDP, as applicable) are submitted to ADB for its review; (d) satisfactory draft, final* and any updated 'EAR, EAMP, and SAMP (CPTD, RAP and/or TPDP, as applicable) are disclosed on the Borrower's website; and (e) submit the same to ADB for disclosure on ADB website.	LA, Sch. 5, para. 10	Complied. IEARs & CPTDs already prepared and disclosed on website after approval of ADB.
The Borrower shall use agency-level CSS to assess, categorize and address any environmental or social impacts under the Project in accordance with the ESPP, the agreed Action Plan for Safeguards, and the provisions set out in paragraphs 12 through 17 of this Schedule.	LA, Sch. 5, para. 11	Complied/Being complied.  The detailed compliance status of agreed action plan under CSS is placed as <b>Annexure-I</b> .
The Borrower shall adopt and implement the Action Plan for Safeguards in a timely manner so as to ensure that its ESPP achieve and maintain full equivalence with the objectives, policy scope, principles and triggers of SPS throughout Project implementation.	LA, Sch. 5, para. 13	Will be notified in case of any changes in ESPP.
The Borrower shall promptly notify ADB of any proposed changes to its ESPP or its safeguards implementation practices pursuant thereto. If, in the reasonable opinion of ADB, the change(s) could have the effect that environmental or social impacts under the Project are no longer assessed, categorized or addressed in a manner consistent with the objectives, policy scope, principles and triggers of SPS, ADB may  (i) require such additional changes to the Action Plan for Safeguards or other remedial actions as it considers necessary to maintain such consistency (ii) withdraw its approval for the use of CSS and financing of related Subprojects.	LA, Sch. 5, para. 15	Complied/Being complied.  For details of compliance status refer section -3.
The Borrower shall ensure, or cause to be ensured, that all land and all rights-of-way required for the Project are made available to the works contractor in accordance with the schedule agreed under the related works contract and all land acquisition and resettlement activities are implemented in compliance with (a) all applicable laws and regulations of the Guarantor and the relevant States relating to land acquisition and involuntary resettlement; (b) the ESPP; (c) the Action Plan for Safeguards, and (d) all measures and requirements set forth in the respective SAMP (CPTD, RAP and/or TPDP, as applicable), and any corrective or preventative actions set forth in a Safeguards Monitoring Report.		

<b>Project Specific Covenants</b>	<b>Reference</b>	<b>Status of Compliance</b>
Without limiting the application of the ESPP, the Action Plan for Safeguards and the relevant SAMP, the Borrower shall ensure that no displacement takes place in connection with the Project until compensation and other entitlements have been provided to affected people. In the case of temporary damages, the Borrower shall apply the provisions of the CPTD. In the case of involuntary land acquisition, the Borrower shall apply the provisions of the RAP.	LA, Sch. 5, para. 16	Complied/Being complied. For details of compliance status refer section -3.
Subject to the provisions of paragraph 11 of this Schedule, in the event of any significant or related impacts on indigenous people, the Borrower shall prepare and implement a TPDP equivalent to an indigenous peoples plan under the SPS in accordance with (a) the applicable laws and regulations of the Guarantor and the relevant States; (b) the ESPP; (c) the Action Plan for Safeguards; and (d) any corrective and preventive actions set forth in a Safeguards Monitoring Report.	LA, Sch. 5, para. 17	No impact on Indigenous people envisaged.
The Borrower shall make available necessary budgetary and human resources to fully implement the ESPP; the Action Plan for Safeguards; and each EAMP and SAMP (CPTD, RAP and/or TPDP, as applicable); and any corrective or preventative actions set forth in a Safeguards Monitoring Report.	LA, Sch. 5, para. 18	Complied/Being complied. All such provisions are integral part of approved IEARs and CPTDs
<p>The Borrower shall ensure that all bidding documents and contracts for works contain provisions that require contractors to:</p> <p>(a) comply with the measures relevant to the contractor set forth in the relevant IEAR, EAMP, and SAMP (CPTD, RAP and/or TPDP as applicable), (to the extent they concern impacts on affected people during construction), and any corrective or preventative actions set forth in the Action Plan for Safeguards and Safeguards Monitoring Report;</p> <p>(b) make available a budget for all such environmental and social measures and monitoring activities</p>	LA, Sch. 5, para. 19	Point (a) to (d) complied and point (e) is being complied as it is completed with project implementation at site.
<p>(b) provide the Borrower with a written notice of (i) any unanticipated environmental, resettlement or indigenous peoples risks or impacts that arise during construction, implementation or operation of the Project that were not considered in the relevant IEAR, EAMP, and SAMP (CPTD, RAP and/or TPDP, as applicable), and (ii) any corrective or preventative actions set forth in the Action Plan for Safeguards and Safeguards Monitoring Report;</p> <p>(c) adequately record the condition of roads, agricultural land and other infrastructure prior to starting to transport materials and construction; an</p> <p>(d) reinstate pathways, other local infrastructure, and agricultural land to at least their pre-project condition upon the completion of construction.</p>		

<p>The Borrower shall do the following, consistent with Action Plan for Safeguards:</p> <ul style="list-style-type: none"> <li>(a) disclose Safeguards Monitoring Reports on the Borrowers website, and submit the same for disclosure on ADB website, on a semiannual basis;</li> <li>(b) disclose satisfactory revisions and updates of IEAR, EAMP, and SAMP (CPTD, RAP and/or TPDP, as applicable), prepared during Subproject implementation, if any, on the Borrower's website, and submit these to ADB for disclosure on ADB website, and provide relevant information to affected people and other stakeholders in a timely manner and in a form and language understandable to them;</li> <li>(c) if any unanticipated environmental and/or social risks and impacts arise during construction, implementation or operation of the Project that were not considered in the relevant IEAR, EAMP, and SAMP (CPTD, RAP and/or TPDP as applicable), promptly inform ADB of the occurrence of such risks or impacts, with detailed description of the event and proposed corrective action plan;</li> <li>(d) report any actual or potential breach of compliance with the measures and requirements set forth in the relevant EAMP, and SAMP (CPTD, RAP and/or TPDP, as applicable) promptly after becoming aware of the breach; and</li> <li>(e) in the event unexpected significant safeguard impacts are identified, promptly engage qualified and experienced external expert or agency under terms of reference intimated to ADB, to verify information produced through the Project monitoring process, and facilitate the carrying out of any verification activities by such external experts.</li> </ul>	LA, Sch. 5, para. 20	<p>Complied/ Being complied Such reports are being submitted in due time and disclosed on website after ADB clearance.</p> <p>To be complied when became due.</p> <p>Will be complied if situation warrants.</p> <p>Will be complied in case of any breach. But till date no such breach reported.</p> <p>Will be complied if situation warrants</p>
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### SECTION: 3 STATUS OF LAND & SOCIAL COMPLIANCES

Details of land required for proposed substations, land status and social compliance is given below in **Table 1**.

**Table 1: Details of Substation Land**

S. N	Name of Substation	Land Area (acre)/ Type	Land Status	Land Cost	Social Compliance
1	Bhadla substation	130.91/ Govt	State Govt. transferred land to POWERGRID on 14.07.2016	Rs. 26.00 million	No R&R issues involved hence, there is no need of Rehabilitation Action Plan (RAP).
2	Extension of Bikaner, Tumkur (Pavagada), Tumkur (Vasantnarsapur) & Mysore substation		The required lands for said extensions are already available in respective existing substations of POWERGRID. Since , no fresh land is secured, there is no need of Rehabilitation Action Plan (RAP)		

A summary of the environmental & social mitigation measures, their monitoring vis-à-vis compliance by POWERGRID is given in **Table- E1**.

#### a. Compensation for Tree/crop damages:

POWERGRID follows the principles of Avoidance, Minimization and Mitigation in the construction of lines in agricultural field 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 (i.e. rate fixed by State Govt.) for standing crops. The process of tree/crop compensation is depicted in **Figure 1**. All efforts are also taken to minimize the crop damage to the extent possible in such cases. In the instant project also POWERGRID is taking all possible measures 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 is allowed after the construction work is completed. However, compensation for the loss of crops/trees/any structure are paid to Affected Persons (APs) for the area of damage to mitigate the impacts probably 3 times i.e. during foundation work, tower erection & stringing as per the prevailing situation. Details of line wise compensation paid for Tree & Crop damages till December, 2019 are given below in **Table- 2**.

**Table 2: Details of Crop & Tree Compensation**

S. No.	Name of the Line	Nos. of Person issued notice	Affected Land Area (Ha.)	Nos. of Tree	Compensation Paid for crop damages(Rs million)			Compensation Paid for Tree damages(Rs million)		
					Fdn.	Erectn.	Stringing	Fdn.	Erectn.	Strg.
<b>A Transmission System Associated with Solar Park at Bhadla, Rajasthan</b>										
1	765 kV D/C Bhadla- Bikaner	987	568.53	Nil	14.454	15.04	10.58	Nil	Nil	Nil
2	400 kV D/C Bhadla-Bhadla	96	41.35	Nil	1.08	1.4	1.58	Nil	Nil	Nil
<b>Sub-total (A)</b>		<b>1083</b>	<b>609.88</b>	<b>Nil</b>	<b>15.534</b>	<b>16.44</b>	<b>12.16</b>	<b>Nil</b>	<b>Nil</b>	<b>Nil</b>
<b>B Transmission System for UMSPP at Tumkur (Pavagada), Karnataka- Phase-II (Part-A &amp; B)</b>										
1	400 kV D/C Hiriyur-Mysore	4740	235	26627	11.17	12.01	19.74	0.15	0.66	182.67
2	400 kV D/C Tumkur-De.hally	1602	254.44	Nil	5.15	1.4	5.292	Nil	Nil	Nil

<b>Sub-total (B)</b>	<b>6342</b>	<b>489.44</b>	<b>26627</b>	<b>16.32</b>	<b>13.41</b>	<b>25.032</b>	<b>0.15</b>	<b>0.66</b>	<b>154.47</b>
<b>C Transmission System for Ultra Mega Solar Power Park at Banaskantha, Gujarat</b>									
1 400 kV D/C B.kantha- B.kantha	1032	119.96	0	11.25	11.166	17.96	Nil	Nil	Nil
<b>Sub-total(C)</b>	<b>1032</b>	<b>119.96</b>	<b>0</b>	<b>11.25</b>	<b>11.166</b>	<b>17.96</b>	<b>Nil</b>	<b>Nil</b>	<b>Nil</b>
<b>Grand Total</b>	<b>8457</b>	<b>1219.28</b>	<b>26627</b>	<b>43.104</b>	<b>41.016</b>	<b>55.152</b>	<b>0.15</b>	<b>0.66</b>	<b>154.47</b>

During reporting period of July-December 2019, compensation to the tune of **Rs 34.20 million** has been paid towards crop & tree damages. As of December, 2019, a total of **Rs 294.552 million** has been paid towards tree/crop compensation against the provision of Rs. 318.90 million as per DPR. Similarly, as of December 2019, a total of 8,457 affected persons with notice have received compensation—2172 within the reporting period—and the compensation progress is around 92.4% based on DRP and expected to be completed with the project implementation. No structure has been identified yet. A sample copy of crop compensation notice along with assessment sheet is enclosed at **Annexure-II**.

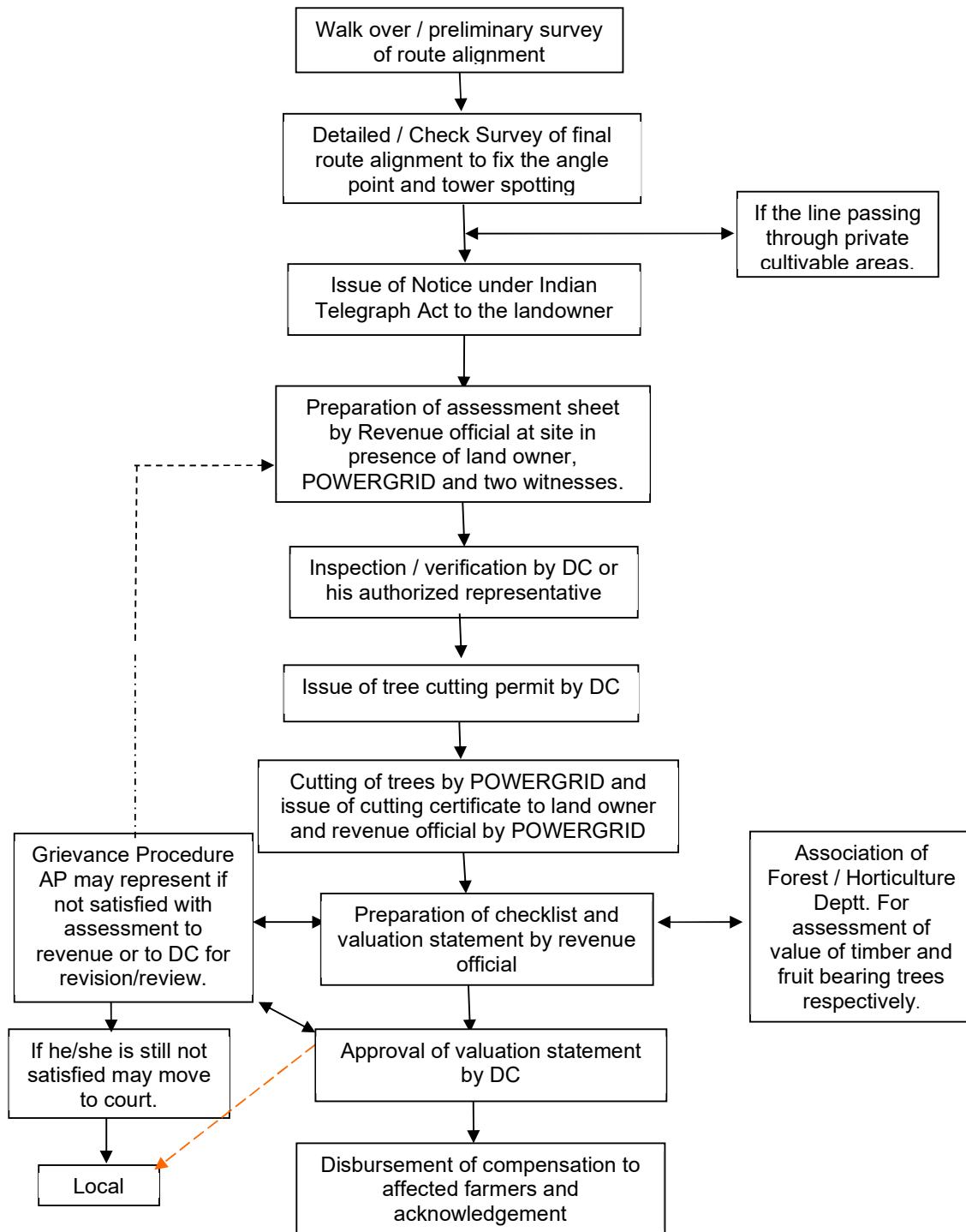
#### b. Land Compensation as per MoP Guidelines:

Ministry of Power (MoP), Govt of India vide their guidelines dated 15 Oct.'15 mandated payment of 85% land cost for the land coming under tower base and payment of maximum 15% of land cost for the land coming under the line corridor. However, these guidelines are subject to adoption by state governments for implementation in respective states. Till date, Govt. of Gujarat & Karnataka have adopted these guidelines among the states, where the project is being executed, while State of Rajasthan is yet to adopt these guidelines. The details of land compensation paid as per the provisions of the said guidelines are given in **Table- 3**:

**Table -3 : Details of Land Compensation as per MoP Guidelines**

S. No.	Name of the Line	Total Compensation paid for area under Tower Base (Rs million)	Total Compensation paid for area under RoW Corridor (Rs million)	Rate of Land Compensation (Rs million)	Remark, if any
<b>A. Transmission System Associated with Solar Park at Bhadla, Rajasthan</b>					
1	765 KV D/C Bhadla- Bikaner	Not Applicable	Not Applicable	Not Applicable	Rajasthan State has yet to adopt MoP Guidelines
2	400 KV D/C Bhadla-Bhadla				
<b>B. Transmission System for UMSPP at Tumkur, Karnataka- Phase-II (Part-A &amp; B)</b>					
1	400 KV D/C Hiriyur-Mysore	129.117	218.13	DA-0.225, DB-0.25-0.56, DC-0.30-0.55 DD-0.40-0.52	
2	400 KV D/C Tumkur- Devanahally	72.77	109.83	DA-0.225, DB-0.25, DC-0.30, DD-0.40 Corridor- 0.20/ acre	
<b>C Transmission System for UMSPP at Banaskantha, Gujarat</b>					
1	400 KV D/C Banaskantha- Banaskantha	13.02	94.41	700-810	
<b>Total</b>		<b>214.907</b>	<b>422.37</b>		

**Figure 1 : TREE / CROP COMPENSATION PROCESS**



**TABLE – E1 : ENVIRONMENT MANAGEMENT PLAN**

Cl. No./ stage	Project activity	Potential Impact	Proposed mitigation measures	Parameter to be monitored	Measurement & frequency	Institutional responsibility	Implementation schedule	Compliance Status
<b>Pre-construction</b>								
1	Location of line towers and line alignment and design	Exposure to safety related risks	Setback of dwellings to line route designed in accordance with permitted level of power frequency and the regulation of supervision at sites	Tower location and alignment selection with respect to nearest dwellings	Setback distances to nearest houses – once	POWERGRID	Part of tower sitting survey and detailed alignment survey &design	Details of compliance provided in environment monitoring report separately.
2	Equipment specifications and design parameters	Release of chemicals and gases in receptors (air, water, land)	PCBs not used in substation transformers or other project facilities or equipment.	Transformer design	Exclusion of PCBs in transformers stated in tender specification – once	POWERGRID	Part of tender specifications for the equipment	Part of tender specifications for the equipment
			Processes, equipment and systems not to use chlorofluorocarbons (CFCs), including halon, and their use, if any, in existing processes and systems should be phased out and to be disposed of in a manner consistent with the requirements of the Govt.	Process, equipment and system design	Exclusion of CFCs stated in tender specification – once	POWERGRID	Part of tender specifications for the equipment	Part of equipment and process design
3	Transmission line design	Exposure to electromagnetic interference	Line design to comply with the limits of electromagnetic interference from power lines including those of ICNIRP	Electromagnetic field strength for proposed line design	Line design compliance with relevant standards – once	POWERGRID	Part of design parameters	Details of compliance provided in environment monitoring report separately.
4	Substation location and design	Exposure to noise	Design of plant enclosures to comply with National ambient noise standards which are also compatible with the EHS guidelines of the World Bank.	Expected noise emissions based on substation design	Compliance with regulations - once	POWERGRID	Part of detailed siting survey and design	Part of detailed siting survey and design

<b>CI. Project activity No./ stage</b>	<b>Potential Impact</b>	<b>Proposed mitigation measures</b>	<b>Parameter to be monitored</b>	<b>Measurement &amp; frequency</b>	<b>Institutional responsibility</b>	<b>Implementation schedule</b>	<b>Compliance Status</b>
	Social inequities	Careful selection of site to avoid encroachment of socially, culturally and archaeological sensitive areas (i.e. sacred groves, graveyard, religious worship place, monuments etc.)	Selection of substation location (distance to sensitive area).	Consultation with local authorities - once	POWERGRID	Part of detailed siting survey and design	Complied during survey. Route alignment criterion is part of survey contract.
5	Location of line towers & line alignment and design	<p>Avoidance of such water bodies to the extent possible.</p> <p>Avoidance of placement of tower inside water bodies to the extent of possible</p> <p>Careful route selection to avoid existing settlements and sensitive locations</p>	<p>Tower location and line alignment selection (distance to water bodies)</p> <p>Tower location &amp; line alignment selection (distance to nearest dwellings or social institutions)</p> <p>Tower location &amp; line alignment selection (distance to agricultural land)</p> <p>Careful selection of site and route alignment to avoid encroachment of socially, culturally &amp; archaeological sensitive areas (i.g. sacred groves, graveyard, religious worship place, monuments etc.)</p>	<p>Consultation with local authorities- once</p> <p>Consultation with local authorities and land owners – once</p> <p>Consultation with local authorities and land owners – once</p> <p>Consultation with local authorities - once</p>	<p>POWERGRID</p> <p>POWERGRID</p> <p>POWERGRID</p> <p>POWERGRID</p>	<p>Part of tower siting survey and detailed alignment survey and design</p> <p>Part of tower siting survey and detailed alignment survey and design</p> <p>Part of tower siting survey and detailed alignment survey and design</p> <p>Part of tower siting survey and detailed alignment survey and design</p>	<p>Complied</p> <p>Route alignment criterion is part of survey contract.</p> <p>Complied</p> <p>Complied</p>

<b>Cl. Project activity No./ stage</b>	<b>Potential Impact</b>	<b>Proposed mitigation measures</b>	<b>Parameter to be monitored</b>	<b>Measurement &amp; frequency</b>	<b>Institutional responsibility</b>	<b>Implementation schedule</b>	<b>Compliance Status</b>
6	Securing lands for substations.	In the case of Involuntary Acquisitions, Compensation and R&R measures are extended as per provision of RFCTLARRA, 2013 <sup>1</sup>	Compensation and monetary R&R amounts/ facilities extended before possession of land.	As per provisions laid out in the act	POWERGRID	Prior to award/start of substation construction.	Fresh land required only for Bhadla substation which was secured from State Govt through transfer. For details refer <b>Table- 1.</b>
7	Line through protected area/ precious ecological area	Avoid siting of lines through such areas by careful site and alignment selection (National Parks, Wildlife Sanctuary, Biosphere Reserves/ Biodiversity Hotspots)  Minimize the need by using ROW wherever possible	Tower location & line alignment selection (distance to nearest designated ecological protected/ sensitive areas)	Consultation with local forest authorities - once	POWERGRID	Part of tower siting survey and detailed alignment survey and design	Details of compliance provided in environment monitoring report separately.
8	Line through identified Elephant corridor / Migratory bird	Damage to the Wildlife/ Birds and also to line	Study of earmarked elephant corridors to avoid such corridors, Adequate ground clearance, Fault clearing by Circuit Breaker, Barbed wire wrapping on towers, reduced spans etc., if applicable	Tower location and line alignment selection.  Minimum /maximum ground clearance	POWERGRID	Part of tower siting and detailed alignment survey & design and Operation	Monitoring – quarterly basis

<sup>1</sup> No involuntary acquisition of land (permanent) involved, hence this clause is not applicable.

CI Project activity No./ stage	Potential Impact	Proposed mitigation measures	Parameter to be monitored	Measurement & frequency	Institutional responsibility	Implementation schedule	Compliance Status
		Avoidance of established/ identified migration path (Birds & Bats). Provision of flight diverter/ reflectors, bird guard, elevated perches, insulating jumper loops, obstructive perch deterrents, raptor hoods etc2., if applicable	Tower location and line alignment selection	Consultation with local forest authorities - once	POWERGRID	Part of tower siting survey and detailed alignment survey and design	
9	Line through forestland	Deforestation and loss of biodiversity edge effect	Avoid locating lines in forest land by careful site and alignment selection Minimise the need by using existing towers, tall towers and RoW, wherever possible  Measures to avoid invasion of alien species	Tower location and line alignment selection (distance to nearest protected or reserved forest)  Intrusion of invasive species	Consultation with local authorities-once Consultation with local authorities & design engineers- once  Consultation with local forest authorities-once	POWERGRID	Part of tower siting survey and detailed alignment survey and design
10	Lines through farmland	Loss of agricultural production/ change in cropping pattern	Use existing tower or footings wherever possible.	Tower location and line alignment selection.	POWERGRID	Part of detailed alignment survey and design	Complied during survey which is a part of survey contract. However, as per law of land, no land is acquired for trans. line tower but all damages are compensated as per provisions of Electricity Act, 2003 and Indian Telegraph Act, 1885.

<sup>2</sup> As per International/National best practices and in consultation with concerned forest/wildlife Authority.

<b>CI. Project activity No./ stage</b>	<b>Potential Impact</b>	<b>Proposed mitigation measures</b>	<b>Parameter to be monitored</b>	<b>Measurement &amp; frequency</b>	<b>Institutional responsibility</b>	<b>Implementation schedule</b>	<b>Compliance Status</b>
		Avoid siting new towers on farmland wherever feasible	Tower location and line alignment selection	Consultation with local authorities & design engineers- once		Part of detailed sitting & alignment survey /design	
11	Noise related	Nuisance to neighbouring properties	Substations sited and designed to ensure noise will not be a nuisance and shall comply with National Ambient Noise Standards, which are also compatible with the EHS guidelines of the World Bank.	Noise levels	POWERGRID	Part of detailed equipment design	Details of compliance provided in environment monitoring report separately.
12	Interference with drainage patterns/ irrigation channels	Flooding hazards/ loss of agricultural production	Appropriate siting of towers to avoid channel interference	Tower location and line alignment selection (distance to nearest flood zone)	Consultation with local authorities and design engineers- once	Part of detailed alignment survey and design	Complied/Being complied. Appropriate siting of towers ensured during alignment survey and Tower spotting to avoid channel interference.
13	Escape of polluting materials	Environmental pollution	Transformers designed with oil spill containment systems, and purpose-built oil, lubricant and fuel storage system, complete with spill cleanup equipment.	Equipment specifications with respect to potential pollutants	POWERGRID	Part of detailed equipment design /drawings	Details of compliance provided in environment monitoring report separately.
			Substations to include drainage and sewage disposal systems to avoid offsite land and water pollution.	Substation sewage design	POWERGRID	Part of detailed substation layout and design /drawings	

<b>CI. Project activity No./ stage</b>	<b>Potential Impact</b>	<b>Proposed mitigation measures</b>	<b>Parameter to be monitored</b>	<b>Measurement &amp; frequency</b>	<b>Institutional responsibility</b>	<b>Implementation schedule</b>	<b>Compliance Status</b>
14 Equipments submerged under flood	Contamination of receptors	Substations constructed above the high flood level(HFL) by raising the foundation pad	Substation design to account for HFL (elevation with respect to HFL elevation)	Base height as per flood design- once	POWERGRID	Part of detailed substation layout and design/ drawings	
15 Explosions /Fire	Hazards to life	Design of substations to include modern firefighting equipment Provision of fire fighting equipment to be located close to transformers	Substation design compliance with fire prevention and control codes	Tender document to mention detailed specifications – once	POWERGRID	Part of detailed substation layout and design /drawings	
<b>Construction</b>							
16 Equipment layout and installation	Noise and vibrations	Construction techniques and machinery seeking to minimize ground disturbance.	Construction techniques and machinery creating minimal ground disturbance- once at the start of each construction phase	Construction techniques and machinery	POWERGRID (Contractor through contract provisions)	Construction period	Details of compliance provided in environment monitoring report separately
17 Physical construction	Disturbed farming activity	Construction activities on cropping land timed to avoid disturbance of field crops (within one month of harvest wherever possible).	Timing of start of construction	Crop disturbance – Post harvest as soon as possible but before next crop – once per site	POWERGRID (Contractor through contract provisions)	Construction period	Complied/ Being complied. Construction on farm land undertaken mostly during post-harvest period. Wherever, crop loss occurs, compensation is paid to farm owners. An amount of <b>Rs 139.27 million</b> has been paid till December 19 (for details refer <b>Table -2</b> ).

<b>Cl. Project activity No./ stage</b>	<b>Potential Impact</b>	<b>Proposed mitigation measures</b>	<b>Parameter to be monitored</b>	<b>Measurement &amp; frequency</b>	<b>Institutional responsibility</b>	<b>Implementation schedule</b>	<b>Compliance Status</b>
18 Mechanized construction	Noise, vibration and operator safety, efficient operation	Construction equipment to be well maintained.	Construction equipment – estimated noise emissions	Complaints received by local authorities – every 2 weeks	POWERGRID (Contractor through contract provisions)	Construction period	Details of compliance provided in environment monitoring report separately.
	Noise, vibration, equipment wear and tear	Turning off plant not in use.	Construction equipment – estimated noise emissions and operating schedules	Complaints received by local authorities – every 2 weeks	POWERGRID (Contractor through contract provisions)	Construction period	
19 Construction of roads for accessibility	Increase in airborne dust particles	Existing roads and tracks used for construction and maintenance access to the line wherever possible.	Access roads, routes (length and width of new access roads to be constructed)	Use of established roads wherever possible – every 2 weeks	POWERGRID (Contractor through contract provisions)	Construction period	Details of compliance provided in environment monitoring report separately.
	Increased land requirement for temporary accessibility	New access restricted to a single carriage way width within the RoW.	Access width (meters)	Access restricted to single carriage – way width within RoW – every 2 weeks	POWERGRID (Contractor through contract provisions)	Construction period	
20 Construction activities	Safety of local villagers	Coordination with local communities for construction schedules, Barricading the construction area and spreading awareness among locals	Periodic and regular reporting /supervision of safety arrangement	No. of incidents- once every week	POWERGRID (Contractor through contract provisions)	Construction period	

<b>CI. Project activity No./ stage</b>	<b>Potential Impact</b>	<b>Proposed mitigation measures</b>	<b>Parameter to be monitored</b>	<b>Measurement &amp; frequency</b>	<b>Institutional responsibility</b>	<b>Implementation schedule</b>	<b>Compliance Status</b>
	Local traffic obstruction	Coordination with local authority, requisite permission for smooth flow of traffic. Imposing speed limits on Project vehicles in project/ habitation areas.	Traffic flow (Interruption of traffic)	Frequency (time span)- on daily basis	POWERGRID (Contractor through contract provisions)	Construction period	
21	Temporary blockage of utilities	Overflows, reduced discharge	Measure in place to avoid dumping of fill materials in sensitive drainage area	Temporary fill placement (m3)	Absence of fill in sensitive drainage areas – every 4 weeks	POWERGRID (Contractor through contract provisions)	Construction period
22	Site clearance	Vegetation	Marking of vegetation to be removed prior to clearance, and strict control on clearing activities to ensure minimal clearance.  No use of herbicides and pesticides	Vegetation marking and clearance control (area in m2)	Clearance strictly limited to target vegetation – every 2 weeks	POWERGRID (Contractor through contract provisions)	Construction period
23	Trimming /cutting of trees within RoW	Fire hazards	Trees allowed growing up to a height within the RoW by maintaining adequate clearance between the top of tree and the conductor as per the regulations.	Species-specific tree retention as approved by statutory authorities (average and max. tree height at maturity, in meters)	Presence of target species in RoW following vegetation clearance – once per site	POWERGRID (Contractor through contract provisions)	Construction period
	Loss of vegetation and deforestation		Trees that can survive pruning to comply should be pruned instead of cleared.	Species-specific tree retention as approved by statutory authorities	Presence of target species in RoW following vegetation clearance-once per site	POWERGRID (Contractor through contract provisions)	Construction period

<b>CI. Project activity No./ stage</b>	<b>Potential Impact</b>	<b>Proposed mitigation measures</b>	<b>Parameter to be monitored</b>	<b>Measurement &amp; frequency</b>	<b>Institutional responsibility</b>	<b>Implementation schedule</b>	<b>Compliance Status</b>
		Felled trees and other cleared or pruned vegetation to be disposed of as authorized by the statutory bodies.	Disposal of cleared vegetation as approved by the statutory authorities (area cleared in m <sup>2</sup> )	Use or intended use of vegetation as approved by the statutory authorities – once per site	POWERGRID (Contractor through contract provisions)	Construction period	
24	Wood/ vegetation harvesting	Construction workers prohibited from harvesting wood in the project area during their employment, (apart from locally employed staff continuing current legal activities).	Illegal wood /vegetation harvesting (area in m <sup>2</sup> , number of incidents reported)	Complaints by local people or other evidence of illegal harvesting – every 2 weeks	POWERGRID (Contractor through contract provisions)	Construction period	
25	Surplus earthwork/soil	Runoff to cause water pollution, solid waste disposal	Soil excavated from tower footings/substation foundation disposed of by placement along roadsides, or at nearby house blocks if requested by landowners.	Soil disposal locations and volume (m <sup>3</sup> )	Acceptable soil disposal sites – every 2 weeks	POWERGRID (Contractor through contract provisions)	Construction period
26	Substation construction	Loss of soil	Loss of soil is not a major issue as excavated soil will be mostly reused for leveling and re-filling. However, in case of requirement of excess soil the same will be met from existing quarry or through deep excavation of existing pond or other nearby barren land with agreement of local communities.	Borrow area sitting (area of site in m <sup>2</sup> and estimated volume in m <sup>3</sup> )	Acceptable soil borrow areas that provide a benefit - every 2 weeks	POWERGRID (Contractor through contract provisions)	Construction period
					Details of compliance provided in environment monitoring report separately.		

<b>CI Project activity No./ stage</b>	<b>Potential Impact</b>	<b>Proposed mitigation measures</b>	<b>Parameter to be monitored</b>	<b>Measurement &amp; frequency</b>	<b>Institutional responsibility</b>	<b>Implementation schedule</b>	<b>Compliance Status</b>
	Water pollution	Construction activities involving significant ground disturbance (i.e. substation land forming) not undertaken during the monsoon season	Seasonal start and finish of major earthworks (PH, BOD /COD, Suspended solids, others )	Timing of major disturbance activities –prior to start of construction activities	POWERGRID (Contractor through contract provisions)	Construction period	
27	Site clearance	Vegetation	Tree clearances for easement establishment to only involve cutting trees off at ground level or pruning as appropriate, with tree stumps and roots left in place and ground cover left undisturbed	Ground disturbance during vegetation clearance (area, m <sup>2</sup> ) Statutory approvals	Amount of ground disturbance – every 2 weeks Statutory approvals for tree clearances- once for each site	POWERGRID (Contractor through contract provisions)	Construction period
28	Tower erection Substation foundation-disposal of surplus earthwork/fill	Waste disposal	Excess fill from substation /tower foundation excavation disposed of next to roads or around houses, in agreement with the local community or landowner.	Location and amount (m <sup>3</sup> ) of fill disposal	Appropriate fill disposal locations – every 2 weeks	POWERGRID (Contractor through contract provisions)	Construction period
29	Storage of chemicals and materials	Contamination of receptors (land, water, air)	Fuel and other hazardous materials securely stored above high flood level	Location of hazardous material storage; spill reports (type of material spilled, amount (kg or m <sup>3</sup> ) and action taken to control and clean up spill)	Fuel storage in appropriate locations and receptacles – every 2 weeks	POWERGRID (Contractor through contract provisions)	Construction period

<b>CI. Project activity No./ stage</b>	<b>Potential Impact</b>	<b>Proposed mitigation measures</b>	<b>Parameter to be monitored</b>	<b>Measurement &amp; frequency</b>	<b>Institutional responsibility</b>	<b>Implementation schedule</b>	<b>Compliance Status</b>
30 Construction schedules	Noise nuisance to neighbouring properties	Construction activities only undertaken during the day and local communities informed of the construction schedule.	Timing of construction (noise emissions, [dB(A)]	Daytime construction only – every 2 weeks	POWERGRID (Contractor through contract provisions)	Construction period	
31 Provision of facilities for construction workers	Contamination of receptors (land, water, air)	Construction workforce facilities to include proper sanitation, water supply and waste disposal facilities.	Amenities for Workforce facilities	Presence of proper sanitation, water supply & waste disposal facilities – once each new facility	POWERGRID (Contractor through contract provisions)	Construction period	
32 Influx of migratory workers	Conflict with local population to share local resources	Using local workers for appropriate tasks	Avoidance/ reduction of conflict through enhancement/ augmentation of resource requirements	Observation & supervision–on weekly basis	POWERGRID (Contractor through contract provisions)	Construction period	Complied/ Being Complied. Local workforce being used based on skill and no incidents of conflict have been reported till date.
33 Lines through farmland	Loss of agricultural productivity	Use existing access roads wherever possible  Ensure existing irrigation facilities are maintained in working condition	Usage of existing utilities  Status of existing facilities	Complaints received by local people /authorities - every 4 weeks	POWERGRID (Contractor through contract provisions)	Construction period	Being complied. No complaints received from local peoples/authorities
		Protect /preserve topsoil and reinstate after construction completed  Repair /reinstate damaged bunds etc after construction completed	Status of facilities (earthwork in m <sup>3</sup> )  Status of facilities (earthwork in m <sup>3</sup> )				

CI Project activity No./ stage	Potential Impact	Proposed mitigation measures	Parameter to be monitored	Measurement & frequency	Institutional responsibility	Implementation schedule	Compliance Status	
	Loss of income.	Land owners/ farmers compensated for any temporary loss of productive land as per existing regulation.	Process of Crop/tree compensation in consultation with forest dept. (for timber yielding tree) and Horticulture deptt. (for fruit bearing tree)	Consultation with affected land owner prior to implementation and during execution.	POWERGRID	During construction	Tried to minimise the loss. However, if any damage occurs to tree/crop same is compensated. Till December 19 <b>Rs 294.55 million and Rs 637.277 million</b> have been paid towards crops /tree compensation and land diminution value to affected farmer/land owners respectively (refer <b>Table -2 &amp; 3</b> ).	
34	Uncontrolled erosion/silt runoff	Soil loss, downstream siltation	Need for access tracks minimised, use of existing roads. Limit site clearing to work areas  Regeneration of vegetation to stabilise works areas on completion (where applicable)  Avoidance of excavation in wet season  Water courses protected from siltation through use of bunds and sediment ponds	Design basis and construction procedures (suspended solids in receiving waters, area re-vegetated in m <sup>2</sup> ; amount of bunds constructed [length in meter, area in m <sup>2</sup> , or volume in m <sup>3</sup> ])	Incorporating good design and construction management practices – once for each site	POWERGRID (Contractor through contract provisions)	Construction period	Details of compliance provided separately in environment monitoring report

<b>Cl. Project activity No./ stage</b>	<b>Potential Impact</b>	<b>Proposed mitigation measures</b>	<b>Parameter to be monitored</b>	<b>Measurement &amp; frequency</b>	<b>Institutional responsibility</b>	<b>Implementation schedule</b>	<b>Compliance Status</b>
35 Nuisance to nearby properties	Losses to neighbouring land uses/ values	Contract specifying construction practices.  As much as possible existing access ways will be used	Contract clauses  Design basis and layout	Incorporating good construction management practices – once for each site  Incorporating good design engineering practices– once for each site	POWERGRID (Contractor through contract provisions)	Construction period	Complied/ Being Complied.  No complaints received so far.

<b>CI Project activity No./ stage</b>	<b>Potential Impact</b>	<b>Proposed mitigation measures</b>	<b>Parameter to be monitored</b>	<b>Measurement &amp; frequency</b>	<b>Institutional responsibility</b>	<b>Implementation schedule</b>	<b>Compliance Status</b>
36 Flooding hazards due to construction impediments of natural drainage	Flooding & loss of soils, contamination of receptors (land, water)	Avoid natural drainage pattern/ facilities being disturbed/blocked/ diverted by on-going construction activities	Contract clauses (e.g. suspended solids and BOD/COD in receiving water)	Incorporating good construction management practices-once for each site	POWERGRID (Contractor through contract provisions)	Construction period	Details of compliance provided which part of environment monitoring report
37 Equipment submerged under flood	Contamination of receptors (land, water)	Equipment stored at secure place above the high flood level(HFL)	Store room level to be above HFL (elevation difference in meters)	Store room level as per flood design-once	POWERGRID	Construction period	
38 Inadequate siting of borrow areas (quarry areas)	Loss of land values	Existing borrow sites will be used to source aggregates, therefore, no need to develop new sources of aggregates	Contract clauses	Incorporating good construction management practices – once for each site	POWERGRID (Contractor through contract provisions)	Construction period	
39 Health and safety	Injury and sickness of workers and members of the public	Safety equipment's (PPEs) for construction workers Contract provisions specifying minimum requirements for construction workers camps Contractor to prepare and implement a health and safety plan. Contractor to arrange for health and safety training sessions	Contract clauses (18.1.3, 18.3.1.1, 18.3.1.4 etc) (requirements of worker camp, number of incidents and total lost-work days caused by injuries and sickness)	Contract clauses – once every quarter	POWERGRID (Contractor through contract provisions)	Construction period	
40 Inadequate construction stage monitoring	Likely to maximise damages	Training of environmental monitoring personnel	Training schedules	No. of programs attended by each person – once a year	POWERGRID	Routinely throughout construction period	Provides proper training and have very good environment monitoring process.

<b>CI/ Project activity No./ stage</b>	<b>Potential Impact</b>	<b>Proposed mitigation measures</b>	<b>Parameter to be monitored</b>	<b>Measurement &amp; frequency</b>	<b>Institutional responsibility</b>	<b>Implementation schedule</b>	<b>Compliance Status</b>
		Implementation of effective environmental monitoring and reporting system using checklist of all contractual environmental requirements	Respective contract checklists and remedial actions taken thereof.	Submission of duly completed checklists of all contracts for each site – once			Awareness/Training program are regularly conducted as per HRD calendar. During reporting period such training programme was conducted on 7 & 8 <sup>TH</sup> Nov. 2019 at Lucknow.
		Appropriate contact clauses to ensure satisfactory implementation of contractual environmental mitigation measures.	Compliance report related to environmental aspects for the contract	Submission of duly completed compliance report for each contract – once			Appropriate clause incorporated in contact provision for EMP.
<b>Operation and Maintenance</b>							
41	Location of line towers and line alignment & design	Exposure to safety related risks	Setback of dwellings to overhead line route designed in accordance with permitted level of power frequency and the regulation of supervision at sites.	Compliance with setback distances ("as-built" diagrams)	Setback distances to nearest houses – once in quarter	POWERGRID	During operation
42	Line through identified bird flyways, migratory path	Injury/ mortality to birds, bats etc. due to collision and electrocution	Avoidance of established/ identified migration path (Birds & Bats). Provision of flight diverter/reflectors, elevated perches, insulating jumper loops, obstructive perch deterrents, raptor hoods etc., if applicable	Regular monitoring for any incident of injury/mortality	No. of incidents- once every month	POWERGRID	Part of detailed siting and alignment survey /design and operation
43	Equipment submerged under flood	Contamination of receptors (land, water)	Equipment installed above the high flood level (HFL) by raising the foundation pad.	Substation design to account for HFL ("as-built" diagrams)	Base height as per flood design – once	POWERGRID	During operation

<b>CI Project activity No./stage</b>	<b>Potential Impact</b>	<b>Proposed mitigation measures</b>	<b>Parameter to be monitored</b>	<b>Measurement &amp; frequency</b>	<b>Institutional responsibility</b>	<b>Implementation schedule</b>	<b>Compliance Status</b>
44	Oil spillage	Contamination of land/nearby water bodies	Each transformer has a secure and impervious underlying pit with a storage capacity of at least 20% of the total oil volume of the transformer and the individual pits are connected to a main collection sump of capacity of 220% of largest transformer oil volume, which acts as a Secondary Containment. (refer para 8.6 of TS)	Substation bunding (Oil sump) ("as-built" diagrams)	Bunding (Oil sump) capacity and permeability - once	POWERGRID	During operation -do-
45	SF <sub>6</sub> management	Emission of most potent GHG causing climate change	Reduction of SF <sub>6</sub> emission through awareness, replacement of old seals, proper handling & storage by controlled inventory and use, enhance recovery and applying new technologies to reduce leakage	Leakage and gas density/level	Continuous monitoring	POWERGRID	During Operation -do-
46	Inadequate provision of staff/workers health and safety during operations	Injury and sickness of staff /workers	Careful design using appropriate technologies to minimise hazards	Usage of appropriate technologies (lost work days due to illness and injuries)	Preparedness level for using these technologies in crisis – once each year	POWERGRID	Design and operation -do-
		Safety awareness raising for staff.		Number of programs and			

CI Project activity No./ stage	Potential Impact	Proposed mitigation measures	Parameter to be monitored	Measurement & frequency	Institutional responsibility	Implementation schedule	Compliance Status
		Preparation of fire emergency action plan and training given to staff on emergency action plan	Training/awareness programs and mock drills	per cent of staff /workers covered – once each year			
47	Electric Shock Hazards	Injury/mortality to staff and public	Careful design using appropriate technologies to minimise hazards Security fences around substations Barriers to prevent climbing on/ dismantling of towers Appropriate warning signs on facilities	Usage of appropriate technologies (no. of injury incidents, lost work days) Maintenance of fences Maintenance of barriers Maintenance of warning signs	Preparedness level for using these technology in crisis- once a month Report on maintenance – every 2 weeks	POWERGRID	Design and Operation -do-
48	Operations and maintenance staff skills less than acceptable	Unnecessary environmental losses of various types	Adequate training in O&M to all relevant staff of substations & line maintenance crews. Preparation and training in the use of O&M manuals and standard operating practices	Training/awareness programs and mock drills for all relevant staff	Number of programs and per cent of total persons covered –once each year	POWERGRID	Operation -do-

<b>CI Project activity No./ stage</b>	<b>Potential Impact</b>	<b>Proposed mitigation measures</b>	<b>Parameter to be monitored</b>	<b>Measurement &amp; frequency</b>	<b>Institutional responsibility</b>	<b>Implementation schedule</b>	<b>Compliance Status</b>
49 Inadequate periodic environmental monitoring.	Diminished ecological and social values.	Staff to receive training in environmental monitoring of project O & M activities	Training/awareness programs and mock drills for all relevant staff	Number of programs and per cent of staff covered – once each year	POWERGRID	Operation	-do-
50 Equipment specifications and design parameters	Release of chemicals and gases in receptors (air, water, land)	Processes, equipment and systems using chlorofluorocarbons (CFCs) including halon, should be phased out and to be disposed of in a manner consistent with the requirements of the Govt.	Process, equipment and system design	Phase out schedule to be prepared in case still in use – once in a quarter	POWERGRID	Operation	-do-
51 Transmission line maintenance	Exposure to electromagnetic interference	Transmission line design to comply with the limits of electromagnetic interference from overhead power lines	Required ground clearance (meters)	Ground clearance -once	POWERGRID	Operation	-do-
52 Uncontrolled growth of vegetation	Fire hazard due to growth of tree/shrub /bamboo along RoW	Periodic pruning to maintain electrical clearance	Requisite clearance (meters)	Assessment in consultation with forest authorities- once a year (pre/post monsoon)	POWERGRID	Operation	-do-
53 Noise related	Nuisance to neighbouring properties	No use of herbicides/ pesticides	Noise levels at Substations sited and designed to ensure noise will not be a nuisance	Noise levels at boundary nearest to properties & consultation with affected parties if any - once	POWERGRID	Operation	-do-

## **SECTION: 4 APPROACH AND METHODOLOGY ENGAGED FOR SOCIAL MONITORING OF THE PROJECT**

Monitoring is a continuous process and it continues throughout the Project life cycle, starting from site selection to construction and maintenance stage. A Project Management Unit (PMU), headed by Executive Director (Corporate Planning), has been set up at headquarters to coordinate and implement all environment and social issues with the assistance of functional department like Environment & Social Management Deptt., Engineering etc. Apart from site managers reviewing progress on daily basis, regular project review meetings are held at least on monthly basis, chaired by the Executive Director of the region, wherein the social aspects of the projects are discussed and remedial measures taken, wherever required. The exceptions of these meetings is submitted to the Directors and Chairman & Managing Director (CMD).

POWERGRID has a separate monitoring department, which carries out real time monitoring of all parameters of project implementation including the environment and social issues. Such issues are discussed in detail during every quarter in the Project Review Meeting (PRM), which is chaired by Director (Projects). CMD also takes periodic review of project implementation.

## **SECTION: 5 DETAILS OF GRIEVENCE REDRESS COMMITTEE AND COMPLAINT RECEIVED AND ACTION TAKEN**

Grievance Redress Mechanism (GRM) is an integral and important mechanism for addressing/resolving the concerns and grievances in a transparent and swift manner. Many minor concerns of peoples are addressed during public consultation process initiated at the beginning of the project. For handling grievance, Grievance Redress Committee (GRC) has been established both at the project/scheme level and at Corporate/HQ level. The site/project level GRCs constituted also include members from POWERGRID, Local Administration, Panchayat Members, Affected Persons representative and reputed persons from the society on nomination basis under the chairmanship of project head. The corporate level GRC functions under the chairmanship of Director (Projects) and includes one representative from corporate ESMD who is conversant with the environment & social issues.

Additionally, GRM process is inbuilt in the tree & crop compensation process, where affected persons are given a chance to place their grievances after issuance of notice by revenue officials on the basis of assessment of actual damages. Grievances received towards compensation are generally addressed in open forum and in the presence of many witnesses. Process of spot verification and random checking by the district collector also provides forum for raising the grievance towards any irregularity/complaint.

Many concerns/grievances from affected persons/public both of verbal and written nature have been recorded by Site Offices which are also regularly tracked for early resolution. However, It has been observed that most of them were minor in nature and were resolved instantly and amicably by Site Officials after discussion & deliberation with affected person/ in consultation of revenue/district officials. During reporting period of July-December 2019 there are 10 complaints received. As of December 2019, 23 cases out of total 48 complaints are remain open/ in negotiations. Details of written & verbal complaints including court cases are presented below in **Table-4**.

**Table- 4: Details of Court Cases and Complaints as of December 2019**

S. N.	Name of the line	Loca-tion No.	Name of complainants	Date of complaints/ Court case	Main Issue of complaints	Status of complaint
<b>A. Court Case</b>						
1.	Mysore -Hiriyur 400kV	137/0 - 137/1	M/s Green World Development & Creations Pvt. Ltd., Mysore	11.11.17/ 01.02.18	Route diversion	The matter is yet to be heard by the Hon'ble High Court.
2.		21/1 & 21/3	Mr. Honnamma	06.08.18	Withhold of payment due ownership dispute	Matter pending in district court. Ownership issue yet to be resolved for releasing of payment
3.		137/ 11	Mr. Gopale Gowda	13.08.18		
4.		6/2	Mr. P Thimmaiah	29.11.18		
5.		127/1 - 128/0	Sri.Ramachandra, Sri Shankare Gowda & Savitramma, Mysore end	12.03.19	Route diversion	The matter is yet to be heard by the Hon'ble High Court.
6.		65/3	Mr. Gangadhaba	01.08.19	Withhold of payment due ownership dispute	Matter pending in district court. Ownership issue yet to be resolved for releasing of payment.
7.		65/1- 65/2	Gurusidde Gowda	13.12.19		
8.		21/9- 22/0	T. Shivamurthy	09.08.19		
9.		15/2- 16/0	R. Rajappa	11.12.19		
10.		25/3- 25/4	Guddegowda Bin Chandriah Gangamma kom Rangappa	29.11.19	Enhancem-ent of Land and Tree Compensat-ion	All compensation are made as per the rate fixed by Forest/ Horticulture/ Revenue authority. The case regarding enhancement of compensation is pending with the court.
11.		25/2- 25/3	G Gururaja Honnappa Lakshamamma Lokesh, Prabhakar	29.11.19		
12.		25/3- 25/4	Devaraju D R Bin Rangappa Pandu D R Bin Rangappa	29.11.19		
13.		27/1- 27/2- 27/3	Bhimmamma	29.11.19		
14.	Banaskantha - Banaskantha 400KV D/C	50/1	Mr. V.B. Mafatsinh	06.10.18	Higher compensation	Matter resolved. Case withdrawn by the complainant on 26.07.19
15.		52/1	Mr. B.J. Thakor	02.11.18		The matter is under the consideration of the civil judge court. However, efforts are on to settle the issue amicably through discussions.
16.		53/0- 53/1	Mr. R.R. Kanbi			
17.		56/0	Mr. R.B. Ramsangbhai			
18.		61/0	Mr.R.R.			

			Valabhai			
19.		64/0	Mr. I.J Rabari			
20.		64/1	Mr.P.N. Prahlad bhai			
<b>B. Written Complaint</b>						
21.	Tumkur- Devanhally 400 kV	23/0-23/1	Mr. U. Ramakristappa	01.08.18	Route diversion & enhancement of compensation	The matter was taken up with local revenue officials, who advised to proceed with the work as per the approved original route and the compensation will be paid as per rate fixed by DC Ananthapuram vide its order dated 09.05.2017.
22.			Mr. Chakal Kollappa			
23.			Smt. Chakal Thippamma			
24.	Mysore -Hiriyur 400kV	132/3 - 132/4	Mr. Jayamma	02.07.18	Withhold of payment due ownership dispute	Matter resolved amicably in consultation with revenue authority.
25.		124/9-124/10	Mr. Siddanayaka	09.07.18		The matter being pursued in consultation with Revenue Authority for settlement of ownership dispute.
26.		34/1-35/0	Mr. K H Janappa	06.08.18	Demanding payment of compensation of Rs. 20000/- per coconut sapling.	Matter resolved. Conveyed to land owner that payment shall be made as per the horticulture dept. rates.
27.		132/5 - 132/6	Smt. Nagamma	13.08.18	Withhold of payment due ownership dispute	Matter resolved amicably in consultation with revenue authority.
28.		124/2 - 124/3	Mr. Mallinj G Thimme Gowda	03.10.18	Land survey no. 22/1 was not correct.	
29.		23/0	Mr.Gowramma	04.10.18	Withhold of payment due ownership dispute	The matter being pursued in consultation with Revenue Authority for settlement of ownership dispute.
30.		28/8	Mr. Shivalingappa	10.11.18		Matter resolved.
31.		27/7-8	Mr. M. N. Omkarappa	16.11.18		
32.		121/0-121/1	Mr. D. S. Subbegowda	16.11.18		
33.		108/2-108/3	Mr. Raj	26.11.18		
34.		119/3-119/4	Mr. Basave Gowda	30.11.18		
35.		119/7-119/8	Mr. Nagaratna	22.12.18		
36.		100/2-100/3	Chaluve Sheety	02.12.19		
37.		134/2& 134/3	Mr. K. Gowda	18.12.19		The matter being pursued in consultation with Revenue Authority for settlement of ownership dispute.

C. Verbal Complaint						
38.	Bhadla - Bikaner 765 kV D/C	14/10	Mr. Saitan Singh	02.07.17	Crop compensation	Issue resolved through discussion with affected persons (APs).
39.		3/4	Mr. Momraj	01.09.17		Matter resolved through discussion.
40.		32/1	Mr. Ram Singh	09.09.17		Issue resolved through meeting/discussion.
41.		34/4	Mr. Mitha Ram	09.10.17		Matter resolved through discussion. Compensation framework explained to complainant.
42.		12/4	Mr. Madan Lal	15.10.17	Safety	All aspect related safety explained to complainant to his satisfaction
43.		27/1	Mr. Bhomo Ram	06.11.17	Crop Compensation	Matter resolved through discussion.
44.		35/4	Mr. Hada Ram	11.11.17		Matter resolved through discussion in consultation with Revenue Authorities.
45.		23/0	Mr. Laxman Singh	25.01.18		Issue resolved through discussion with APs.
46.		39/3	Mr. Ramdin Panchariya	15.02.18		Matter resolved through discussion.
47.	Bhadla-Bhadla		Mr. Sahabuddin	11.07.17		Matter resolved through discussion.
48.	765kV D/C		Mr. Kayagddin	01.10.17		Matter resolved through discussion

## SECTION: 6 CONCLUSION

From the above discussions, it is evident that all efforts have been made to minimize the social impacts associated with the project. POWERGRID endeavors to minimize the social impacts started right from the selection of land for the proposed substations by completely avoiding the socially sensitive areas. Fresh land was needed only for Bhadla substation. Accordingly, 130.91 acres of encroachment free Government land was secured for Bhadla substation through transfer without creating any adverse social issues or Project Affected persons (PAPs).

Similarly during construction of transmission lines, efforts were made to avoid damage to standing crops and trees. However, in unavoidable cases, compensation was paid at market rate for damage to standing crops. Accordingly, in the instant project till December, 2019, a total of 8457 persons were issued notices for 1219.28 ha. of crop area/tree damaged for which total compensation of Rs. 294.552 million paid to affected farmers/land owners (Rs. 43.254 million during foundation and Rs. 41.676 million during erection & Rs.209.622 million during stringing). During reporting period of July-December 2019, compensation of Rs. 34.20 million has been paid out towards tree & crop damages to 2172 cases. Further, POWERGRID has already started paying land compensation for tower footing and RoW Corridor in compliance to Ministry of Power guidelines on RoW compensation dated 15<sup>th</sup> October, 2015 and subsequent govt. order/notification with by Govt of Gujarat and Tamil Nadu for its implementation. Accordingly, as of December, 2019, an amount of Rs. 637.277 million has been paid towards land compensation for tower base and RoW corridor in Karnataka and Gujarat.

In view of aforesaid, it may be noted that all possible measures have already been implemented to safeguard the interest of Project Affected Persons (PAPs). Besides, POWERGRID undertakes various need based Community Development Works under its Corporate Social Responsibility (CSR) activities such as skill development & capacity building, livelihood generation, healthcare, education, environment, plantation, sanitation, drinking water and infrastructure developments like classrooms, roads, community centres etc. in and around its areas of operations for socio-economic and integral development of areas and communities at large. Moreover, in long run the instant investment for infrastructure development shall have a positive impact on several socio-economic indicators in the nearby community and will ward off any temporary offset faced due to said project.

**Dr. S.S. Singh**  
**Sr. General Manager (ESMD)**

## Annexure- 1 : Status of Action Plan for Safeguards under CSS

In order to achieve full compliance with ADB's SPS, 2009 under CSS, following agreed action plan is implemented by POWERGRID. The detailed compliance status of the same is as follows;

### (i) Environment

Action Plan	Status
a) Assign environmental specialist(s) (staff or consultants) to each project for project implementation and monitoring during construction.	Dedicated environmental specialists have been assigned with the responsibility to coordinate, supervise & monitor the safeguard measures on project basis. To strengthen the manpower, two more environment specialists were recruited in 2017 (one posted at WR-II Regional Head Quarters for Green Energy Corridor projects and other at Corporate Center).
b) Undertake stakeholder consultations with representation of women.	Completed as such information was already made part of IEARs/CPTDs.
c) Document disclosure and availability of project information in a timely manner and in a form and languages understandable to affected people.	All safeguard documents (IEAR/CPTD) including its update, if any are regularly uploaded on POWERGRID's website.  The Executive Summary of such reports are also translated in the local languages and disclosed at Panchayat Office/Site office as well as on website.
d) Document where EAMP requirements were not met and status of associated corrective actions in site visit reports by environmental specialists.	Regular inspection visits by assigned environmental specialist carried out and till date no major deviations worth reporting observed.  Minor issues were rectified during visit itself in consultation with site in-charge.

### (ii) Involuntary Resettlement

Action Plan	Status
a) Develop procedures on monitoring livelihood impacts of land acquisition.	As agreed no land has been secured involuntarily and all lands are secured on willing buyer willing seller basis on negotiated and agreed rate. The process of such negotiation included confirmation by seller that he is fully satisfied with the agreed rate and the process  As per agreed action, POWERGRID organized training for trainer programme on Livelihood Restoration in association with domain expert from ADB and World Bank in Jan.'18 wherein senior officials associated with safeguard implementation at various sites participated. Such topics have also been incorporated in the regular E & S training module to facilitate wider reach and acceptability.
b) Use recording and tracking systems in the Grievance Redress Mechanism.	Being complied.  Two tiers GRC constituted and notified. Moreover, a centralized online portal for complaint has become

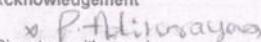
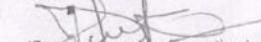
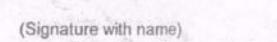
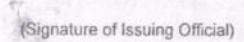
Action Plan	Status
	operational which also include proper tracking and time bound action procedure.
c) Conduct meaningful consultation with affected people.	<p>Public consultation is an integral part of project cycle. However, more emphasis on dissemination of information through various modes have also been practiced.</p> <p>A total of 9 numbers of formal consultations and 10 informal group meetings have been conducted en-route of the proposed transmission lines. The issues/concerns raised by stakeholders during these formal/informal meetings were answered/ addressed instantaneously to the satisfaction of the participants. However, any major concerns during project implementation are being addressed through GRM.</p>
d) Disclose monitoring reports, in a timely manner and in Hindi and English to the affected people.	<p>Semi-annual monitoring reports for period May-December 2017 January-June 2018 &amp; July- December 2018 have already been disclosed on website. Monitoring Reports for period Jan-June 2019 shall be disclosed after clearance from ADB. Moreover, as agreed executive summary of semi-annual monitoring report for period January -June, 2018 have also been disclosed in local languages (i.e. Hindi, Kannada &amp; Telugu)</p> <p>It is to inform that EAMP translated in Hindi is already available on website.</p>

### (iii) Indigenous Peoples

Action Plan	Status
Provisions for acceptability actions with respect to safeguards of Indigenous Peoples are not applicable at this stage. While ESPP requires that a project affecting Indigenous Peoples prepare and implement a TPDP, there are currently no POWERGRID projects triggering Indigenous Peoples safeguards under implementation that are mature enough to assess.	No impacts on IPs and hence actions with regard to IPs are not applicable in the instant case.

 **As regard revision of ESPP it is to inform that as discussed during appraisal process “The Right to Fair Compensation and Transparency in Land Acquisition, Rehabilitation and Resettlement (Amendment) Bill, 2015” is still with Select Committee of Parliament of India and once cleared and notified the revision of ESPP shall be planned/undertaken.**

## Annexure -2: Sample Copy of Compensation Process

<b>POWER GRID CORPORATION OF INDIA LIMITED</b> (A Government of India Enterprise) (Region Name : SRTS - II, Address : A. N. O. 2110, Near Bypass Road, Hirebidanur Village, Kasaba Hobli, GAURIBIDANUR-561208. <b>NOTICE UNDER THE ELECTRICITY ACT, 2003 READ WITH THE INDIAN TELEGRAPH ACT, 1885</b>		 <b>पवरग्रिड</b> <b>POWERGRID</b> <b>1201</b> Notice No: ..... Date, 10-10-19.																																																						
<b>25</b> Book No: .....	Name of the Line/Section : 400KV, Pavagada - Devanahalli D/C TLC Sec. 68 Approval Ref. : No. 52 / 11 (PGCIL) / 2015-PSPA-II / 142-143 dated 23-02-2016	Father's/Husband's Name: ..... Village: Vankalamanahalli PO: ..... Block/Tehsil: Moga Bramadikere Date (D. / M. / Y.) : 10.10.19 Pin: ..... Mobile No: .....																																																						
<p>In accordance to selection-164 of The Electricity Act, 2003, Ministry of Power, Govt. of India has conferred the powers of Telegraph Authority under Part - III of the Indian Telegraph Act, 1885 to Power Grid Corporation of India Ltd., (POWERGRID) vide Notification No. S.O. 1463(E) published in the Extraordinary Official Gazette of India On 24-12-2003. In exercise of such powers, notice is hereby given that the above mentioned line shall pass through your property/properties as detailed below. While all possible care will be taken to minimize the damage to standing crop and trees in the right of way of (RoW), certain minimum unavoidable damages / felling of trees in RoW may take place during construction of said line. All crop damage/tree falling shall be compensated as per the assessment of Revenue authority or any other competent authority as may be declared or decided by State Government/District administration.</p>																																																								
<b>Property Details :</b> <table border="0" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 33%;">Name of the Beneficiary (Owner/Tenant/Sharecroper)</td> <td style="width: 33%;">Peddanna</td> <td style="width: 33%;">Name of the Village Mandal / Tehsil / Circle</td> </tr> <tr> <td>Father's/Husband's Name</td> <td>Peddanna</td> <td>Name of the District Nagaramadikere Tumkur</td> </tr> <tr> <td>Survey / Plot / Khasra No.</td> <td>Plot No. 123</td> <td>Aadhaar No. of Beneficiary</td> </tr> </table>			Name of the Beneficiary (Owner/Tenant/Sharecroper)	Peddanna	Name of the Village Mandal / Tehsil / Circle	Father's/Husband's Name	Peddanna	Name of the District Nagaramadikere Tumkur	Survey / Plot / Khasra No.	Plot No. 123	Aadhaar No. of Beneficiary																																													
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<i>*In case more trees, table with such details may be annexed</i>																																																								
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<b>Copy to : Local Concerned Revenue Official</b> <i>*Based on preliminary assessment, However, compensation shall be paid as per actual crop damaged no. of trees failed.</i>																																																								
Book No..... Notice No..... This is to certify that the damaged crops / felled trees as per enclosed list have been handed over by POWERGRID to you / your authorized representative.																																																								
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### Notice to Land Owner

**Construction of 400kV Pavagada- Devanhalli Transmission Line.**

**Joint Measurement Certificate (Revenue)**

LOC NO: **58/1**

Date:

S No	Name of Landowner	Address for Communication	Details of Land owner	Village	Hou	Survey No
1	<b>H.C.Mallikarjunayya S/o K.Chinnappa</b>	Cheelanahalli,Gauribidanuru, Chikkaballapura	Cheelanahalli	Manchenahalli	26/2	

**B** In case this land is registered in the name of some other person, please furnish following details

S No	Land registered in the name of	Relationship with present landowner	Possession of this land with present landowner since	Disputes (if any) with legal-heirs/ Other	Any other remarks

**C** Details of Tower

Loc No	Type of Tower	No.of Legs	Remarks
58/1	<b>DA</b>	<b>4</b>	

**D** Details of Tower

Department	Landowner/ Representative	Surveyor	village Secretary	Revenue Inspector	POWERGRID
Signature					
Name	ಹೆಚ್. ಮಲ್ಲಿಕರ್ಜುನಾಯ್ಯಾ ಸೌ. ಕೆ. ಚಿನ್ನಪ್ಪಾ	ಉತ್ತಮ ಪ್ರಾಣಿ ವೈದಿಕ ವಿಭಾಗ	ಕುಟುಂಬ ಪ್ರಾಣಿ ವೈದಿಕ ವಿಭಾಗ	ಉತ್ತಮ ಪ್ರಾಣಿ ವೈದಿಕ ವಿಭಾಗ	
Designation	ಗರಿಬಾರ್ಥಿ ಶಾ. ಹೆಚ್. ಮಲ್ಲಿಕರ್ಜುನಾಯ್ಯಾ ಸೌ. ಕೆ. ಚಿನ್ನಪ್ಪಾ				

**Assessment by the Revenue Department**

TO,  
GM (F&A)  
POWERGRID CORPORATION OF INDIA LTD  
SRTS-II, BANGALORE

~~25~~ / 120

Sub: Authorization of all payments through Electronic Fund transfer system/RTGS/NEFT

We hereby authorize POWERGRID to disburse all our payments through electronic fund transfer system/RTGS/NEFT.

The details for facilitating the payments are given below:-

Name of the Beneficiary	peddanna
Permanent Account Number (PAN)	—
Correspondence Address With Postal Pin	peddanna, Venkata manaballi Kyanthagani chesly, pavagada, Tumkur
Telephone No	
Landline	—
Mobile	—
E-mail Account	—
Contact person	—
<u>Bank Details for electronic payment</u>	
Name of Bank	State Bank of India
Address of Branch	pavagada
Account No	355001
Type of Account (Saving/Current)	S
RTGS/IFSC Code	

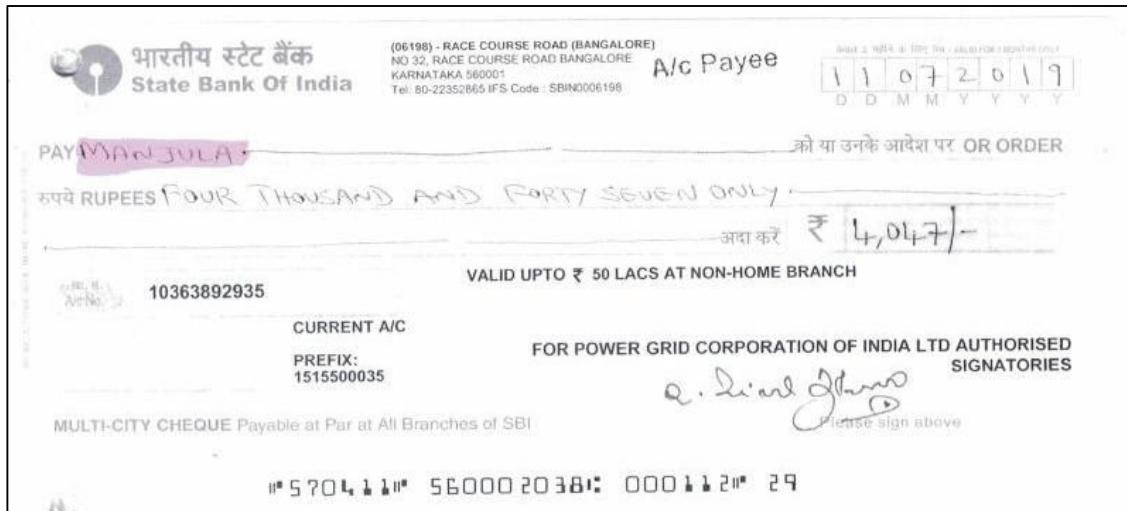
I/We, hereby, declare that particulars given above are correct and complete and I will be the sole responsible if the transaction is delayed or credit is not effected due to incorrect information.

Authorized Signatory/Payee  
Name

Note: Please enclose one cancelled cheque /photocopy of Bank Pass Book and copy of photo ID  
For E-Payment.

Signature of POWERGRID Executive with Name Designation & Official Seal

## Compensation Receipt



Compensation Paid and acknowledgment by Land Owner