Semi-Annual Social Safeguard Monitoring Report

(Reporting Period: July'16 to December'16)

Green Energy Corridors- Inter State Transmission System Part- A, B & C Project

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Implementing Agency : POWERGRID

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ABBREVIATIONS

CFC	–	Chlorofluorocarbons
CTU	–	Central Transmission Utility
EMF	–	Electro Magnetic Fields
EMP	–	Environment Management Plan
ESA	–	Environment and Social Assessment
ESMD	–	Environment & Social Management Department
ESPP	–	Environment and Social Policy & Procedures
GoI	–	Government of India
GRC	–	Grievance Redressal Committee
GRM	–	Grievances Redressal Mechanism
GW	–	Giga Watt
IEGC	–	Indian Electricity Grid Code
IPP	–	Independent Power Producer
ISTS	–	Inter State Transmission System
KfW	–	Kreditanstalt für Wiederaufbau
km	–	Kilometers
MoEFCC	–	Ministry of Environment, Forest and Climate Change
PMU	–	Project Management Unit
POWERGRID	–	Power Grid Corporation of India Ltd.
R&R	–	Rehabilitation & Resettlement
RAP	–	Rehabilitation Action Plan
RE	–	Renewable Energy
RoW	–	Right of Way
S/s	–	Substation
STU	–	State Transmission Utility
SR	–	Southern Region
TL/T/L		Transmission Line
WR	–	Western Region
NR	–	Northern Region

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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. As on December 31, 2016, POWERGRID operates a Grid network consisting of 1,34,018 Ckm of transmission line and 214 associated substations having a transformation capacity of 2,78,862 MVA, while ensuring a system availability of 99%.

About 33 GW renewable capacity addition in 12th plan has been envisaged in the eight (8) Renewable rich states viz. Tamil Nadu (7400 MW), Andhra Pradesh (4800 MW), Karnataka (4300 MW), Gujarat (4700 MW), Maharashtra (4100 MW), Rajasthan (5700 MW), Himachal Pradesh (1300 MW) and Jammu & Kashmir (500 mw). In order to facilitate integration of such large scale renewable generation capacity in 12th plan, a comprehensive transmission plan comprising intra state and inter state transmission system strengthening was identified as a part of "Green *Energy Corridors*". Intra State Strengthening (STU) included transmission system within the host state for absorption of power within the state through additional transmission system including transmission lines as well as sub-stations.

In view of the quantum of envisaged Renewable capacity addition, its associated challenges like volatility etc, as well as need to enlarge balancing area through strong grid interconnections, there is a need to strengthen Inter state transmission system. Considering this, High capacity transmission corridor, as part of Inter State Transmission System (ISTS), connecting major renewable pockets is being proposed right from the Bhuj Pooling station in Gujarat (WR) to Moga in Punjab (NR) via Chittorgarh/Ajmer/Suratgarh in Rajasthan (NR). In addition, establishment of Tirunelveli Substation and its interconnection with already planned high capacity transmission corridors associated with other IPP Projects in Southern Region (SR) is also proposed as part of proposed ISTS strengthening. Above identified ISTS scheme is to be implemented simultaneously however from funding point of view, scheme is divided in various parts.

Considering above quantum of envisaged Renewable capacity, it is expected that some of the RE rich state including Rajasthan, Tamil Nadu etc. shall have more RE capacity than the capacity required for fulfilling their Renewable Purchase Obligations (RPO). Further, such RE rich host state may also not absorb RE energy locally particularly during the other than peak hour condition when renewable generation is at peak(Inherent characteristics of renewable). Intermittency/ variability also necessitate requirement of strong grid interconnections.

In addition, the Indian Electricity Grid Code (IEGC) stipulates renewable energy plants to have "MUST RUN" status and not to be subjected to "merit order dispatch" principles. Considering above requirements, there is a need to strengthen Inter state transmission which shall facilitate transfer of power outside the RE resource rich states with reliability and security as well as enlarge balancing area to address volatility issues of renewables.

RE concentration in certain pockets of these states & very short gestation period for generation as compared to transmission infrastructure development, also necessitates strengthening of grid interconnections.

The Government of India (GOI) and the Government of Germany signed a joint declaration of intent in Germany in 2013 to accelerate the use of renewable energy in India. The German government proposed to provide financial assistance in the form of concessional loans (up to one billion euros) over the next six years through KfW under the Indo-German Bilateral Development Cooperation Programme. Further, technical assistance will also be provided in the field of forecasting, balancing and network management for aiding grid integration of renewable energy.

To meet the funding requirement of ISTS projects cover under Green Energy Corridors Part A, B & C scheme, KfW agreed to extend a financial loan of € 500 million to POWERGRID. The funding for the remaining part will be met from POWERGRID's own Internal Resources (IR). For this purpose, KfW and POWERGRID entered into a Loan Agreement on 17.12.2014 and the loan closing period is December' 2019.

1.1 OVERALL PROJECT DESCRICTION

The components of Green Energy Corridor (GEC) project under ISTS Part A, B & C funded by KfW include:

1) **GEC- ISTS-Part - A**
   a) 400 KV D/C Ajmer (New) – Ajmer (RVPN) line;
   b) 400 KV D/C Chittorgarh (New) – Chittorgarh (RVPN) line;
   c) 2X400 KV D/C Tuticorin – Tirunelveli line;
   d) 765/400 KV substation at Chittorgarh;
   e) 765/400 KV substation at Tuticorin Pooling Station.

2) **GEC- ISTS-Part-B**
   a) 765 KV D/C Banaskantha – Chittorgarh line;
   b) 400 KV D/C Banaskantha – Sankhari line;
   c) 765 KV D/C Chittorgarh - Ajmer line;
   d) 765/400/220 KV substation at Banaskantha.

3) **GEC- ISTS-Part – C**
   a) 765 KV D/C Banaskantha – Bhuj (Pool) line;
   b) 765/400/220 KV substation at Bhuj Pooling Station.

1.2 PROJECT OBJECTIVES

The objective of the project is to provide transmission arrangement so as to transfer power from RE rich states to RE deficient states, thus, ensuring equitable distribution of power. Furthermore, the project aims to fight the increasing threat of climate change by reducing the emissions of Green House Gases, in line with the commitments of Government of India.

1.3 OVERALL PROJECT PROGRESS, AGREED MILESTONES & COMPLETION SCHEDULES

Name of Project	Project Details	Progress as on Dec' 2016	Completion Schedule
GEC-ISTS PART- A	400 KV D/C Ajmer (New)–Ajmer(RVPN) TL	Foundation: 145/200 Tower: 141/200 Stringing: 10/66 kms	December 2019
	400 KV D/C Chittorgarh (New) – Chittorgarh (RVPN) TL	Foundation: 131/136 Tower: 73/136 Stringing: 13/49 kms	
	2X400 KV D/C Tuticorin – Tirunelveli TL	Foundation: 12/33 Tower: 1/33 Stringing: 0/12 kms	
	765/400 KV S/s at Chittorgarh	Civil Work: 55% Equipment Supply: 60% Erection: 65%	
	765/400 KV S/s at Tuticorin Pooling Station	Civil Work: 30% Equi. Supply: Yet to commence. Erection: Yet to commence	
GEC-ISTS PART- B	765 KV D/C Banaskantha – Chittorgarh TL	Foundation: 889/1257 Tower: 630/1257 Stringing: 0/443 kms	December 2019
	400 KV D/C Banaskantha – Sankhari TL	Foundation: 25/59 Tower: 0/59 Stringing: 0/22 kms	
	765 KV D/C Chittorgarh - Ajmer TL	Foundation: 565/577 Tower: 528/577 Stringing: 41/210 kms	
	765/400/220 KV S/s at Banaskantha (AIS)	Civil Work: 40% Equipment Supply: 25% Erection: Yet to commence	
GEC-ISTS PART- C	765 KV D/C Banaskantha – Bhuj (Pool) TL	Foundation: 135/803 Tower: 29/803 Stringing: 0/292 kms	December 2019
	765/400/220 KV S/s at Bhuj Pooling Station (AIS)	Civil Work: 10% Equipment Supply: 5% Erection: Yet to commence	

SECTION: 2 STATUS OF LAND & SOCIAL COMPLIANCE

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	Area (acre)	Location	Type of Land	Land Status	Social Compliance
1	765/400 kV (New) substation at **Ajmer**	25.93	The proposed land is located at Jethana village in Pisangan Tehsil, Ajmer district. *Co-ordinates: 26º17'26.77"N 74º27'23.84"E*	Govt.	Land transferred to POWERGRID	Since, the proposed S/S is being built on Govt land, there are no Project Affected Persons (PAPs) and also R&R issues, hence, there is no need of Rehabilitation Action Plan (RAP).
2	765/400 kV (New) substation at **Chittorgarh**	97.37	The proposed land is located at village Chappri in Dungla tehsil, Chittorgarh district. *Co-ordinates: 24º36'50"N, 74º12'59"E*	Govt	Land transferred to POWERGRID	
3	765/400kV (New) substation at **Banaskantha**	167	The proposed land is located at Mudetha village in Banaskantha district. *Co-ordinates: 24º 8'27.18" N 71º59'46.49"E*	Govt	Land transferred to POWERGRID	
4	765/400/ 200kV (New) substation at **Bhuj**	137	The proposed land is located at Palanpur Badi in Nakhatrana Taluka of Bhuj district. *Co-ordinates: 23º27'23.68"N, 69º34'28.88"E*	Govt	Land transferred to POWERGRID	
5	400/230 kV GIS (New) Substation at **Tirunelveli**	27 (Pvt: 25.8, Govt: 1.2)	The proposed land is located at North Vandanam village, Lovilpatti Taluk, Tirunelveli District. *Co-ordinates: 9º03'1.94"N, 77º55'31.65"E*	Pvt./Govt	**Private land** purchased through willing buyer-willing seller basis on negotiated rate. Govt. Land transferred to POWERGRID	**Private land:** Since, purchased through willing buyer-willing seller basis on negotiated rate, no land acquisition is involved. Consequently, there are no Project Affected Persons (PAPs) and also R&R issues, hence, there is no need of Rehabilitation Action Plan (RAP). **Govt land:** There are no Project Affected Persons (PAPs) and also R&R issues, hence, there is no need of Rehabilitation Action Plan (RAP).

Additionally, extension of 400/220 KV Ajmer (RVPN) substation, 400/220 KV Chittorgarh (RVPN) substation and extension of 400/230 KV Tuticorin substation are proposed under the project, for which sufficient land is available in the campus of existing substations. Hence, there is no need for arranging/acquiring fresh land.

A summary of the environmental & social mitigation measures, their monitoring vis-a vis compliance by POWRGRID's is given in **Table 2**.

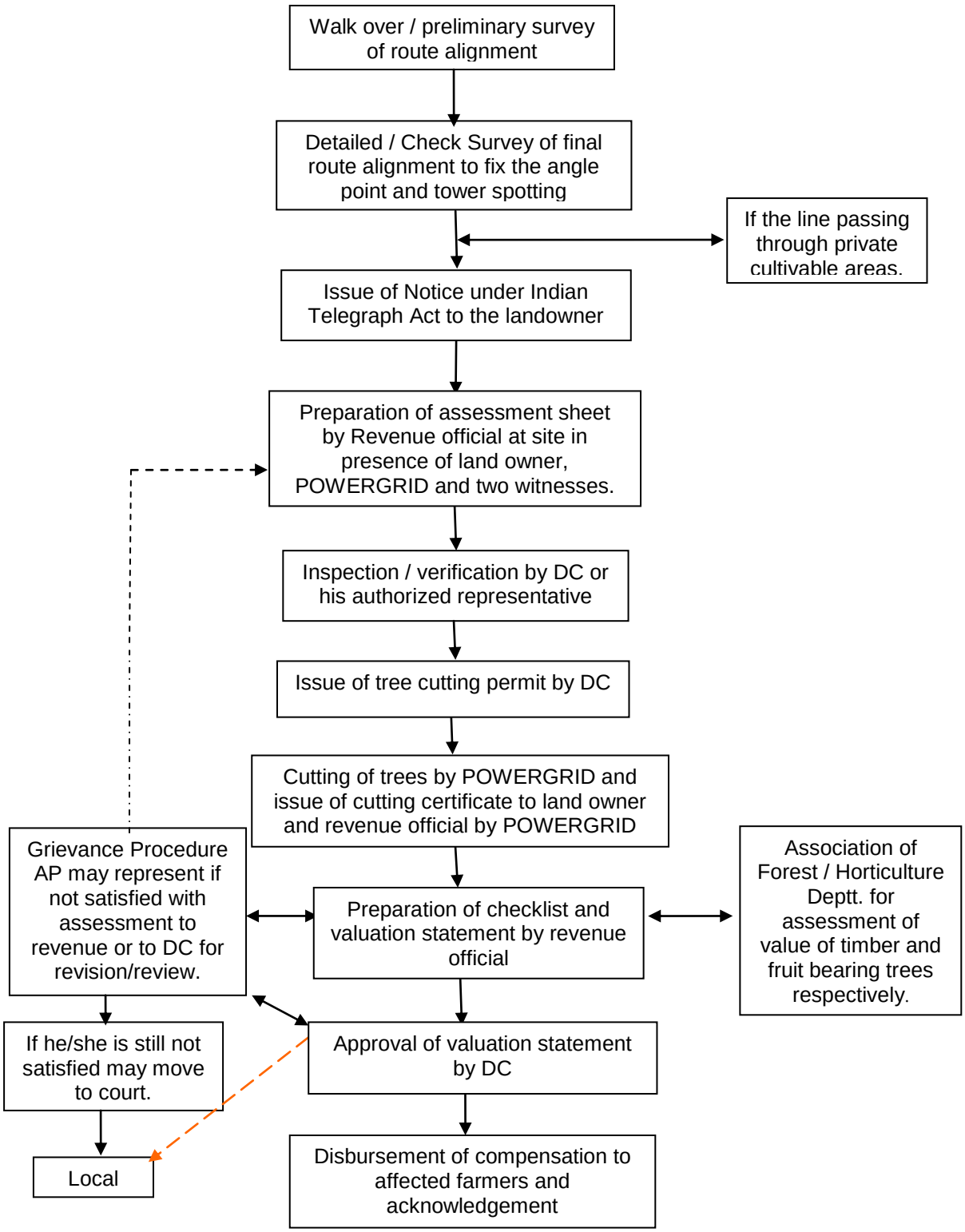
Compensation for Tree/crop damages:

POWERGRID follows the principle of Avoidance, Minimization and Mitigation in the construction of line in agricultural field having crop 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. 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 etc. 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 is given below:

Sl. No.	Name of the Line	No. of Persons issued notice	Affected Land Area (Ha.)	Nos. of Tree affected	Compensation Paid for crop damages (Rs Lakh)			Compensation Paid for Tree damages (Rs lakh)		
					Foundation	Erection	Stringing	Foundation	Erection	Stringing
1	Ajmer (New) - Ajmer (RVPN) 400 KV D/C TL	**158**	58.28	Nil	23.57	19.83	Yet to be started	Nil	Nil	Nil
	Chittorgarh (New) - Chittorgarh (RVPN) 400 KV D/C TL	343	38	Nil	12.09	36.13	24.9	Nil	Nil	Nil
	Chittorgarh - Ajmer (new) 765 KV D/C TL	528	224.85	Nil	105.11	79.29	Yet to be started	Nil	Nil	Nil
2	Banaskantha - Chittorgarh 765 KV D/C TL	1637	298.676	Nil	64.4	69.91	Yet to be started	Nil	Nil	Nil
3	Banaskantha - Sankhari 400 KV D/C TL	19	2.84	Nil	6.92	Yet to be started	Yet to be started	Nil	Nil	Nil
4	Banaskantha - Bhuj 765 KV D/C TL	59	19.81	Nil	68.89	17.1	Yet to be started	Nil	Nil	Nil
5	Tirunelveli - Tuticorin 400 KV D/C TL (Line 1 & 2)	15	3.2	Nil	6.81	Yet to be started	Yet to be started	Nil	Nil	Nil
Total		**2759**	**645.66**	0	**287.79**	**222.26**	**24.9**	**0**	**0**	**0**

A total sum of **Rs 534.95 lakhs** has been paid as tree/crop compensation till Dec'2016. A sample copy of crop compensation notice along with assessment sheet is enclosed at **Annex-1**

Figure 1 : TREE / CROP COMPENSATION PROCESS



Land Compensation as per MoP Guidelines:

Ministry of Power, Govt of India vide their Guidelines dated 15th October 2015 mandated payment of 85% land cost for the land coming under tower base and payment of 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. The details of land compensation paid as per the provisions of the said guidelines are given below:

Land Compensation for RoW Corridor as per MoP Guidelines					
Sl No	**Name of the Line**	**Total Compensation paid for area under Tower Base (Rs)**	**Total Compensation paid for area under RoW Corridor (Rs)**	**Rate of Land Compensation (Rs)**	**Remark, if any**
1	Banaskantha - Bhuj 765 KV D/C TL	1997153.37	Yet to be Started	900	
2	Banaskantha - Chittorgarh 765 KV D/C TL	Assessment under progress	Yet to be Started		
3	Banaskantha - Sankhari 400 KV D/C TL	Assessment under progress	Yet to be Started		
4	Chittorgarh (New) - Chittorgarh (RVPN) 400 KV D/C TL				Rajasthan state has yet to adopt the MoP Guidelines.
5	Ajmer (New) - Ajmer (RVPN) 400 KV D/C TL				
6	Chittorgarh - Ajmer (new) 765 KV D/C TL				
7	Tirunelveli - Tuticorin 400 KV D/C TL (Line 1 & 2)				Tamil Nadu state has yet to adopt the MoP Guidelines.
Total		1997153.37			

TABLE – 2 : ENVIRONMENT MANAGEMENT PLAN

Clause No.	Project activity/ stage	Potential Impact	Proposed mitigation measures	Parameter to be monitored	Measurement & frequency	Institutional responsibility	Implementation schedule	Compliance Status
Pre-construction								
1	Location of 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 and design	
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	
			Processes, equipment and systems not to use chlorofluorocarbons (CFCs), including halon, and their use, if any, in existing processes and systems should be phased out and to be disposed of in a manner consistent with the requirements of the Government	Process, equipment and system design	Exclusion of CFCs stated in tender specification – once	POWERGRID	Part of tender specifications for the equipment	
					Phase out schedule to be prepared in case still in use – once		Part of equipment and process design	
3	Transmission line design	Exposure to electromagnetic	Line design to comply with the limits of electromagnetic interference from power lines including those of	Electromagnetic field strength for proposed line design	Line design compliance with relevant standards – once	POWERGRID	Part of design parameters	

Clause No.	Project activity/ stage	Potential Impact	Proposed mitigation measures	Parameter to be monitored	Measurement & frequency	Institutional responsibility	Implementation schedule	Compliance Status
		interference	ICNIRP.					
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	
		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	Impact on water bodies	Avoidance of such water bodies to the extent possible. Avoidance of placement of tower inside water bodies to the extent of possible	Tower location and line alignment selection (distance to water bodies)	Consultation with local authorities– once	POWERGRID	Part of tower siting survey and detailed alignment survey and design	
		Social inequities	Careful route selection to avoid existing settlements and sensitive locations	Tower location and line alignment selection (distance to nearest dwellings	Consultation with local authorities and land owners – once	POWERGRID	Part of tower siting survey and detailed alignment survey and	Complied during survey. Route alignment criterion is part of survey contract.

Clause No.	Project activity/ stage	Potential Impact	Proposed mitigation measures	Parameter to be monitored	Measurement & frequency	Institutional responsibility	Implementation schedule	Compliance Status
			Minimise impact on agricultural land	Tower location and line alignment selection (distance to agricultural land)	Consultation with local authorities and land owners – once		design	
			Careful selection of site and route alignment to avoid encroachment of socially, culturally and archaeological sensitive areas (i. g. sacred groves, graveyard, religious worship place, monuments etc.)	Tower location and line alignment selection (distance to sensitive area)	Consultation with local authorities - once			
6	Securing lands for substations.	Loss of land/ income change in social status etc.	In the case of Involuntary Acquisitions, Compensation and R&R measures are extended as per provision of RFCTLARRA, 2013[1]	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.	Land for proposed substations are either prior existing land under POWERGRID's control or Govt land or private land purchased through willing buyer – willing seller basis on negotiated rates.

[1] In the instant case no Involuntary acquisition of land (permanent) is involved, hence this clause shall not be applicable.

Clause No.	Project activity/ stage	Potential Impact	Proposed mitigation measures	Parameter to be monitored	Measurement & frequency	Institutional responsibility	Implementation schedule	Compliance Status
7	Line through protected area/ precious ecological area	Loss of precious ecological values/ damage to precious species	Avoid siting of lines through such areas by careful site and alignment selection (National Parks, Wildlife Sanctuary, Biosphere Reserves/ Biodiversity Hotspots)	Tower location and 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	
			Minimize the need by using RoW wherever possible	Tower location and line alignment selection	Consultation with local authorities and design engineers - once	POWERGRID	Part of tower siting survey and detailed alignment survey and design	
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	Consultation with local forest authorities – once. Monitoring – quarterly basis	POWERGRID	Part of tower sitting and detailed alignment survey & design and Operation	

Clause No.	Project activity/ 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 etc[2]., 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	Tower location and line alignment selection (distance to nearest protected or reserved forest)	Consultation with local authorities – once	POWERGRID	Part of tower siting survey and detailed alignment survey and design	
			Minimise the need by using existing towers, tall towers and RoW, wherever possible		Consultation with local authorities and design engineers – once			
			Measures to avoid invasion of alien species	Intrusion of invasive species	Consultation with local forest authorities - once			
			Obtain statutory clearances from the Government	Statutory approvals from Government	Compliance with regulations – once for each subproject			
10	Lines through farmland	Loss of agricultural	Use existing tower or footings wherever possible.	Tower location and line alignment selection.	Consultation with local authorities and design engineers – once	POWERGRID	Part of detailed alignment survey and	Complied during survey which is a part of survey contract.

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

Clause No.	Project activity/ stage	Potential Impact	Proposed mitigation measures	Parameter to be monitored	Measurement & frequency	Institutional responsibility	Implementation schedule	Compliance Status
		production / change in cropping pattern	Avoid sitting new towers on farmland wherever feasible	Tower location and line alignment selection	Consultation with local authorities and design engineers – once		Part of detailed sitting and alignment survey /design	However, as per law of land, no land is acquired for transmission line tower but all damages are compensated as per provisions of Electricity Act, 2003 and Indian Telegraph Act, 1885.
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	Noise levels to be specified in tender documents – once	POWERGRID	Part of detailed equipment design	
12	Interference with drainage patterns/ irrigation channels	Flooding hazards/ loss of agricultural production	Appropriate sitting 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	POWERGRID	Part of detailed alignment survey and design	Complied during survey. Route alignment criterion is part of survey contract.
13	Escape of polluting materials	Environmental pollution	Transformers designed with oil spill containment systems, and purpose-built oil, lubricant and fuel storage system, complete with spill cleanup equipment.	Equipment specifications with respect to potential pollutants	Tender document to mention specifications – once	POWERGRID	Part of detailed equipment design /drawings	

Clause No.	Project activity/ stage	Potential Impact	Proposed mitigation measures	Parameter to be monitored	Measurement & frequency	Institutional responsibility	Implementation schedule	Compliance Status
			Substations to include drainage and sewage disposal systems to avoid offsite land and water pollution.	Substation sewage design	Tender document to mention detailed specifications – once	POWERGRID	Part of detailed substation layout and design /drawings	
14	Equipments submerged under flood	Contamination of receptors	Substations constructed above the high flood level(HFL) by raising the foundation pad	Substation design to account for HFL (elevation with respect to HFL elevation)	Base height as per flood design- once	POWERGRID	Part of detailed substation layout and design/drawings	
15	Explosions /Fire	Hazards to life	Design of substations to include modern fire fighting equipment Provision of fire fighting equipment to be located close to transformers	Substation design compliance with fire prevention and control codes	Tender document to mention detailed specifications – once	POWERGRID	Part of detailed substation layout and design /drawings	
Construction								
16	Equipment layout and installation	Noise and vibrations	Construction techniques and machinery selection seeking to minimize ground disturbance.	Construction techniques and machinery	Construction techniques and machinery creating minimal ground disturbance- once at the start of each construction phase	POWERGRID (Contractor through contract provisions)	Construction period	
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	Construction on farm land undertaken mostly during post harvest period. Wherever, crop loss occurs,

Clause No.	Project activity/ stage	Potential Impact	Proposed mitigation measures	Parameter to be monitored	Measurement & frequency	Institutional responsibility	Implementation schedule	Compliance Status
								compensation is paid to farm owners and an amount of Rs. 534.95 lakhs has been paid so far.
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	
		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	
		Increased land requirement for temporary accessibility	New access ways restricted to a single carriageway width within the RoW.	Access width (meters)	Access restricted to single carriage – way width within RoW – every 2 weeks	POWERGRID (Contractor through contract provisions)	Construction period	Complied/ Being Complied

Clause No.	Project activity/ stage	Potential Impact	Proposed mitigation measures	Parameter to be monitored	Measurement & frequency	Institutional responsibility	Implementation schedule	Compliance Status
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	Being complied. No safety related incidents reported so far
		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	Being complied. Project sites are located in low traffic density Areas.
21	Temporary blockage of utilities	Overflows, reduced discharge	Measure in place to avoid dumping of fill materials in sensitive drainage area	Temporary fill placement (m^3)	Absence of fill in sensitive drainage areas – every 4 weeks	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 m^2)	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	

Clause No.	Project activity/ stage	Potential Impact	Proposed mitigation measures	Parameter to be monitored	Measurement & frequency	Institutional responsibility	Implementation schedule	Compliance Status
		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	POWERGRID (Contractor through contract provisions)	Construction period	
			Felled trees and other cleared or pruned vegetation to be disposed of as authorized by the statutory bodies.	Disposal of cleared vegetation as approved by the statutory authorities (area cleared in m^2)	Use or intended use of vegetation as approved by the statutory authorities – once per site	POWERGRID (Contractor through contract provisions)	Construction period	
24	Wood/ vegetation harvesting	Loss of vegetation and deforestation	Construction workers prohibited from harvesting wood in the project area during their employment, (apart from locally employed staff continuing current legal activities)	Illegal wood /vegetation harvesting (area in m^2, number of incidents reported)	Complaints by local people or other evidence of illegal harvesting – every 2 weeks	POWERGRID (Contractor through contract provisions)	Construction period	No complaints received on illegal harvesting.
25	Surplus earthwork/ soil	Runoff to cause water pollution, solid waste disposal	Soil excavated from tower footings/ substation foundation disposed of by placement along roadsides, or at nearby house blocks if requested by landowners	Soil disposal locations and volume (m^3)	Acceptable soil disposal sites – every 2 weeks	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	Borrow area sitting (area of site in m^2 and estimated volume in m^3)	Acceptable soil borrow areas that provide a benefit - every 2 weeks	POWERGRID (Contractor through contract provisions)	Construction period	Being Complied.

Clause No.	Project activity/ stage	Potential Impact	Proposed mitigation measures	Parameter to be monitored	Measurement & frequency	Institutional responsibility	Implementation schedule	Compliance Status
			deep excavation of existing pond or other nearby barren land with agreement of local communities					
		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(P^H, 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^2)	Amount of ground disturbance – every 2 weeks	POWERGRID (Contractor through contract provisions)	Construction period	
				Statutory approvals	Statutory approvals for tree clearances – once for each site			
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^3)of fill disposal	Appropriate fill disposal locations – every 2 weeks	POWERGRID (Contractor through contract provisions)	Construction period	
29	Storage of chemicals and	Contamination of receptors	Fuel and other hazardous materials securely stored above high flood level.	Location of hazardous material storage;	Fuel storage in appropriate locations and	POWERGRID (Contractor through contract provisions)	Construction period	

Clause No.	Project activity/ stage	Potential Impact	Proposed mitigation measures	Parameter to be monitored	Measurement & frequency	Institutional responsibility	Implementation schedule	Compliance Status
	materials	(land, water, air)		spill reports (type of material spilled, amount (kg or m^3) and action taken to control and clean up spill)	receptacles – every 2 weeks			
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 and 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	Being Complied
33	Lines through farmland	Loss of agricultural productivity	Use existing access roads wherever possible	Usage of existing utilities	Complaints received by local people /authorities - every 4 weeks	POWERGRID (Contractor through contract provisions)	Construction period	Being Complied. No complaints received from local people/authorities.
			Ensure existing irrigation facilities are maintained in working condition	Status of existing facilities				

Clause No.	Project activity/ stage	Potential Impact	Proposed mitigation measures	Parameter to be monitored	Measurement & frequency	Institutional responsibility	Implementation schedule	Compliance Status
			Protect /preserve topsoil and reinstate after construction completed	Status of facilities (earthwork in m^3)				
			Repair /reinstate damaged bunds etc after construction completed	Status of facilities (earthwork in m^3)				
		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 there is any damage to tree/crop then damages are compensated. An amount of Rs 534.95 lakhs paid towards crops & tree compensation during construction till December' 16.
34	Uncontrolled erosion/silt runoff	Soil loss, downstream siltation	Need for access tracks minimised, use of existing roads.	Design basis and construction procedures (suspended solids in receiving waters; area re-vegetated in m^2; amount of bunds constructed [length in meter, area in m^2, or volume in m^3])	Incorporating good design and construction management practices – once for each site	POWERGRID (Contractor through contract provisions)	Construction period	
			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					

Clause No.	Project activity/ stage	Potential Impact	Proposed mitigation measures	Parameter to be monitored	Measurement & frequency	Institutional responsibility	Implementation schedule	Compliance Status
35	Nuisance to nearby properties	Losses to neighbouring land uses/ values	Contract clauses specifying careful construction practices.	Contract clauses	Incorporating good construction management practices – once	POWERGRID (Contractor through contract provisions)	Construction period	No complaints received
			As much as possible existing access ways will be used	Design basis and layout	Incorporating good design engineering practices– once for each site			Complied/ Being Complied
			Productive land will be reinstated following completion of construction	Reinstatement of land status (area affected, m^2)	Consultation with affected parties – twice – immediately after completion of construction and after the first harvest			No complaints received
		Social inequities	Compensation will be paid for loss of production, if any.	Implementation of Tree/Crop compensation (amount paid)	Consultation with affected parties – once in a quarter	POWERGRID	Prior to construction	Compensation provided as per POWERGRID's procedure for tree/crop compensation
36	Flooding hazards due to construction impediments of natural drainage	Flooding and loss of soils, contamination of receptors (land, water)	Avoid natural drainage pattern/ facilities being disturbed/blocked/ diverted by on-going construction activities	Contract clauses (e.g. suspended solids and BOD/COD in receiving water)	Incorporating good construction management practices-once for each site	POWERGRID (Contractor through contract provisions)	Construction period	

Clause No.	Project activity/ stage	Potential Impact	Proposed mitigation measures	Parameter to be monitored	Measurement & frequency	Institutional responsibility	Implementation schedule	Compliance Status
37	Equipment submerged under flood	Contamination of receptors (land, water)	Equipment stored at secure place above the high flood level(HFL)	Store room level to be above HFL (elevation difference in meters)	Store room level as per flood design-once	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	Complied/ Being Complied
39	Health and safety	Injury and sickness of workers and members of the public	Safety equipment's (PPEs) for construction workers	Contract clauses	Contract clauses compliance – once every quarter	POWERGRID (Contractor through contract provisions)	Construction period	
			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					
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	
			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			

Clause No.	Project activity/ stage	Potential Impact	Proposed mitigation measures	Parameter to be monitored	Measurement & frequency	Institutional responsibility	Implementation schedule	Compliance Status
			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			
Operation and Maintenance								
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 operations	Since, the project is in construction stage, this clause is not applicable at present.
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	Since, the project is in construction stage, this clause is not applicable at present.
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 operations	Since, the project is in construction stage, this clause is not applicable at present.
44	Oil spillage	Contamination of land/nearby water bodies	Substation transformers located within secure and impervious sump areas with a storage capacity of at least 100% of the capacity of oil in transformers and associated reserve tanks,	Substation bunding (Oil sump) ("as-built" diagrams)	Bunding (Oil sump) capacity and permeability - once	POWERGRID	During operations	Since, the project is in construction stage, this clause is not applicable at present.

Clause No.	Project activity/ stage	Potential Impact	Proposed mitigation measures	Parameter to be monitored	Measurement & frequency	Institutional responsibility	Implementation schedule	Compliance Status
			which acts as a Secondary Containment, in case of a leakage.					
45	SF_6 management	Emission of most potent GHG causing climate change	Reduction of SF6 emission through awareness, replacement of old seals, proper handling & storage by controlled inventory and use, enhance recovery and applying new technologies to reduce leakage	Leakage and gas density/level	Continuous monitoring	POWERGRID	During Operations	Since, the project is in construction stage, this clause is not applicable at present.
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	Since, the project is in construction stage, this clause is not applicable at present.
			Safety awareness raising for staff.	Training/awareness programs and mock drills	Number of programs and percent of staff /workers covered – once each year			
			Preparation of fire emergency action plan and training given to staff on implementing emergency action plan					
			Provide adequate sanitation and water supply facilities	Provision of facilities	Complaints received from staff /workers every 2			
47	Electric Shock Hazards	Injury/ mortality to staff and public	Careful design using appropriate technologies to minimise hazards	Usage of appropriate technologies (no.	Preparedness level for using these technology in crisis-	POWERGRID	Design and Operation	Since, the project is in construction stage, this clause is not applicable at present.
			Security fences around substations	Maintenance of fences	Report on maintenance – every 2 weeks			
			Barriers to prevent climbing on/ dismantling of towers	Maintenance of barriers				

Clause No.	Project activity/ stage	Potential Impact	Proposed mitigation measures	Parameter to be monitored	Measurement & frequency	Institutional responsibility	Implementation schedule	Compliance Status
			Appropriate warning signs on facilities	Maintenance of warning signs				
			Electricity safety awareness raising in project areas	Training /awareness programs and mock drills for all concerned parties	Number of programs and percent of total persons covered – once each year			
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.	Training/awareness programs and mock drills for all relevant staff	Number of programs and percent of staff covered – once each year	POWERGRID	Operation	Since, the project is in construction stage, this clause is not applicable at present.
			Preparation and training in the use of O&M manuals and standard operating practices					
49	Inadequate periodic environmental monitoring.	Diminished ecological and social values.	Staff to receive training in environmental monitoring of project operations and maintenance activities.	Training/awareness programs and mock drills for all relevant staff	Number of programs and percent of staff covered – once each year	POWERGRID	Operation	Since, the project is in construction stage, this clause is not applicable at present.
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	Since, the project is in construction stage, this clause is not applicable at present.
51	Transmission line maintenance	Exposure to electromagnetic	Transmission line design to comply with the limits of electromagnetic interference from overhead	Required ground clearance (meters)	Ground clearance - once	POWERGRID	Operation	Since, the project is in construction stage, this clause is not applicable at present.

Clause No.	Project activity/ stage	Potential Impact	Proposed mitigation measures	Parameter to be monitored	Measurement & frequency	Institutional responsibility	Implementation schedule	Compliance Status
		interference	power lines					
52	Uncontrolled growth of vegetation	Fire hazard due to growth of tree/shrub /bamboo along RoW	Periodic pruning of vegetation to maintain requisite electrical clearance. No use of herbicides/ pesticides	Requisite clearance (meters)	Assessment in consultation with forest authorities - once a year(pre-monsoon/post-monsoon	POWERGRID	Operation	Since, the project is in construction stage, this clause is not applicable at present.
53	Noise related	Nuisance to neighbouring properties	Substations sited and designed to ensure noise will not be a nuisance.	Noise levels {dB(A)}	Noise levels at boundary nearest to properties and consultation with affected parties if any - once	POWERGRID	Operation	Since, the project is in construction stage, this clause is not applicable at present.

SECTION: 3 APPROACH AND METHODOLOGY ADOPTED FOR MONITORING OF THE PROJECT

Monitoring is a continuous process throughout the Project life cycle starting from site selection to construction and maintenance state. A Project Management Unit (PMU) has been set up headed by Executive Director (Corporate Planning) 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 this, site managers review the progress on daily basis and regular project review meetings held at least on monthly basis, chaired by the Executive Director of the region wherein the environmental and social aspects of the projects are discussed and remedial measures taken, wherever, required. The exceptions of these meetings will be submitted to the Directors and Chairman & Managing Director (CMD).

POWERGRID has separate monitoring departments which carry 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) Chaired by Director (Project). CMD also takes periodic review of project implementation.

SECTION: 4 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 concern and grievances in a transparent and swift manner. Many minor concerns of peoples are addressed during public consultation process initiated at the beginning of the project. For handling grievance, Grievance Redress Committee (GRC) has been established both at the project/scheme level and at Corporate/HQ level. The project level GRCs have been established at 4 places i.e. Ajmer, Chittorgarh, Banaskantha & Bhuj and 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. As per information collected from different sites, no major complaints have been registered till date. However, some minor issues brought to the notice were resolved instantly through discussion & deliberation by local project officials.

SECTION: 5 CONCLUSION

From the preceding discussions, it is vivid that all efforts have been made to minimize the social impacts associated with the project. The endeavor to minimize the social impacts started right from the selection of land for the proposed substations. Out of total 454.3 acres of land required for the proposed 5 substations, 428.5 acres of land is Government land having no Project Affected persons (PAPs) and was transferred to POWERGRID without creating any adverse social issues. The balance 25.8 acres of private land required for proposed Tirunelveli GIS substation was purchased through willing buyer-willing seller basis on negotiated rate without the involvement of applicable land acquisition regulations, thus, there are no Project Affected Persons even for this private land.

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. A total of 2759 persons were issued notices for 645.66 ha of crop area damaged and a total of Rs. 287.79 lakhs (Rs.28.779 Millions), 222.26 lakhs (Rs. 22.226 Millions) and Rs 24.9 lakhs (Rs 2.49 Millions) were paid during foundation, erection and stringing respectively so far.

In compliance with the requirements of guidelines dated 15th October, 2015 issued by Ministry of power, Govt of India regarding land compensation, a total amount of Rs 19.97 lakhs (Rs. 1.997 Millions) has been paid till December 2016 in Gujarat state, where these guidelines have been adopted (**Annex-2**). Efforts are still on with the other two states i.e. Rajasthan and Tamil Nadu for the adoption of said guidelines in overall interest of farmers.

In view of aforesaid, it may be noted that all possible measures have already been implemented to safeguard the interest of PAP. Moreover, the state governments are also persuaded for enhancing the compensation as per MoP guidelines on RoW compensation.

R.K.SRIVASTAVA
Addl. General Manager (ESMD)

To
Sr. Engineer,
Powergrid Corporation of India Ltd, Bhachau

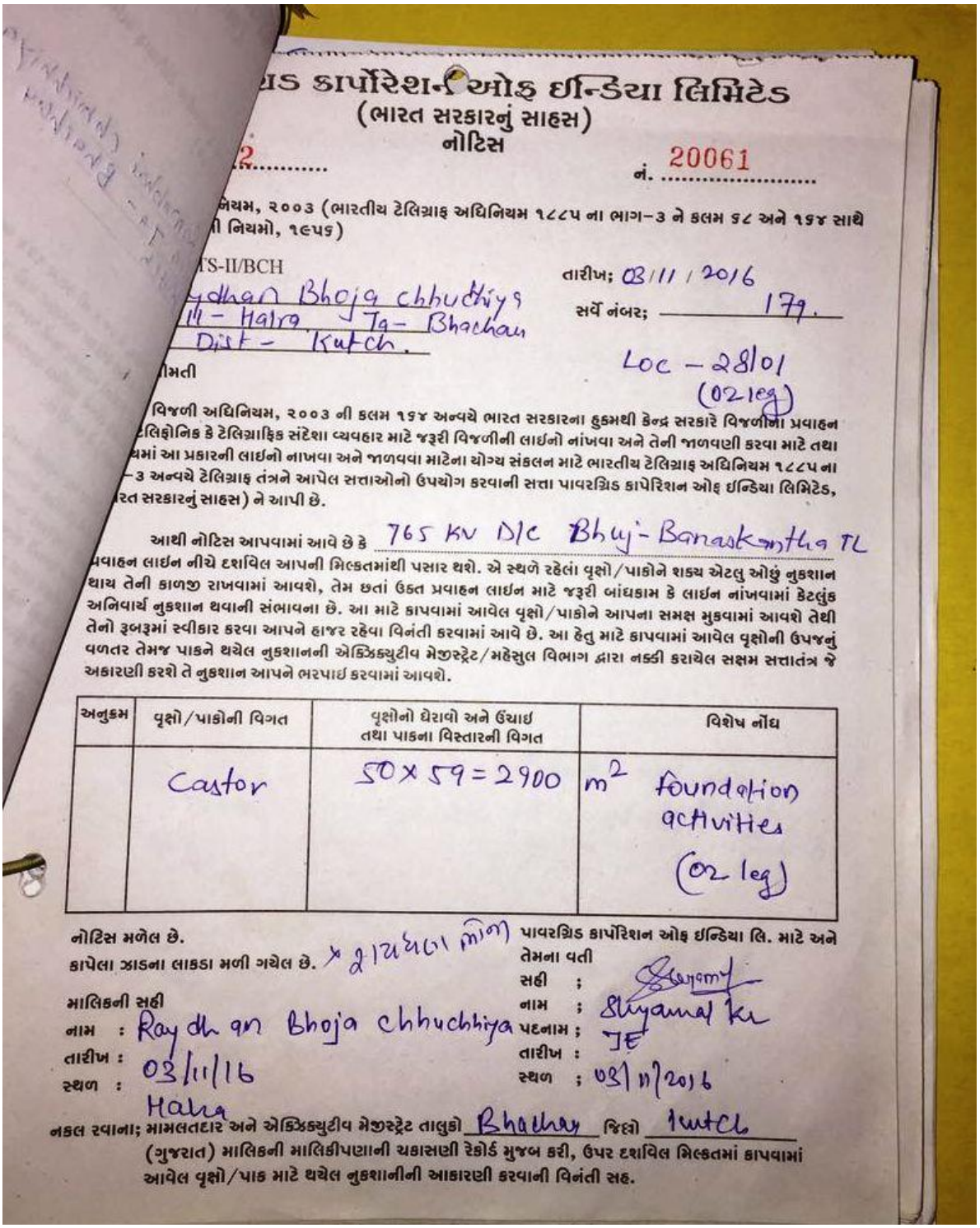
As per the notices received from Power Grid Corporation of India Limited, the Crop/Land compensation to be paid to the land owners are as follows after the asse... of the same by Talati/Circle Officer.

Name of the Line :- 765 KV D/C BHUJ-BANASKANTHA TRANSMISSION LINE (TW02)
Letter ref. No.- WRTS-II/BCH/BHUJ-BANAS-II/ 2026 **dated** 09.11.16

Sr no	Name of Land owner	Village	WORK	Survey No	Notice No	Tower no	Detail of crops/trees	Area (Mtr sq)	Rate	Amount to be Paid
1	Valabhai Ramabhai Chhuchhiya	Halra	Foundation (02 leg)	178	20062	28/01	Castor	2900	38	110200
2	Raydhanbhai Bhoja Chhuchhiya	Halra	Foundation (02 leg)	179	20061	28/01	Castor	2900	38	110200
3	Raydhanbhai Bhoja Chhuchhiya	Halra	Approach road-Foundation	180/p1	20081	28/01	Castor	1300	38	49400
4	Pancha Amra Parmar	Halra	Foundation	183	20063	28/02	Castor	4290	38	163020
5	Raniben Sajan Bhima Chavda	May	Foundation	469/p2	20080	26/13	Cotton	3540	66	233640
6	Pancha Vibha Harijan	May	Foundation	451	20079	26/15	Cotton	3600	66	237600
7	Virabhai Maghabhai Vaniya	May	Foundation	259/p1	20078	26/17	Cotton	3600	66	237600
8	Hiriben Hira Mata	May	Foundation	266	20077	26/18	Cotton	3780	66	249480
9	Shamjibhai Meghabhai Chavda	May	Foundation	632	20076	26/9	Cotton	3540	66	233640
10	Karshan Lakhmir Rabari	Ner-Amarsar	Foundation	301/p2	20059	24/08	Castor	4200	38	159600
11	Shamji Ramji Varchand	Bandhadi	Approach road-Foundation	536	20058	24/18	Juvar	1360	9	12240
12	Abdula Haji Hussain Node	Baniyari	Foundation	355/p22	20057	21/01	Mindiavaad	5180	29	150220

The Compensation amount may be paid to the individual land owners through online mode.

Mamalatdar



ડ કાર્પોરેશન ઓફ ઈન્ડિયા લિમિટેડ
(ભારત સરકારનું સાહસ)
નોટિસ

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નિયમ, ૨૦૦૩ (ભારતીય ટેલિગ્રાફ અધિનિયમ ૧૮૮૫ ના ભાગ–૩ ને કલમ ૬૮ અને ૧૬૪ સાથે
ી નિયમો, ૧૯૫૬)

TS-II/BCH

તારીખ; 03/11/2016

Raydhan Bhoja chhuchhiya
At - Hajra Ta- Bhachau
Dist - Kutch.

સર્વે નંબર; 179.

LOC – 28101
(02 leg)

ીમતી

વિજળી અધિનિયમ, ૨૦૦૩ ની કલમ ૧૬૪ અન્વયે ભારત સરકારના હુકમથી કેન્દ્ર સરકારે વિજળીના પ્રવાહન
ટેલિફોનિક કે ટેલિગ્રાફિક સંદેશા વ્યવહાર માટે જરૂરી વિજળીની લાઈનો નાંખવા અને તેની જાળવણી કરવા માટે તથા
યમાં આ પ્રકારની લાઈનો નાખવા અને જાળવવા માટેના યોગ્ય સંકલન માટે ભારતીય ટેલિગ્રાફ અધિનિયમ ૧૮૮૫ ના
–૩ અન્વયે ટેલિગ્રાફ તંત્રને આપેલ સત્તાઓનો ઉપયોગ કરવાની સત્તા પાવરગ્રિડ કાર્પોરેશન ઓફ ઈન્ડિયા લિમિટેડ,
રત સરકારનું સાહસ) ને આપી છે.

આથી નોટિસ આપવામાં આવે છે કે 765 KV D/C Bhuj-Banaskantha TL પ્રવાહન લાઈન નીચે દર્શાવેલ આપની મિલ્કતમાંથી પસાર થશે. એ સ્થળે રહેલાં વૃક્ષો/પાકોને શક્ય એટલુ ઓછું નુકશાન થાય તેની કાળજી રાખવામાં આવશે, તેમ છતાં ઉક્ત પ્રવાહન લાઈન માટે જરૂરી બાંધકામ કે લાઈન નાંખવામાં કેટલુંક અનિવાર્ય નુકશાન થવાની સંભાવના છે. આ માટે કાપવામાં આવેલ વૃક્ષો/પાકોને આપના સમક્ષ મુકવામાં આવશે તેથી તેનો રૂબરૂમાં સ્વીકાર કરવા આપને હાજર રહેવા વિનંતી કરવામાં આવે છે. આ હેતુ માટે કાપવામાં આવેલ વૃક્ષોની ઉપજનું વળતર તેમજ પાકને થયેલ નુકશાનની એક્ઝિક્યુટીવ મેજીસ્ટ્રેટ/મહેસુલ વિભાગ દ્વારા નક્કી કરાયેલ સક્ષમ સત્તાતંત્ર જે અકારણી કરશે તે નુકશાન આપને ભરપાઇ કરવામાં આવશે.

અનુક્રમ	વૃક્ષો/પાકોની વિગત	વૃક્ષોનો ઘેરાવો અને ઉંચાઇ તથા પાકના વિસ્તારની વિગત	વિશેષ નોંધ
	Castor	50 × 59 = 2900	m^2 foundation activities (02 leg)

નોટિસ મળેલ છે.
કાપેલા ઝાડના લાકડા મળી ગયેલ છે. × ૨ાયધણ ભોજા

પાવરગ્રિડ કાર્પોરેશન ઓફ ઇન્ડિયા લિ. માટે અને તેમના વતી
સહી ;
નામ ; Shyamal Ku
પદનામ ; JE
તારીખ :
સ્થળ ; 03/11/2016

માલિકની સહી
નામ : Raydhan Bhoja chhuchhiya
તારીખ : 03/11/16
સ્થળ : Hajra

નકલ રવાના; મામલતદાર અને એક્ઝિક્યુટીવ મેજીસ્ટ્રેટ તાલુકો Bhachau જિલ્લો Kutch
(ગુજરાત) માલિકની માલિકીપણાની ચકાસણી રેકોર્ડ મુજબ કરી, ઉપર દર્શાવેલ મિલ્કતમાં કાપવામાં આવેલ વૃક્ષો/પાક માટે થયેલ નુકશાનીની આકારણી કરવાની વિનંતી સહ.

Mamalatdar Office Bhachau

Assessment Sheet

To
Sr. Engineer,
Powergrid Corporation of India Ltd, Bhachau

As per the notices received from Power Grid Corporation of India Limited, the Crop/Land compensation to be paid to the land owners are as follows after the assessment of the same by Talati/Circle Officer.

Name of the Line :- 765 KV D/C BHUJ-BANASKANTHA TRANSMISSION LINE (TW02)
Letter ref. No.- WRTS-II/BCH/BHUJ-BANAS-II/2026 dated 09.11.16

Sr no	Name of Land owner	Village	Description	Survey No	Notice No	Tower no	Type of Tower	Area (Mtr sq)	Rate	Total Amount (100%)	Amount to be Paid (85% tower base, 15% stringing ROW)
1	Valabhai Ramabhai Chhuchhiya	Halra	Tower base	178	7	28/01 (02 leg)	DA+00	177.47	900	159723	135765
2	Raydhanbhai Bhoja Chhuchhiya	Halra	Tower base	179	8	28/01 (02 leg)	DA+00	177.47	900	159723	135765
3	Pancha Amra Parmar	Halra	Tower base	183	6	28/02	DA+00	354.98	900	319482	271560
4	Raniben Sajan Bhima Chavda	May	Tower base	469/p2	4	26/13	DA+03	396.926	900	357233	303648
5	Pancha Vibha Harijan	May	Tower base	451	5	26/15	DA+00	354.98	900	319482	271560
6	Virabhai Maghabhai Vaniya	May	Tower base	259/p1	3	26/17	DA+00	354.98	900	319482	271560
7	Hiriben Hira mata	May	Tower base	266	2	26/18	DA+03	396.926	900	357233	303648
8	Shamjibhai Meghabhai Chavda	May	Tower base	632	1	26/9	DA+03	396.926	900	357233	303648

The Compensation amount may be paid to the individual land owners through online mode.

Mamalatdar

ાવરગ્રીડ કોર્પોરેશન ઓફ ઈન્ડિયા લિમિટેડ

(ભારત સરકાર નું સાહસ)

નં.: 01 **નોટીસ** નં. 007

રત સરકાર, કેન્દ્રીય ઉર્જા મંત્રાલય, ગાઇડ લાઇન નં. ૩/૭/૨૦૧૫–Trans, તા. ૧૫.૧૦.૨૦૧૫ તથા ગુજરાત સરકાર, મહેસુલ વિભાગ, ાંધીનગર પત્ર સંખ્યા– પરચ–૨૧૬–૯૧૩–ધ, તા. ૨૩.૦૬.૨૦૧૬ અન્વયે)

પ્રતિ શ્રીમાન/શ્રીમતી
Valabhai Ramabhai chhuchhiya
:/:- Halra
T- Bhachau

તારીખ : 15.11.16
સર્વે નંબર : 178
LOC-28/01 (02 leg)

વિજળી અધિનિયમ ૨૦૦૩ ની કલમ ૧૬૪ અન્વયે ભારત સરકારના હુકમથી કેન્દ્ર સરકારે વીજળીના પ્રવહન માટે ટેલિફોનીક ટેલિગ્રાફિક સંદેશા વ્યવહાર માટે જરૂરી વીજળી લાઈનો નાંખવા અને તેની જાળવણી કરવા માટે તથા ભવિષ્યમાં આ પ્રકાર ની લાઇનો નાંખવા અને જાળવવા માટેના યોગ્ય સંકલન માટે ભારતીય ટેલિગ્રાફ અધિનિયમ ૧૮૮૫ નાં ભાગ–૩ અન્વયે કેન્દ્રીય ઉર્જા મંત્રાલય, ભારત સરકાર ના ૧૧.૧૧.૨૦૦૯ નાં આદેશ અનુસાર વિભાગ ૬૮ નાં પેટા વિભાગ ૯૧– અનુસાર ગ્રીનએનર્જી કોરીડોર અંતર્ગત 765 kv ભુજ–બનાસકાંઠા વીજ લાઇન નિર્માણ ની કામગીરી કરવાની સત્તા પાવરગ્રીડ (ભારત સરકાર નું સાહસ) ને આપેલ છે.

આથી નોટીસ આપવામાં આવે છે કે 765 kv ભુજ–બનાસકાંઠા પ્રવહન લાઇન નીચે દર્શાવેલ આપની મિલ્કતમાંથી સાર થશે. આ સ્થળ પર આવેલ આપની જમીન નો ઉપયોગ ટાવર નિર્માણનાં બાંધકામઅંગે કરવામાં આવશે. સદરહુ જમીનના ઉપયોગ ાબતે ટાવરની સાઇઝ મુજબ ટાવરના બાંધકામમાં ઉપયોગમાં લેવાયેલ જમીનનો વિસ્તાર માપી તેનાં વળતર બાબતે મહેસુલ વિભાગનાં ેક્ઝીક્યુટીવ મેજિસ્ટ્રેટશ્રી, ગુજરાત સરકાર દ્વારા નક્કી કરાયેલ સક્ષમ સત્તાતંત્ર–ભારત સરકારનાં કેન્દ્રીય ઉર્જા મંત્રાલય દ્વારા જારી કરાયેલ ાઇડ લાઇન અંતર્ગત જે આકારણી કરશે તે નુકશાનીની ભરપાઇ પાવરગ્રીડ દ્વારા કરવામાં આવશે.

ખનુ. નં.	જમીન માલિકનું નામ	સર્વે નં/બ્લોક નં	ઉપયોગમાં લેવાયેલ જમીનનું ક્ષેત્રફળ (SQ.. Mtr.)		રિમાર્કસ
			ટાવર માટે	વિજતાર માટે	
	Valabhai Ramabhai Chhuchhiya	178	18.84 x 9.42 = 177.47 m²	-	Tower base area at LOC-28/01 DA+0 (02 leg)

ધિ : ઉપરોક્ત ટાવર નિર્માણ તેમજ લાઇનનાં વિજતાર માટે ઉપયોગમાં લેવાયેલ જમીન માત્ર જમીનનાં ઉપયોગ બાબતે છે. જમીન પાદન કરવાની થતી નથી જેથી જમીનની માલિકી જે તે જમીન માલિકની જ રહેશે. લાઇનનિર્માણ નાં કાર્ય વખતે થયેલ પાક / વૃક્ષો નું ગતર અલગ થી આપવામાં આવશે.

ોટીસ મળેલ છે.
મીન માલિક ની સહી :
ામ : Valabhai Ramabhai Chhuchhiya
ળ : Halra
રીખ :

પાવરગ્રીડ કોર્પોરેશન ઓફ ઇન્ડિયા લિ. માટે અને તેમના વતીશ્રી,
સહી :
નામ : Shyam al kr
પદનામ : JE
સ્થળ : Halra
તારીખ :

ુલ રવાના : મામલતદાર અને એક્ઝીક્યુટીવ મેજિસ્ટેટશ્રી, તાલુકો.....Bhachau.....જીલ્લો.....Kutch.....જમીન માલિકનાં માલિકીપણાની ચકાસણી રેકોર્ડ મુજબ કરી, ઉપર દર્શાવેલ સર્વે નં માં ઉપયોગમાં લેવાયેલ જમીનના નુકશાનની આકારણી કરવા તેમજ નુકશાની ભરપાઇ કરવા બાબતનો આદેશ કરવા વિનંતી.