Safeguard Assessment and Review Framework

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India: Multi Tranche Financing Facility Uttar Pradesh Power Distribution Network Rehabilitation Project

Prepared by the Uttar Pradesh Power Corporation Limited, Government of Uttar Pradesh for the Asian Development Bank.

CURRENCY EQUIVALENTS

(as of 19 September 2020 (4 Month forward rate
as of 19 May 2020)

Currency Unit	=	Indian Rupee (₹)
₹1.00	=	$0.01307
$1.00	=	₹76.5129

ABBREVIATIONS

ABC	-	aerial bundled conductors
ADB	-	Asian Development Bank
ASI	-	archeological survey of India
ATC	-	aggregate technical and commercial (losses)
BCM	-	billion cubic meters
CEA	-	Central Electricity Authority
CERC	-	Central Electricity Regulatory Commission
CPCB	-	Central Pollution Control Board
DISCOM	-	distribution company
DVVNL	-	Dakshinanchal Vidyut Vitaran Nigam Limited (South Distribution Company)
EFS	-	environmental framework and safeguards (of UPPCL)
EHS	-	environment, health and safety
EIA	-	environmental impact assessment
EMF	-	electromagnetic field
EMP	-	environmental management plan
ESP	-	environmental and social policy (of UPPCL)
GFP	-	grievance focal person
GHG	-	greenhouse gas
GRC	-	grievance redress committee
GRM	-	grievance redress mechanism
ICNIRP	-	International Commission for Non-Ionizing Radiation Protection
IEE	-	initial environmental examination
IFC	-	International Finance Corporation
ILO	-	International Labour Organization
MFF	-	multitranche financing facility
MOEF&CC	-	Ministry of Environment, Forest and Climate Change
MOP	-	Ministry of Power
MVVNL	-	Madhyanchal Vidyut Vitaran Nigam Limited (Central (Distribution Company)
OBC	-	other backward class
PCB	-	polychlorinated biphenyls
PIU	-	project implementation unit
PMA	-	project management agency
PMC	-	project management consultant
PMU	-	project management unit
POPs	-	persistent organic pollutants
PTW	-	private tube wells
PuVVNL	-	Purvanchal Vidyut Vitaran Nigam Limited (East

		Distribution Company)
PVVNL	-	Pashchimanchal Vidyut Vitaran Nigam Limited (West Distribution Company)
REA	-	rapid environmental assessment
ROW	-	right of way
R&R	-	resettlement and rehabilitation
SAUBHAG HYA	-	Sahaj Bijili Har Ghar Yojana (Government of India project to provide electricity to the households)
SARF	-	safeguard assessment and review framework (combined environmental assessment and review framework and resettlement framework under ADB's Safeguard Policy Statement (2009))
SDDR	-	Social Due Diligence Report
SEC	-	social and environmental cell (of UPPCL)
SEP	-	social and environmental policy (of UPPCL)
SP&P	-	social policy and procedure (of UPPCL)
TKC	-	turnkey contractor
UPPCB	-	Uttar Pradesh Pollution Control Board
UPPCL	-	Uttar Pradesh Power Corporation Limited
WHO	-	World Health Organization

WEIGHTS AND MEASURES

amp	-	ampere
ha	–	hectare
km	–	kilometer (1,000 meters)
kV	–	kilovolt (1,000 volts)
kW	–	kilowatt (1,000 watts)
mG	-	milligauss
Hz	-	hertz

NOTES

(i) The fiscal year (FY) of the Government of India ends on 31 March. FY before a calendar year denotes the year in which the fiscal year ends, e.g., FY 2020 ends on 31 March 2020.

(ii) In this report, "$" refers to US dollars unless otherwise stated.

CONTENTS

I. INTRODUCTION

A. Multitrance Financing Facility Background and Rationale

1. Under investment in the low voltage distribution network in Uttar Pradesh over several decades combined with an increasing number of legal and illegal electricity connections have imposed a severe stress on the operational performance of the network. Overloading of the network has caused the technical losses, whilst the widespread illegal tapping of distribution wires by consumers, unmetered residential and agriculture consumers, and the inefficiency in billing and collections by Uttar Pradesh Power Corporation Limited (UPPCL) (an Uttar Pradesh government owned distribution utility company) have contributed to the high level of commercial losses.

2. The proposed Uttar Pradesh Power Distribution Network Rehabilitation Project (the Project) will provide improved electricity supply to rural areas of Uttar Pradesh state of India in a financially sustainable manner. The project is estimated to cost $800 million. The Government of Uttar Pradesh, through the Government of India, has requested the Asian Development Bank (ADB) to provide financing in the form of a large-scale project (time sliced) multitranche financing facility (MFF) with a ceiling on ADB financing of $430 million. ADB will provide a loan through time sliced MFF of $430 million for the program to UPPCL with a first tranche of $300 million and an indicative second tranche of $130 million. Tranche 2 will be requested when substantial progress on disbursements has been achieved under Tranche 1.

3. The Project will have following outputs:

- **Output 1: Electricity distribution network in rural habitations improved.** This will consist of replacement of existing bare conductors with aerial bundle conductors (ABC) in rural low voltage distribution network in approximately 46,000 rural habitations having a population of more than 1,000 in Uttar Pradesh and the Project impact areas will have a population of approximately 70 million (10.6 million households). It is expected approximately 65,000 km of distribution lines will be converted to ABC. This will improve the reliability and safety of electricity distribution and cost recovery by discouraging the illegal connections. The rural communities including women will also be trained in safe and efficient use of electricity.

- **Output 2: Systems for separating electricity distribution for agriculture consumers from residential consumers established.** Approximately 1,100 11 kV feeders having a length of 17,000 km and supplying 273,000 private tube wells (PTWs) and 2.42 million households will be separated. Separate 11 kV feeders of approximately 17,000 km will be constructed under this component to connect existing distribution transformers to residential consumers while retaining the existing 11 kV feeder for supplying the agricultural consumers. This will enable UPPCL to increase the duration of power supply to rural households from 18 hours at present to 22–24 hours and to control the supply duration to PTWs to match the seasonal requirement of water for agriculture. This is expected to reduce the wastage of electricity and groundwater by agriculture users and reduce the financial and fiscal burden of supplying electricity to unmetered PTWs.

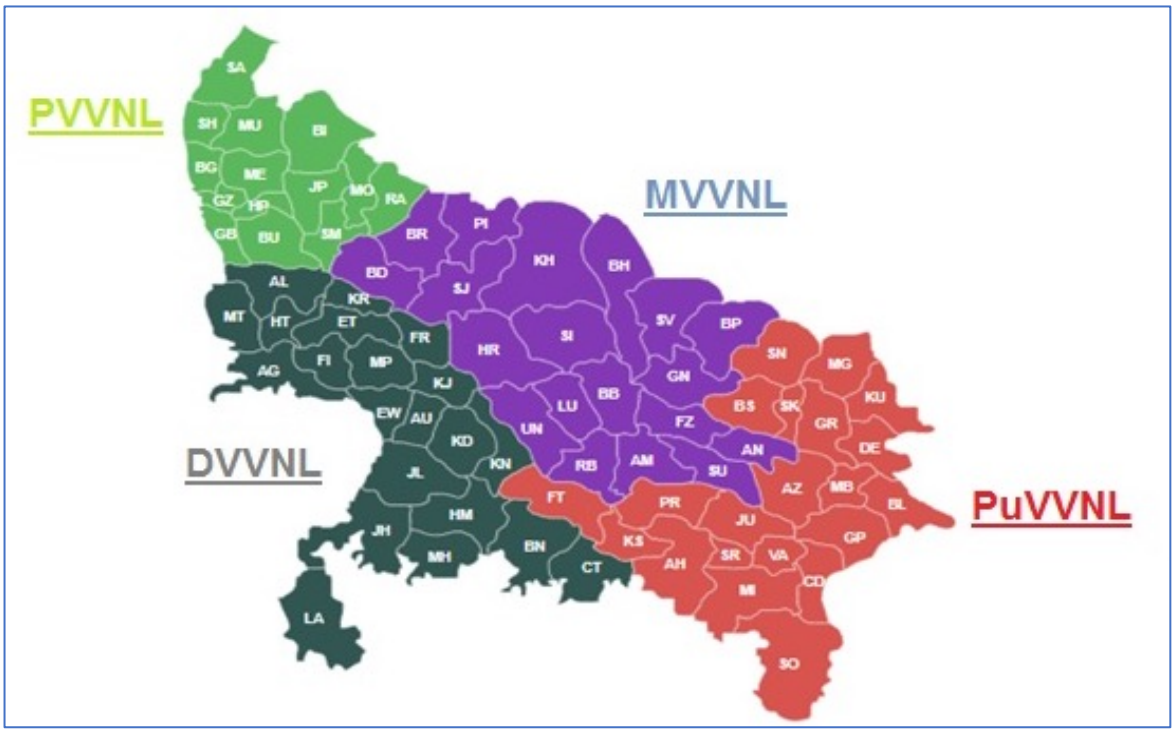
- **Output 3. Systems for bill collection in rural areas, financial management and creating gender sensitive workplace improved.** This will be delivered through the attached technical assistance (TA) grant. This grant will finance (i) developing and pilot testing innovative bill collection strategies involving active participation of rural women as collection agents; (ii) strengthening the financial management capacity of UPPCL and four distribution companies (DISCOMs), such as establishing and maintaining a comprehensive fixed asset register, reconciliations of receivable balances, ageing analysis and development of provisioning policy; (iii) supporting UPPCL in adopting Indian Accounting Standards and related areas; (iv) facilitating introduction of gender sensitive workplace practices improved working conditions for contractual workers with focus on female contractual workers; and (v) supporting the implementation of Financial Management Action Plan to improve the corporate governance of UPPCL.

4. The Project is state-wide and will be implemented under 26 turnkey contracts for ADB funded work and an additional 9 turnkey contracts for counterpart funded work, with exact details of components/activities to be undertaken still to be determined. The components/activities undertaken under each of the turnkey contracts is to constitute a subproject. The 26 contracts to be awarded under the Project for ADB funded work consist of a certain number of components/activities across 3-4 districts in each distribution zone as presented in Appendix 1 with a further district wide breakdown of both the ADB and counterpart funded works in Appendix 2. Replacement of bare conductors with ABC will take place under 13 contracts/subprojects (covering 40 districts in two DISCOMs) funded by ADB with a further 9 contracts/subprojects (covering 35 districts in two DISCOMs) funded by counterpart funds. Separation of 11 kV feeders will take place under 13 contracts/subprojects covering 35 districts of Uttar Pradesh.

5. Upon achieving the significant progress and disbursement under Tranche 1, the periodic financing request (PFR) will be submitted for Tranche 2 to complete the remaining scope of each contract. Given that a time slice approach will be used for the MFF the Project as a whole is appraised upfront.

6. The executing agency will be UPPCL and it will be responsible for Project implementation oversight. The four subsidiary DISCOMs of UPPCL will act as the Project implementing agencies, namely, Purvanchal Vidyut Vitran Nigam Ltd (PuVVNL), Dakshinanchal Vidyut Vitran Nigam Ltd (DVVNL), Paschimanchal Vidyut Vitran Nigam Ltd (PVVNL), and Madhyanchal Vidyut Vitran Nigam Ltd (MVVNL). Figure 1 shows the jurisdiction of each DISCOM.

Figure 1: Distribution Areas of each DISCOM in Uttar Pradesh



B. Output 1 Subprojects and Construction Works

7. Under the Project, conversion of the rural low voltage distribution network to ABC will be implemented across all four DISCOMs. The loan proceeds from ADB will finance this work in two DISCOMs, namely MVVNL and PuVVNL, while counterpart funds will fund work in the remaining two DISCOMs, namely DVVNL and PVVNL. There will be 21 districts consisting of a total of 15,334 habitations in PuVVNL and 19 districts consisting of 11,299 habitations in MVVNL funded by ADB. There will be 21 districts consisting of a total of 10,932 habitations in DVVNL and 14 districts consisting of 8,251 habitations in PVVNL which will be counterpart funded.[1] In all there will be 32 contracts/subprojects. The output 1 project activities by DISCOM are given in Table 1.

8. The habitations included are already electrified; have a population size of between 1,000 to 5,000; and are characterized by high levels of distribution losses and a high per capita power consumption

9. Subject to screening and categorization in accordance with this SARF once the villages involved have been confirmed, the output 1 subproject components are likely to be category C for all three safeguards on the basis they will have minimal or no adverse impacts although

[1] Both ADB and counterpart funded components/activities included in the Project are subject to ADB's Safeguard Policy Statement (2009) requirement with all components/activities requiring safeguards screening and assessment.

health and safety and waste management issues will still need to be addressed by the DISCOMs.

Table 1: Conversion to ABC

	PuVVNL	MVVNL	DVVNL	PVVNL	Total
	ADB funded		**Counterpart funded**		
Number of subprojects	6	7	4	5	22
Number of Districts	21	19	21	14	75
Number of Habitations	15,334	11,299	10,932	8,251	45,816
Length to be converted to ABC (km)	10,864	21,248	14,031	19,241	65,384
Cost (₹ Million)	5,612	8,160	5,111	5,612	30,147

10. Most works under output 1 will take place within villages in order to convert existing bare conductors to ABC. It will generally take less than a week to complete reconductoring works in each village. Conversion to ABC will utilize existing poles emanating from existing ground or pole-mounted 11 kV/400 V transformers. Rehabilitation and replacement of old transformers is not included in the program scope. The main activities involved in conversion to ABC are:

(i) Network survey and design: This includes surveying existing low tension (LT) networks to collect basic information such as coordinates of lines, alignment, location of poles, sensitive receptors; preparation of a single line diagram indicating survey information; preparation of a schedule of network survey information; and preparation of the load readings network design for conversions of bare conductors to ABC.

(ii) Installation of poles: This activity will be carried out in the event there are locations where minor diversions to avoid sensitive receptors; are required or when it is deemed to be necessary to replace existing unusable poles along the same alignment. The exact number of poles required is to be defined by the contractor. All unusable poles will be removed and either reused or disposed of. If the existing pole is removed for reuse measures will be taken not to damage the pole during removal. Existing poles will be removed by pulling the complete pole from the ground; poles will not be cut off at the ground level. Poles will then be cleaned, and any material attached to the pole (including concrete) removed. Unused pits will then be backfilled and compacted completely with enough backfill piled above grade to prevent depressions being created by natural compaction. For new pole locations digging of any foundation pits is done manually using auguring tools, concrete mixture for foundation is cast, and poles are unloaded for erection which is done using chain and pulley blocks.

(iii) Installation of stays and struts for supporting distribution poles.

(iv) Trimming of trees: In the event trimming of tree branches is required, the contractor will mark with suitable quality of paint all the trees that are required to be trimmed to obtain the required safety clearance. Permission from the local administration will be arranged for trimming of trees by the contractor through the DISCOM Project Manager. The contractor will pay compensation for any loss or damage due to the fault of the contractor's work.

(v) Conversion of bare conductor line to ABC (Photo 1): This includes stringing of the ABC, connecting the ABC to the external insulator bushing of existing distribution transformers, earthing of poles, and dismantling existing bare conductors and line hardware such as distribution boxes, insulators, etc.

(vi) Installation of LT distribution boxes for ABC: This includes mounting of small distribution boxes to poles, connecting the distribution boxes to the ABC and consumer service cables.

(vii) Replacement of existing consumer service connections: Existing service cables will be replaced with armoured service cables in certain villages (depending on the extent to which illegal connections are an issue in the village) which will generally take 2-3 hours.

C. Output 2 Subprojects and Construction Works

11. Feeder separation will be implemented across the regions of two DISCOMs, namely, PVVNL and DVVNL. Under the Project, 1,092 feeders will be separated of which 484 feeders (over 6 subprojects in 14 districts) will be in the PVVNL region and 608 (over 7 subprojects covering 21 districts) in the DVVNL region. No new substations are required, feeders will connect to existing substations which may be augmented in order to connect the feeders to them. The augmentation includes a control panel for the new feeder, and outdoor cabling and circuit breaker for the new feeder, no works will take place in the substation switchyard or to existing substation transformers.

12. Subject to screening and categorization in accordance with this SARF once the villages involved have been confirmed, the output 2 subproject components are likely to be category B for environment, category B or C or involuntary resettlement, and category C for indigenous peoples.

13. The output 2 project activities by DISCOM are given in Table 2.

Table 2: Feeder Separation

Items to be Installed	Unit	DVVNL	PVVNL
Number of Subprojects		7	6
Construction of New 11kV Feeders			
11 kV line on 8.5 m pre-cast concrete pole with rabbit conductor	km	10,860	6,066
11 kV line on 8.5 m pre-cast concrete pole with ABC	km	-	149
11 kV underground line (to take feeders out from existing substations, and in case of railway line crossing)	km	31	139
11 kV line crossing railway line	Nos.	51	48
11 kV feeder (originating from existing substations)	Nos.	608	484
Construction of New Distribution Transformers			
100 kVA, 11/0.433 kV Distribution Transformer	Nos.	181	2,635
63 kVA, 11/0.433 kV Distribution Transformer	Nos.	336	2,592
25 kVA, 11/0.433 kV Distribution Transformer	Nos.	1,282	1,689

14. Feeder separation involves installing new 11 kV lines from existing 33 kV/11 kV substations to connect to existing 11 kV/400 V transformers supplying residential consumers. In the event the existing 11 kV/400 V transformer is supplying mixed load to households and agricultural users, a new 11 kV/400 V transformer will be installed under the program with the existing transformer retained for supplying pumps for private tube wells for agriculture. The scope of this component does not entail any replacement or rehabilitation of existing ground or pole-mounted 11 kV/400 V transformers. The feeder lines will mostly be constructed on flat terrain along the right of way of existing rural roads, but a percentage will need to cross agricultural land.

15. The main activities required for construction of new 11kV feeders (Photos 2 and 3) and new distribution transformers are:

(i) Surveying: Including mapping of routes of proposed 11 kV lines and locations of new distribution transformers using Global Positioning System (GPS) surveys. While surveying, existing electrical infrastructure and other utilities, sensitive receptors, existing agriculture PTW locations, capacity and load details, required vertical and horizontal statutory clearances to buildings and vehicular traffic shall be mapped. Optimal locations for new distribution transformers will be proposed to minimize the length of lines for providing supply to existing consumers. In surveying the routes it will be ensured by the DISCOMs that the locations of poles and distribution transformers along the new alignments will be selected adhering to the Central Electricity Authority (CEA) electricity rules/guidelines and IFC Environmental, Health and Safety (EHS) Guidelines on Transmission and Distribution e.g. installation above or adjacent to residential properties or other locations intended for highly frequent human occupancy (e.g. schools or offices) will be avoided.

(ii) Construction of line: New distribution line works will involve staging and transportation of equipment, installation of poles for lines, unrolling of cables, and installation. Surveys will be carried out to ascertain the need to clear the right of way (ROW) that may have vegetation to be trimmed etc. Equipment (distribution poles, lines and transformers) will be transported to the construction site and temporary traffic diversions will be put in place. Digging of any foundation pits is done manually using auguring tools, concrete mixture for foundation is cast, and poles are unloaded for erection which is done using chain and pulley blocks.

(iii) Stringing of cables: Stringing of conductors will be carried out manually on the towers as per design requirements. The process of stringing the cables will engage crew members ranging from 5 to 10 people with multiple groups posted along the alignment for about 1 week.

(iv) 11 kV line underground at railway crossings: In the event the line crosses railway lines, a detailed survey of location of the crossing will be carried out by the contractor, who will need to avoid multi-crossings of the same railway line at nearby locations. Prior approval from railway authorities for execution of this work shall be obtained by the contractor through the DISCOM Project Manager.

(v) 11 kV line at roads and waterways crossings: In the event the line crosses road/highways or water bodies, a detailed survey of location of the crossing will be carried out by the contractor to choose the optimum crossing location. Prior approval from roads and waterways authorities for execution of this work shall be obtained by the contractor through the DISCOM Project Manager. Traffic management will take place during the work at road crossings.

(vi) 11 kV underground line: For underground distribution lines, earthworks/drilling will be involved. Radar systems are used to identify other utility structures under the ground and using a drilling technique a micro tunnel is bored through the ground using a boring machine. The cables are cast into the ground using conduit carried over a vehicle. The size of construction crew depends upon site conditions, the volume of works and techniques. Typically, a crew of 8 to 10 people will be employed and around 1-2 weeks will be needed for the construction of 1 km of 11 kV line however boring technique using modern equipment will take less time.

(vii) 11 kV feeder at existing substations: The contractor will verify during the survey the availability of existing 11 kV feeder bays at the existing substation. In the event existing feeders are not available, the contractor will arrange for the installation of a new outgoing feeder control panel at the existing substation.

(viii) Tree cutting and trimming: In the event tree cutting and trimming is required, the contractor will count and mark with suitable quality of paint all the trees that are required to be cut or trimmed to obtain the required safety clearance. Permission from the forest or other applicable department will be arranged for tree cutting of public trees by the contractor through the DISCOM Project Manager. For tree cutting and trimming or private trees compensation to affected parties based on UPPCL standard rates will be paid. Moreover, the contractor will pay

compensation for any loss or damage due to the fault of the contractor's work.

(ix) Installation of distribution transformers: Distribution transformer shall be constructed as per design specifications. The distribution transformers are generally installed on single or double poles with transformers mounted on the pole (with switch gear and an enclosed control panel) or ground mounted. Concrete foundation will need to be constructed in the case of ground mounted transformer, for which earth works are required.

Photo 1: ABC Installation and Stringing Work

Photo 2: Feeder Separation Works

Photo 3: Completed Feeder Separation (left and middle) and ABC (right) Works

D. Operation and Maintenance

16. During the operational phase, regular activities that will be implemented include routine monitoring and inspection by the DISCOM district units (distribution division of DISCOMs) to check the condition and integrity of poles, lines and transformers) and if the required safety clearances from trees and structures are being maintained. Maintenance activities will include replacement of missing or corroded parts and the trimming of trees and vegetation to maintain safety clearances if required. The clearing of vegetation shall be done manually without the use of heavy equipment and herbicides.

E. Project Implementation Schedule

17. The Project will be implemented progressively over nine years with completion date by end 2029. Civil work for each contract will be for 5-6 years. Table 3 presents the implementation schedule.

Table 3: Implementation Schedule of the Project Table 2: Implementation Schedule of MFF Sector Program

Indicative Activities	2019 (Mo/Qtr)				2020 (Mo/Qtr)				2021 (Mo/Qtr)				2022 (Mo/Qtr)				2023 (Mo/Qtr)				2024 (Mo/Qtr)				2025 (Mo/Qtr)				2026 (Mo/Qtr)				2027 (Mo/Qtr)				2028 (Mo/Qtr)				2029 (Mo/Qtr)			
Project Formulation	Q 1	Q 2	Q 3	Q 4	Q 1	Q 2	Q 3	Q 4	Q 1	Q 2	Q 3	Q 4	Q 1	Q 2	Q 3	Q 4	Q 1	Q 2	Q 3	Q 4	Q 1	Q 2	Q 3	Q 4	Q 1	Q 2	Q 3	Q 4	Q 1	Q 2	Q 3	Q 4	Q 1	Q 2	Q 3	Q 4	Q 1	Q 2	Q 3	Q 4	Q 1	Q 2	Q 3	Q 4
MFF Sector Project preparation and signing																																												
Loan effectiveness																																												
F. Electricity distribution network in rural habitations improved.							■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■												
1.1 Detailed survey and quantity estimates by Contractor							■	■	■	■	■																																	
1.2 Training of rural communities on safe and efficient use of electricity.									■	■	■	■																																
1.3 Material Procurement by Contractor													■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■															
1.4 Conversion of Low Voltage Network to AB Cabling														■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■														
1.5 Verification and Acceptance																	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■												
G. Systems for separating electricity distribution for agriculture consumers from residential consumers established							■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■				
2.1 Detailed survey and quantity estimates by Contractor							■	■	■	■	■	■																																
2.2 Verification by PMA/IA									■	■	■	■	■	■																														
2.3 Material Procurement by Contractor											■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■								
2.4 Construction of new 11 kV feeders to supply residential villages													■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■						
2.5 Verification and Acceptance															■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■				
H. Systems for bill collection in rural areas, financial management, and creating gender-sensitive workplace improved							■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■														
3.1 Capacity building on safeguard compliance and project management							■	■	■	■	■	■																																
3.2 Design new bill collection strategies involving rural women							■	■	■																																		

Indicative Activities	2019 (Mo/Qtr)	2020 (Mo/Qtr)	2021 (Mo/Qtr)	2022 (Mo/Qtr)	2023 (Mo/Qtr)	2024 (Mo/Qtr)	2025 (Mo/Qtr)	2026 (Mo/Qtr)	2027 (Mo/Qtr)	2028 (Mo/Qtr)	2029 (Mo/Qtr)
3.3 Develop and implement training program on new bill collection strategies											
3.4 Pilot four new bill collection strategies											
3.5 Undertaking age analysis of receivables											
3.6 Preparing receivables write-off policy											
3.7 Implementing receivable write-off policy											
3.8. Development of interventions for gender inclusivity of contractual workers											
3.9 Institutional assessment of HR policies and practices on gender inclusivity											
3.10 Designing and implementing gender-responsive employment practices											
3.11 Organization of training programs for project officials and staff on gender inequality aspects and project benefits for men and women											
Project Management Activities											
Procurement Plan Activities											
Consultant Selection Procedure											
Environment Management Plan key activities											
Communication Strategy key activities											
Gender Action Plan Key Activities											
Review Missions											
Approval periodic financing request for Tranche 2											
Project Completion Report Tranche 1											
MFF Facility Completion Report											

F. Safeguard Assessment and Review Framework (SARF)

18. Tranche 1 of the Project has been categorized as category B for environment, category B for involuntary resettlement, and category C for indigenous people based on ADB's Safeguard Policy Statement (2009). Tranche 2 will be categorized in due course but as a large-scale project (time sliced) MFF the safeguard categories will likely remain as for Tranche 1.

19. For an MFF, ADB's Safeguard Policy Statement (2009) requires an environmental assessment and review framework, and a resettlement framework to ensure compliance with ADB's Safeguard Policy Statement (2009) requirements and guide subproject selection, screening and categorization, and assessment during implementation. Since the environmental and social impacts of the subprojects are anticipated to be limited, the safeguard assessment and review framework (SARF) combines the requirements of both the environmental assessment and review framework, and resettlement framework to streamline the safeguards implementation.

20. Given that a time slice approach will be used for the MFF, the entire Project is appraised upfront. An initial environmental examination (IEE) and resettlement plan (RP) have been prepared including sample surveys for eight potential feeder separation subproject components/activities to be implemented by PVVNL and DVVNL. However, as the turnkey contractors will select the actual components/activities based on a long-list of villages including in their contract, per the procedures described in this SARF, the IEE will need to be updated and Social Due Diligence Reports (SDRRs) will need to be prepared for clearance by ADB before commencement of works on subproject components/activities. The DISCOMs with the support of consultants will be responsible for updating the IEE and undertaking resettlement due diligence for subprojects during implementation in accordance with this SARF.

II. ENVIRONMENTAL ASSESSMENT AND REVIEW

A. Environment, Health and Safety Policy and Legal Framework

21. Environmental assessment and review of all subprojects under the Project will be undertaken in accordance with ADB's Safeguard Policy Statement (2009) requirements, Government of India and Government of Uttar Pradesh environment, health and safety policies, laws, and regulatory requirements, including relevant international agreements.

a. Government of India Framework

22. **Environment Framework.** The legal framework of the country consists of several acts, notifications, rules and regulations to protect the environment and wildlife. In 1976, the 42nd Constitutional Amendment created Article 48A and 51A, placing an obligation on every citizen of the country to attempt to conserve the environment. The legal framework is broadly divided under following categories:

- Environmental Protection;
- Forests Conservation; and
- Wild Life Protection.

23. The umbrella legislation under each of the above categories is as follows:

- **The Environment (Protection) Act, 1986** was enacted with the objective of providing for the protection and improvement of the environment. It empowers central government to establish authorities charged with the mandate of preventing environmental pollution in all its forms and to tackle specific environmental problems that are peculiar to different parts of the country. Various rules are framed under this act for grant of environmental clearance for any development project, resources conservation and waste management.

- **The Forest Conservation Act, 1980** was enacted to help conserve the country's forests. It strictly restricts and regulates the de-reservation of forests or use of forest land for non-forest purposes without the prior approval of central government. To this end the act lays down the pre-requisites for the diversion of forest land for non-forest purposes.

- **Wild Life (Protection) Act, 1972 (amended 2003)** was enacted with the objective of effectively protecting the wildlife of the country and to control poaching, smuggling and illegal trade in wildlife and its derivatives. It defines rules for the protection of wildlife and ecologically important protected areas.

24. **Institutional Arrangements for the Environment Framework.** The environmental management and pollution control framework at Government of India level defines the roles and responsibility of various ministries and government departments at central level and state level with the Ministry of Environment, Forest and Climate Change (MOEF&CC) at central level as the apex body and state boards/departments working under their guidance and overall coordination. Uttar Pradesh Pollution Control Board (UPPCB) together with Central Pollution Control Board (CPCB) provide the regulatory function for pollution prevention and control applicable to the Project. Other ministries/departments responsible for ensuring environmental compliance and granting various clearances/permits for the Project are the Environment, Forest and Climate Change Department of Uttar Pradesh.

25. **Environmental Clearance.** The Environmental Impact Assessment (EIA) requirement in India is based on the Environment (Protection) Act, 1986 and the Environmental Impact Assessment Notification, 2006 (amended 2009). Neither conversion of rural low voltage distribution network to ABC nor feeder separation fall under the purview of the Environmental Impact Assessment Notification, 2006 so no environmental clearance is required. However, construction work including the establishment by the contractor of any related facilities for a subproject, such as, construction camps is still required to comply with the provisions of various acts and rules. UPPCL and the DISCOMs will need to ensure compliance by contractors and their subcontractors with these acts and rules through contractual obligation and regular checks and penalties. The applicable standards for air, noise and water quality are provided in Appendix 3:

- The Water (Prevention and Control of Pollution) Act 1972 (Amended 1988) and Rules 1974;
- The Air (Prevention and Control of Pollution) Act, 1981 (Amended 1987) and Rules 1982;
- The Noise Pollution (Regulation and Control) Rules, 2000 (Amended 2002);
- Hazardous Waste (Management, Handling and Trans-boundary Movement) Rules 2008 (Amended 2009); and
- Regulation of Polychlorinated Biphenyls Order, 2016 (S.O. 1327(E).

26. **Forest Clearance**:

(i) As per the Forest Conservation Rules (1981, amended 2003) a forestry clearance from Department of Forests is required for diversion of forest land for non-forest purpose. Processing of the forestry clearance entails two stages: stage I and stage II. Amongst other requirements stage I clearance requires the applicant to make payments for compensation of forest land that will be acquired and trees that will be cut. Accordingly, timely allocation of budget for this purpose by the applicant is necessary to expedite the clearance process. Per the selection criteria, it should be noted that subprojects involving forest land will not be eligible under the Project.

(ii) Cutting of trees in non-forest land requires a tree cutting permit from the local forest department. All trees cut under the Project must be compensated by compensatory afforestation as required by the Forest Department. Obtaining the tree cutting permit needs special attention in order to avoid any delays to subproject implementation.

27. The Forest (Conservation) Act, 1980 provides guidance on the distribution line ROW and tree cutting. Where routing of distribution lines through forest areas cannot be avoided, they should be aligned in such a way that it involves the least number of trees cutting. The maximum width of a ROW for distribution lines on forest land is given in Table 4. Below each conductor, a width clearance of 3 meters (m) would be permitted for the movement of tension stringing equipment. The trees within this width would have to be felled but, after cable stringing is completed, the natural vegetation should be allowed to regenerate. Felling/pollarding/pruning of trees will be done with the permission of the local forest officer whenever necessary to maintain the electrical clearance. One outer strip of 2m width shall also be left clear (without any encroachment) to permit maintenance of the distribution line.

Table 4: Description of Right-of-Way of Distribution Lines in Forest Areas

Voltage (kV)	ROW (meter)
11	7

Source: 1). IS 5613 (Code of Practice for Design, Installation and Maintenance of Overhead Power Lines, Part 1 – Lines up to and including 11 kV), and 2). MOEF&CC Guidelines for Laying Transmission Lines Through Forest Areas (MOEF&CC F.No.7-25/2012-FC, dated 5th May 2014)

28. **Labour, Health and Safety Framework.** There are many acts and regulations framed by the Government of India for the protection of workers applicable to UPPCL, DISCOMs, and contractors in charge of construction under the Project. There are also health and safety aspects included under energy related legislation applicable to distribution networks.

29. UPPCL and the DISCOMs will need to ensure compliance by contractors and their subcontractors including informal workers to these labour, health and safety acts and rules through contractual obligation and regular checks and penalties:

- The Building and Other Construction Workers (Regulation of Employment and Conditions of Service) Act, 1996;
- Child Labour (Prohibition and Regulation) Act, 1986;
- Minimum Wages Act, 1948;
- Workmen Compensation Act, 1923;
- Payment of Gratuity Act, 1972;
- Employee State Insurance Act;
- Employees P.F. and Miscellaneous Provision Act, 1952;
- Maternity Benefit Act, 1951;
- Payment of Wages Act, 1936;
- Equal Remuneration Act, 1979;
- Inter-State Migrant Workmen's (Regulation of Employment & Conditions of Service) Act, 1979;
- Equal Remuneration Act, 1979
- Electricity Act (1910) and its Amendments (2004) and (2007);
- Indian Electricity (Uttar Pradesh Amendment) Ordinance, 2002;
- Electricity Rule (1956) and its Amendments (2000);
- International Commission on Non-Ionizing Radiation Protection (ICNIRP) 1998 EMF Guidelines; and
- The Indian Telegraphic Act (1885) and its Amendments (2003).

30. **Applicable Requirements.** A review was undertaken of permissions and clearances that might be applicable to the Project, those applicable are summarised in Table 5.

Table 5: Applicable Environmental National and State Requirements

No.	Permissions/Clearances and relevance to the Project	Acts/Rules/ Notifications/ Guidelines	Concerned Agency	Responsibility/ Status
1.	Forest clearance for subproject components located in forest land.	Forest Conservation Act, 1980.	Environment, Forest and Climate Change Department of Uttar Pradesh	Per the selection criteria subproject components/activities involving forest land will not be eligible under the Project.
2.	Permission for felling of trees for subprojects requiring cutting of trees.	Forest Conservation Act, 1980.	Concerned District Authorities in Uttar Pradesh State in non-forests areas.	For non-forest areas DISCOMs/to be obtained
3.	Authorization for disposal of hazardous waste for handling and disposal of phased out distribution transformers.	Hazardous Waste (Management and Handling) Rules, 1989	Uttar Pradesh Pollution Control Board.	DISCOMs / to be obtained
4.	Permit for employing labour/workers for construction work.	The Building and Other Construction Workers (Regulation of Employment and Conditions of Service) Act, 1996	District Labour Commissioner for concerned districts.	Contractor engaged by DISCOM/to be obtained before construction works
5.	Permission for use of water for construction and drinking purpose for workers during construction work.	Environment (Protection) Act, 1986	Respective Municipal Office of Project region.	Contractor engaged by DISCOM/to be obtained before use of water for construction or drinking purpose

b. UPPCL Environmental and Social Policy

31. UPPCL has high concern for ensuring a clean environment and sustainable development in its every activity. To achieve this objective UPPCL has formulated its own environmental framework and safeguards (EFS) for transmission and distribution projects and subsequent environment management plans (EMPs). To effectively minimise adverse impacts, UPPCL's EFS for transmission and distribution projects requires an EMP. This EMP is an important tool that suggests suitable mitigative measures for identified impacts, during planning, construction and maintenance stages of transmission and distribution works. Environmental impacts that may arise during implementation are loss of vegetation, forests and land. Other impacts include loss of cultural and historical heritage, generation of chemical contaminates and fire hazards. Suitable mitigation measures are to be implemented and monitored at various stages of project implementation by the zonal level project authorities.

32. In addition, UPPCL announced an environmental and social sustainability policy focusing specifically on the distribution system as of 23 July 2020 (Appendix 10). It recognizes that distribution system works may have environmental impacts, albeit minor.

The following environmental commitments and principles of UPPCL's environmental and social sustainability policy will be implemented by the UPPCL and DISCOMs while designing and implementing the Project.

- Ensure transparency of the project to all stakeholders through dissemination of information and consultation at every stage of project implementation.
- Maintain the highest standards of social and environmental responsibility not only towards employees but also to the consumers and the community as well.
- Minimize ecological impacts on environment, land and flora/fauna through progressive policies like consciously economizing on the requirement of the land.
- As far as possible avoid operations in environmentally sensitive areas with special respect for fragile ecosystems and their inherent biodiversity.
- As far as possible avoid areas like high mountains, hilly terrain prone to landslides, large lakes, reservoirs, and marshy places.
- Care is taken to route the lines through a minimum disturbance path.
- Avoid protected area to the extent possible.
- ROW is selected duly considering the location of different utilities such as telecommunication lines, railway circuits, and gas pipelines to avoid interference.
- Adoption of best technology / latest equipment to avoid pollution and to ensure electrical safety.
- Minimize energy losses and promote energy efficiency in all activities.
- Used transformer oil, batteries, and capacitor banks to be disposed of with utmost care as per prescribed norms to minimize any ill effect on the environment.
- Concerns and complaints of affected persons and communities should be addressed in a manner that is fair, objective, and constructive. A mechanism shall be established to enable individuals and communities affected by any operational activities to raise their grievances.

c. Safeguard Policy Statement Requirements

33. Specific to environmental aspects, the objective of the ADB's Safeguard Policy Statement (2009) is to "ensure the environmental soundness and sustainability of projects and to support the integration of environmental considerations into the project decision-making process." The environmental policy principles of ADB's Safeguard Policy Statement (2009) are as follows:

(i) Use a screening process for each proposed project, as early as possible, to determine the appropriate extent and type of environmental assessment so that appropriate studies are undertaken commensurate with the significance of potential impacts and risks.

(ii) Conduct an environmental assessment for each proposed project to identify potential direct, indirect, cumulative, and induced impacts and risks to physical, biological, socioeconomic (including impacts on livelihood through environmental media, health and safety, vulnerable groups, and gender issues), and physical cultural resources in the context of the project's area of influence. Assess potential transboundary and global impacts, including climate change. Use strategic environmental assessment where appropriate.

(iii) Examine alternatives to the project's location, design, technology, and components and their potential environmental and social impacts and document the rationale for selecting the particular alternative proposed. Also consider the no project alternative.

(iv) Avoid, and where avoidance is not possible, minimize, mitigate, and/or offset adverse impacts and enhance positive impacts by means of environmental planning and management. Prepare an EMP that includes the proposed mitigation measures, environmental monitoring and reporting requirements, related institutional or organizational arrangements, capacity development and training measures, implementation schedule, cost estimates, and performance indicators. Key considerations for EMP preparation include mitigation of potential adverse impacts to the level of no significant harm to third parties, and the polluter pays principle.

(v) Carry out meaningful consultation with affected people and facilitate their informed participation. Ensure women's participation in consultation. Involve stakeholders, including affected people and concerned nongovernment organizations, early in the project preparation process and ensure that their views and concerns are made known to and understood by decision makers and taken into account. Continue consultations with stakeholders throughout project implementation as necessary to address issues related to environmental assessment. Establish a grievance redress mechanism to receive and facilitate resolution of the affected people's concerns and grievances regarding the project's environmental performance.

(vi) Disclose a draft environmental assessment (including the EMP) in a timely manner, before project appraisal, in an accessible place and in a form and language(s) understandable to affected people and other stakeholders. Disclose the final environmental assessment, and its updates if any, to affected people and other stakeholders.

(vii) Implement the EMP and monitor its effectiveness. Document monitoring results, including the development and implementation of corrective actions, and disclose monitoring reports.

(viii) Do not implement project activities in areas of critical habitats, unless (a) there are no measurable adverse impacts on the critical habitat that could impair its ability to function; (b) there is no reduction in the population of any recognized endangered or critically endangered species; and (c) any lesser impacts are mitigated. If a project is located within a legally protected area, implement additional programs to promote and enhance the conservation aims of the protected area. In an area of natural habitats, there must be no significant conversion or degradation, unless (a) alternatives are not available; (b) the overall benefits from the project substantially outweigh the environmental costs; and (c) any conversion or degradation is appropriately mitigated. Use a precautionary approach to the use, development, and management of renewable natural resources.

(ix) Apply pollution prevention and control technologies and practices consistent with international good practices as reflected in internationally recognized standards such as the World Bank Group's EHS Guidelines. Adopt cleaner production processes and good energy efficiency practices. Avoid pollution, or, when avoidance is not possible, minimize or control the intensity or load of pollutant emissions and discharges, including direct and indirect greenhouse gas (GHG) emissions, waste generation, and release of hazardous materials from their production, transportation, handling, and storage. Avoid the use of hazardous materials subject to international bans or phaseouts. Purchase, use, and manage pesticides based on integrated pest management approaches and reduce reliance on synthetic chemical pesticides.

(x) Provide workers with safe and healthy working conditions and prevent accidents, injuries, and disease. Establish preventive and emergency preparedness and response measures to avoid, and where avoidance is not possible, to minimize, adverse impacts and risks to the health and safety of local communities.

(xi) Conserve physical cultural resources and avoid destroying or damaging them by using field-based surveys that employ qualified and experienced experts during environmental assessment. Provide for the use of "chance find" procedures that include a pre-approved management and conservation approach for materials that may be discovered during project implementation.

34. ADB's Safeguard Policy Statement (2009) defines the requirements to be followed with regards to project screening and classification, information disclosure, consultation and participation, due diligence, monitoring and reporting, local grievance redress mechanisms, and ADB's Accountability Mechanism.

35. *Project screening and classification*: ADB's Safeguard Policy Statement (2009) requires screening as early as possible to (i) determine the significance of adverse impacts; (ii) identify the level of assessment and institutional resources required; and (iii) determine disclosure requirements. A project's category is determined by its most environmentally sensitive component, including direct, indirect, cumulative, and induced impacts in the project's area of influence. Each project is scrutinized as to its type, location, scale, and sensitivity and the magnitude of its potential environmental impacts. Projects are then assigned to one of the following three categories:

- **Category A**. A proposed project is classified as category A if it is likely to have significant adverse environmental impacts that are irreversible, diverse, or unprecedented. These impacts may affect an area larger than the sites or facilities subject to physical works. An environmental impact assessment is required.
- **Category B**. A proposed project is classified as category B if its potential adverse environmental impacts are less adverse than those of category A projects. These impacts are site-specific, few if any of them are irreversible, and in most cases mitigation measures can be designed more readily than for category A projects. An initial environmental examination is required.
- **Category C**. A proposed project is classified as category C if it is likely to have minimal or no adverse environmental impacts. No environmental assessment is required although environmental implications need to be reviewed.

36. ADB has categorized Tranche 1 as category B for environment, Tranche 2 is likely to have the same categorization. However, as a loan with multiple subprojects and with the villages to be included still to be confirmed, all subprojects will need to be screened and categorized using the environment screening checklist, included in Appendix 5. Per the selection criteria subproject component/activities with the potential to trigger category A will not be eligible under the Project, so all subprojects will either be category B or C for environment.

37. *Information disclosure*: ADB's Safeguard Policy Statement (2009) requires information about environmental safeguard issues to be made available in a timely manner, in an accessible place, and in a form and language(s) understandable to affected people and to other stakeholders, including the general public, so they can provide meaningful inputs into project design and implementation. For illiterate people, suitable communication methods will be used. The SARF (incorporating environmental assessment and review framework) was posted on ADB's website before project appraisal. During project implementation UPPCL will need to submit the following for posting on ADB's website: (i)

final or updated IEEs and corrective action plans prepared during implementation by the DISCOMs upon receipt by ADB; and (ii) environment monitoring reports submitted by UPPCL during project implementation upon receipt by ADB.

38. *Consultation and participation*: ADB's Safeguard Policy Statement (2009) requires communities, groups, or people affected by proposed projects, and civil society to be engaged by UPPCL through information disclosure, consultation, and informed participation in a manner commensurate with the risks to and impacts on affected communities. Meaningful consultation processes are defined as those that, (i) beginning early in the project preparation stage and being carried out on an ongoing basis throughout the project cycle; (ii) providing timely disclosure of relevant and adequate information that is accessible to affected people; (iii) being free of intimidation and coercion; (iv) being gender inclusive and responsive; and (v) enabling the incorporation of all relevant views of affected people and other stakeholders in decision-making. The consultation process and its results are to be documented and reflected in the IEE report.

39. *Monitoring and reporting*: ADB's Safeguard Policy Statement (2009) requires that UPPCL implement the safeguard measures and relevant safeguard plans, as provided in the legal agreements, and submit periodic monitoring reports on their implementation performance. Given the Project is category B for environment, UPPCL is required to (i) establish and maintain procedures to monitor the progress of implementation of safeguard plans; (ii) verify the compliance with safeguard measures and their progress toward intended outcomes; (iii) document and disclose monitoring results and identify necessary corrective and preventive actions in the periodic monitoring reports; (iv) follow up on these actions to ensure progress toward the desired outcomes; and (v) submit periodic monitoring reports on safeguard measures as agreed with ADB. In addition to recording information to track environmental performance, UPPCL will need to undertake inspections to verify compliance with the EMP and progress toward the expected outcomes. Environmental monitoring reports should describe progress with implementation of the EMP and compliance issues and corrective actions, if any, and be posted in a location accessible to the public. ADB will also monitor projects on an ongoing basis until a project completion report is issued.

Local grievance redress mechanisms (GRM) and ADB's Accountability Mechanism: ADB's Safeguard Policy Statement (2009) requires that UPPCL set up and maintain a GRM to receive and facilitate resolution of affected peoples' concerns and grievances about their environmental performance at project level. It should address affected people's concerns and complaints promptly, using an understandable and transparent process that is gender responsive, culturally appropriate, and readily accessible to all segments of the affected people. Affected people can also take complaints to ADB's Accountability Mechanism although they should approach the local GRM in the first instance; but the GRM should not impede access to the country's judicial or administrative remedies.

d. IFC Environmental, Health, and Safety (EHS) Guidelines

40. The Project will follow national as well as international good practice related to environment, health and safety including as set out in the IFC EHS General Guidelines (30 April 2007), in particular Section 4 on Construction and Decommissioning and the guidelines on Electric Power Transmission and Distribution. The latter requires consideration of terrestrial and aquatic habitat alteration, electric and magnetic fields, hazardous materials, occupational health and safety and community health and safety issues.

41. UPPCL and the DISCOMs are required to follow these guidelines regarding assessment of potential impacts and applicable standards and management measures, performance indicators, and monitoring guidelines; they should also ensure that all appointed contractors and subcontractors follow the guidelines. When country regulations

differ from these standards and measures, UPPCL will ensure that it achieves whichever is more stringent.

e. International and Regional Treaties, Conventions, and Agreements

42. India is a party and signatory to several international and regional environmental treaties, conventions, and agreements for which the MOEF&CC is the national focal point. Screening was carried out of these treaties regarding applicability to this Project. Key international agreements that India is signatory to and relevant for the Project are as follows:

- Convention Relative to the Preservation of Fauna and Flora in the Natural State (1933) - no direct relevance, but seek to avoid loss of natural flora and fauna
- International Plant Protection Convention (1951) - no direct relevance, but seek to avoid loss of natural flora and fauna
- Convention on Wetlands of International Importance, Especially as Waterfowl Habitat (Ramsar, 1971) – ensure potential impacts on Ramsar designated sites avoided
- Convention concerning the Protection of World Cultural and Natural Heritage (Paris, 1972) – ensure potential impacts on world cultural and natural heritage designated sites avoided
- Convention on International Trade in Endangered Species of Wild Fauna and Flora (Washington, 1973)–no direct relevance, but seek to avoid poaching by construction workers
- Convention on Migratory Species of Wild Animals (Bonn, 1979)–ensure potential impacts on any mitigatory species supported by the Project area of influence assessed and managed
- Convention on the Prior Informed (Consent) Procedure for Certain Hazardous Chemicals and Pesticides in International Trade (PIC or Rotterdam, 1990)-no direct relevance, but avoid use of hazardous chemicals and pesticides
- United Nations Framework Convention on Climate Change (Rio De Janeiro, 1992) - stabilize GHG emissions, SF6 is a GHG used in gas insulated switchgear although it is not used in project scope.
- Convention on Biological Diversity (Rio De Janeiro, 1992) - biodiversity conservation and sustainable usage, habitat preservation, and protection of indigenous people’s rights, and intellectual property, no direct relevance, but seek to avoid loss of natural flora and fauna
- Protocol to the United Nations Convention on Climate Change (Kyoto, 1997) - to achieve stabilization of greenhouse gas (GHG) concentrations in the atmosphere at a level low enough to prevent dangerous anthropogenic interference with the climate system, SF6 is a GHG used in gas insulated switchgear although it is not involved in project scope.
- Stockholm Convention- of Persistent Organic Pollutants (POPs) (1972) - ensures the environmentally sound management and the disposal of POPs including polychlorinated biphenyls (PCBs). India has started using PCB free equipment, but existing equipment contaminated and cross contaminated with PCBs are also present in significant quantity. The convention gives governments until 2025 to phase out "in–place equipment" such as electrical transformers containing PCBs, as long as the equipment is maintained in a way that prevents leaks. It grants them another three years to destroy the recovered PCBs. The recovered PCBs must be treated and eliminated by 2028.
- Basel Convention - this convention came into force on 5 May 1992 and aims to reduce the amount of waste produced by signatories and regulates the

international traffic in hazardous wastes including PCBs and asbestos which may be present in existing facilities.

- International Labour Organization (ILO) conventions and protocols ratified by India (47 conventions and 1 protocol) - related to the core labor standards for construction workers
- ILO Asbestos Congestion, 1986 (Convention No. C 162) – yes to be ratified by India but will be applied to project as measure to avoid use of asbestos in substations. This convention applies to all activities involving exposure of workers to asbestos in the course of work.

43. UPPCL will need to ensure the Project is implemented in compliance with the above agreements.

f. Gaps Analysis of National Requirements and ADB's Safeguard Policy Statement (2009) Requirements

44. Table 6 presents a comparison of the environmental requirements of Government of India and ADB's Safeguard Policy Statement (2009).

Table 6: Comparison of Environmental Requirements of Government of India and ADB's Safeguard Policy Statement (2009)

Project Stage	Government of India	ADB's Safeguard Policy Statement (2009)	Gaps for the Project/ Gap Filling Measures
Screening and Categorization	• EIA Notification (2006; as amended in 2009) set screening criteria to classify new and expansion projects based on potential environmental impacts as follows: category A, B1 and/or B2. • The category determines the level of environmental assessment.	• Uses sector-specific rapid environmental assessment checklist for screening and assigns categories based on potential impacts.	• As per the Indian regulations, the EIA is mandatory for eight types of project activities including mining, power generation, primary processing, materials production and processing, specific manufacturing and services sectors, infrastructure and construction. Under each category, the threshold limits are specified when it is mandatory to conduct an EIA. However, Power Distribution projects are not listed as environmental sensitive projects. Therefore, screening and categorization is not required as per Indian regulations. However, as per ADB's Safeguard Policy Statement (2009) screening and categorization is required. • The Project (Tranche 1) has been categorized

Project Stage	Government of India	ADB's Safeguard Policy Statement (2009)	Gaps for the Project/ Gap Filling Measures
			as B for environment, under the SARF each subproject will also be screened and categorized. • Selection criteria ensure category A subproject components/activities are not eligible for financing under this Project.
Environmental Assessment	• No assessment required for power distribution projects.	• Identify potential impacts on physical, biological, physical cultural resources, and socioeconomic aspects in the context of Project's area of influence (i.e., primary site and facilities, associated facilities etc.)	• Power Distribution projects are not listed as environmental sensitive projects and so EIA is not required as per Indian regulations. However, as per ADB's Safeguard Policy Statement (2009) environmental assessment is required for projects that trigger category B. • IEE has been prepared for the Project, relevant DISCOM will update the IEE as necessary once subproject components/activities confirmed. • No associated facilities are involved.
Analysis of Alternatives	• No analysis of alternatives required for power distribution projects. However, under UPPCL practices, the alignment of lines is selected to avoid environmental and ecological sensitive areas	• Alternative analysis is required only for project with significant impacts. • Examine alternatives to the project's location, design, and technology • Document rationale for selecting the project location, design, and technology • Consider "no project" alternative	• Under UPPCL practices, the alignment of lines is selected to avoid environmental and ecologically sensitive areas. • To comply with the ADB's Safeguard Policy Statement (2009), environmentally sensitive areas will be avoided while selecting the alignment of lines.
Meaningful Consultation	• No public consultation required for power	• Starts early and continues during implementation	• No specific requirements for gender

Project Stage	Government of India	ADB's Safeguard Policy Statement (2009)	Gaps for the Project/ Gap Filling Measures
	distribution projects. However, as part of route selection of lines, UPPCL/ DISCOMs need to consult people.	• Undertaken in an atmosphere free of intimidation • Gender inclusive and responsive • Tailored to the needs of vulnerable groups • Allows for the incorporation of all relevant views of stakeholders	balance and vulnerable groups • Under the SARF meaningful consultation will need to be undertaken as part of the IEE update, it will also be required to ensure gender balance and representation of vulnerable groups.
Information Disclosure	• No information disclosure required for power distribution projects.	Local disclosure is required and ADB will post in its website the following: • Final or updated IEEs and corrective action plan prepared during Project implementation, if any; and • Environmental monitoring reports.	• Under the SARF local disclosure including on UPPCL's website is required and the IEE and environmental monitoring reports will be disclosed on the ADB website.
Grievance Redress Mechanism	• GRM is not mentioned in the regulations.	• Establish GRM to receive and facilitate resolution of grievances or complaints	• Under ADB's Safeguard Policy Statement (2009) GRM will be required.
Environmental Standards	• The Environment (Protection) Rules, 1986 • Various legislations addressing aspects such as air and water pollution, hazardous substance management, etc. • Occupational health and safety standards included in the Factories Act (India) and various India specific labour laws • National Ambient Air Quality Standards as per (MOEF&CC notification G.S.R 826(E), dated 16.11.2009) and in	• Refers to IFC EHS Guidelines for environmental standards • If national regulations differ, more stringent one will be followed • If less stringent levels are appropriate in view of specific project circumstances, provide full and detailed justification	• The limiting value of some pollutants specified in the Indian regulatory standards maybe different than those specified in EHS general guidelines and hence the more stringent one will be followed for the Project.

Project Stage	Government of India	ADB's Safeguard Policy Statement (2009)	Gaps for the Project/ Gap Filling Measures
	compliance with the Air (Prevention and Control of Pollution) Act, 1981(Amended 1987) and Rules 1982. • Noise Standards as per the Noise Pollution (Control and Regulation) Rules, 2000 (Amended 2002). • Water quality standards as per MOEF&CC notification No. GSR 742(E), Dt: 25.09.2000) and in compliance with the Water (Prevention and Control of Pollution) Act 1972 (Amended 1988) and Rules 1974.		
Monitoring and Reporting	• No monitoring and reporting as per national regulations.	• Prepare monitoring reports on the progress of EMP implementation • Prepare and implement corrective action plan if non-compliance is identified • Requires regular monitoring reports to ADB for review and disclosure	• Monitoring measures in accordance with ADB's Safeguard Policy Statement (2009) are proposed for the Project.

B. Anticipated Environmental, Health and Safety Impacts

a. Uttar Pradesh Environmental Setting

45. Uttar Pradesh with a total area of 243,290 square kilometers, is India's fourth-largest state in terms of land area and it is situated on the northern spout of India sharing an international boundary with Nepal and borders with Uttarakhand in the north, Delhi and Haryana in the northwest, Rajasthan in the west, Madhya Pradesh in the southwest, Bihar in the east and Jharkhand in the southeast (Figure 2). The state has 75 districts under 18 administration divisions for control.

46. Plains cover most of the state with the larger Gangetic Plain region in the north, it includes the Ganges-Yamuna Doab, the Ghaghra plains, the Ganges plains, and the Terai, and the smaller Vindhya Range and plateau region is in the south.

47. About 68% of the land in the State is utilized for agriculture and cultivation (Table 7).

Figure 2: Map of the State of Uttar Pradesh

48. The state has great religious and cultural heritage. The culture has its roots in the Hindi and Urdu literature, music, fine arts, and drama. Uttar Pradesh is the birthplace of Lord Rama and Lord Krishna and it witnessed the setting of two great epics – the Ramayana and the Mahabharata and left the mark of this in the form of rich heritage and structures. The state is also home to large number of historical sites and heritage monuments. There are 3 World Heritage Sites, 741 Monuments of National Importance and 143 state protected monuments have been recognized by the archeological survey of India (ASI) in Uttar Pradesh.

49. Agra is one of the most popular cities of the world with three UNESCO World Heritage monuments - Taj Mahal, Fatehpur Sikri and Red Fort. Lucknow, the capital of Uttar Pradesh, also has several beautiful historical monuments such as Bara Imambara and Chota Imambara. Other historical cities famous for their monuments are Mathura, Vrindavan, Gokul, Varanasi, Ayodhya, Kushinar, Sarnath Agra, Jhansi, Lucknow, Meerut and Allahabad.

50. In the Indian State of Forest Report 2013, the recorded forest cover in Uttar Pradesh was 16,582 km^2, constituting about 7% of the State's total geographic area: 12,070 km^2 is classified as Reserved Forest (forest land owned by Government of India and may be

upgraded to the status of national parks/national sanctuaries); 1,157 km^2 is Protected Forest (forests that enjoy a certain degree of protection from Government of India, such as land not permitted to be developed on) and 3,355 km^2 is Unclassed Forest (wild forests which are not classified as either of the above) (Figure 3). The protected area network in Uttar Pradesh occupies a 6,310ha area which constitutes about 2.62% of the state's geographical area (Figure 4). Dudhwa National Park, is the only National Park in Uttar Pradesh, located in the northern Terrai region, bordering Nepal. With an area of 680 km^2, Dudhwa National Park has also been classified as a Tiger Reserve, with the population of tigers at 98, as of 2005.

Table 7: Land Use Pattern in the State

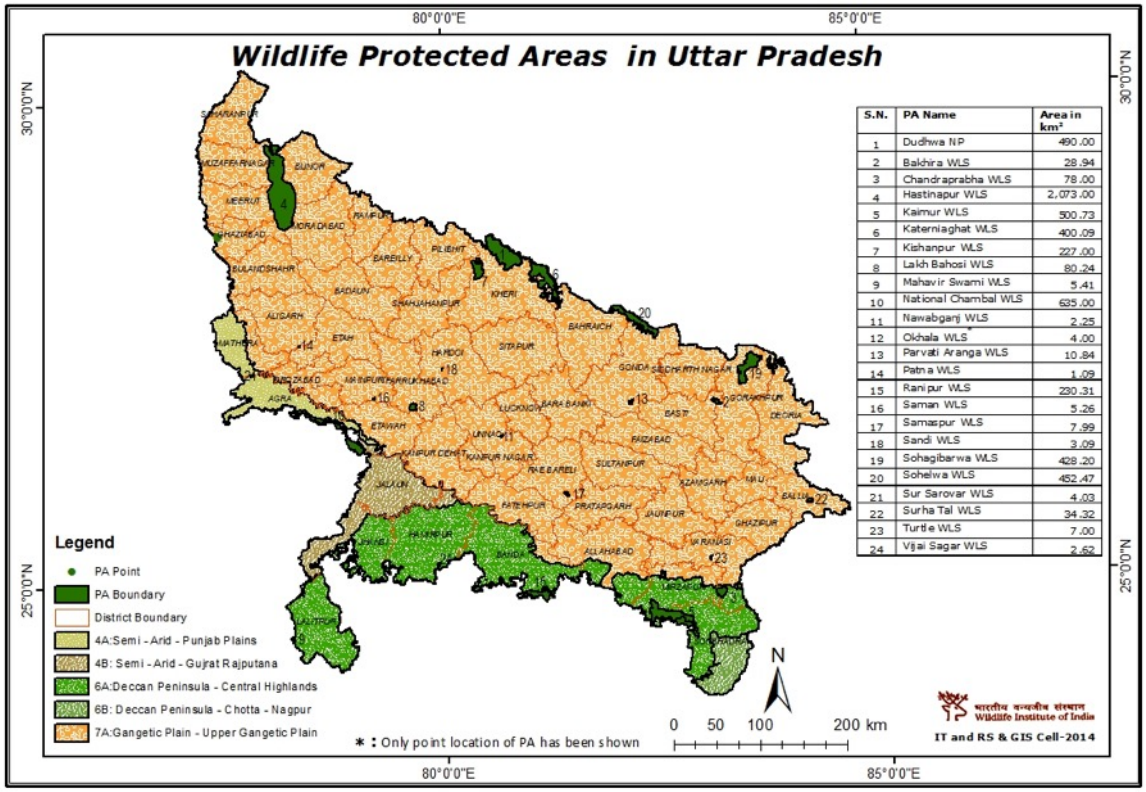
Land Use	Area in '000 ha	Percentage
Reporting Area for Land Utilization	24,170	100
Net Area Sown	16,546	68.46
Forest*	1,658	6.86
Area Not Available for Cultivation	3,491	14.44
Permanent Pasture and Grazing Land	65	0.27
Land Under Misc. Tree Crops and Groves	325	1.34
Cultivable Waste Land	410	1.70
Fallow Land Other Than Current Fallows	539	2.23
Current Fallows	1135	4.70

**Landuse Statistics, Ministry of Agriculture, Government of India, 2013-14*

Figure 3: Map of Forest Cover in Uttar Pradesh

Source: India state of Forest Report, 2017

Figure 4: Map Showing Protected Areas in Uttar Pradesh



b. Potential Impacts

51. Environmental impacts will result from both the location of the subprojects and the scope of the Project.

52. In relation to location, most works will take place within villages for the replacement of existing bare conductors with ABC, hence, no additional land should be required, except in the case of minor diversions to ensure safety distances, horizontal and vertical clearances, from structures are maintained. The feeder lines will require additional land but will mostly be constructed on flat terrain along the right of way of existing rural roads but with a percentage required to cross agricultural land. The associated poles, conductors, and any transformers for feeder lines will have a small footprint. The turnkey contractor will be required to consult with affected landowners and households prior to any construction works.

53. Conservation to ABC can reduce the electrocution of birds of prey and bats hanging on wires when their large wing spans meet live conductor cables, but poorly installed and sagging distribution lines can still result in the electrocution of wildlife. For example, elephants in forest areas have been electrocuted crossing under distribution lines whilst birds of prey are electrocuted when perched at the top of poles or on the steel crossarm etc. Significant impacts could result if subproject locations support high biodiversity value or internationally or nationally important biodiversity areas, however, these will be avoided through the application of subproject component selection criteria. Studies have shown that for birds, electrocution rates can be significantly lower, average reduction of 85%, by discouraging them from perching on top of the pole and providing a barrier to touching the live cables. Mitigation is relatively inexpensive to implement (approximately $12/pole for materials) with no additional maintenance requirement. In areas where elephants are regularly found, such as the elephant corridors at Rawasn–Sonanadi via Lansdowne and Sonanadi via Bijnor in the north-west of the state, outside of the habitations, overhead

cables should be installed with the clearance above ground of the lower conductor per national regulations or above maximum trunk height of an elephant, whichever is the higher.

54. In addition, whilst significant impacts could result if subproject locations support internationally or nationally important physical cultural resources these will be avoided through the application of subproject component selection criteria. There are existing feeder lines and telecommunication lines in villages and along the road in most locations, so the feeder lines are not a new component in the landscape. Good quality installation will be required to minimize further disfiguration of the rural landscape in which distribution lines are already an existing feature especially as consultees have concerns over visual clutter. Locally important biodiversity features (e.g. trees) and physical cultural resources will be avoided to the extent possible during survey works for the feeder lines. However, as noted in the baseline, roads and agricultural land are bounded by scattered individual mature trees and shrubs so where safety clearances cannot be met some trees may need to be trimmed or in the worst case cut. Compensation to local communities for the loss of any crops or private trees will be provided in accordance with the Project's Resettlement Plan. Compensatory trees native in the district should be planted in order to preserve the ecological value of the modified habitat. Chance find procedures as per national regulations and ADB's Safeguard Policy Statement (2009) requirements for physical cultural resources will be applied to the Project.

55. In relation to further screening and assessment of subproject components/activities:

- **For conversion to ABC components/activities following existing alignments with no diversion**, it will only be necessary to confirm they are not in locations supporting high biodiversity value or internationally or nationally important biodiversity areas or physical cultural resources.
- **In cases of conversion to ABC with minor diversion or 11kV feeder separation**, additional baseline related to the component/activity location will be established per the baseline form included in Appendix 5, in order to inform the subproject screening and categorization.

56. In relation to the scope of the Project, potential impacts relate to (i) management of existing transformers; (ii) other pollution risks; (iii) management of waste such as old conductors generated by the work; (iv) trimming or cutting of trees along alignments for safety purposes; (v) disturbance to local communities including interference with agricultural activities, road traffic and access during installation; and (vi) occupational and community health and safety issues related to construction and operation as elaborated on in the following sections. Further details of these scope-related impacts and their mitigation are including in Chapter V of the IEE. These minor impacts and risks will be common to all subprojects regardless of location, mostly temporary and of short duration during construction works, and can be easily dealt with through adherence to national regulations and the adoption of international good practice measures as set out in the project-level EMP which is included in the IEE.

57. There will also be a number of beneficial socio-economic impacts in relation to quality of life and improved electricity supply to rural areas of Uttar Pradesh state of India.

58. **Project IEE and Environmental Management Plan.** An IEE including project-level EMP has been prepared which is applicable to all subprojects regardless of categorization under the Project and provides the mitigation and monitoring measures to be followed by the DISCOMs and their contractors in relation to potential impacts that are common to all projects. Given the feeder lines involve existing facilities the project-level EMP also includes a corrective action plan for existing substations to be implemented by the DISCOMs prior to the contractors being given access to the existing substations to connect in the feeder lines.

59. Following further subproject component/activity assessment, it will be identified if any additional site-specific management measures need to be applied, these measures will be supplementary to those set out in this project-level EMP. If no site-specific management measures are identified by the assessment, the project-level EMP will form the EMP for the subproject.

C. Existing Institutional Capacity to Undertake Environmental Assessment

60. UPPCL has previously developed an Environmental and Social Policy (ESP) and formulated an Environmental Framework and Safeguards (EFS) for Transmission and Distribution Projects and subsequent Environment Management Plans.[2] The EFS for Transmission and Distribution Projects of UPPCL has been prepared taking into account the policies, rules, acts, and legal requirements of Government of India and Government of Uttar Pradesh. The EFS provides a framework and methodology to address environmental issues associated with transmission, distribution lines and substations, and formulate EMPs for the same.

61. The ESP and EFS are meant to be implemented by UPPCL as well its successive companies including DISCOMs for all its projects. For the proposed Project, the UPPCL ESP and EFS, together with Government of India and Government of Uttar Pradesh regulations will need to be followed for planning, design, operation and maintenance of all components/activities under the Project.

62. The ESP and EFS are meant to be operationalized via a social and environmental cell (SEC) at the corporate office in Lucknow headed by a chief engineer (Planning) who is responsible for the overall management of the environmental aspects associated with UPPCL operations and dealing with grievances at corporate level. At zonal level, the zonal general manager of the DISCOMs (assisted by existing divisional engineers) are meant to take on responsibility for environmental, health and safety aspects at the field level. Most corporate and zonal staff have an electrical engineering background.

63. Twenty years ago, the SEC was operational and had experience in implementing the externally funded projects including World Bank and CIDA funded projects. However, consultations with UPPCL have identified that the SEC is not currently operational. Further, the proposed Project will be the first ADB support to UPPCL. Therefore, training of UPPCL and the DISCOMs will be required on environment, health and safety policies, monitoring and reporting requirements of ADB's Safeguard Policy Statement (2009) and the requirements of this SARF and the project-level EMP.

64. During the environment due diligence of the Project, a sample of existing facilities of the DISCOMs were visited including locations where conversion to ABC had been undertaken, locations where feeder separation had been undertaken, substations from where feeder lines will be taken off, as well as stores where old conductors and other equipment wastes will be stored until auctioned off. Site visits identified limited awareness by the DISCOMs of environment, health and safety issues associated with distribution and weak compliance with both the national Central Electricity Regulatory Commission (CERC) regulations and ADB's Safeguard Policy Statement (2009) environment, health and safety requirements.

65. The capacity of UPPCL to undertake environment assessments and implement subprojects is assessed as very low in terms of staffing numbers and their qualifications and experience to undertake the work required. Capacity development including appointment of sufficient number of suitably qualified and experienced environment, health and safety staff and training will be required.

III. RESETTLEMENT

66. The principles to be adopted for addressing resettlement and compensation for loss of assets such as crops and trees in this Project have been guided by the existing legislation and policies of the Government of India and Government of Uttar Pradesh, UPPCL and by the involuntary resettlement policy of ADB stated in the ADB's Safeguard Policy Statement (2009).

A. National Policy Framework

67. The relevant legislations include the Indian Electricity Act (2003), UPPCL Environment and Social Policy and ADB's Safeguard Policy Statement (2009). The Right to Fair Compensation and Transparency in Land Acquisition, Rehabilitation and Resettlement Act (2013), does not apply for this Project, as there will be no land acquisition for the laying of new 11kv poles.

68. **The Indian Electricity Act, 2003 (Central Act 36 of 2003)** The act consolidates the laws relating to generation, transmission, distribution, trading and use of electricity and for matters connected therewith or incidental thereto. Sec. 164 empowers the appropriate government to confer on any Authority or person engaged in the business of supplying electricity under the Act, any of the powers which the Telegraph Authority possesses under the Telegraph Act with respect to the placing of telephonic lines or posts for the purpose of a telephone established or maintained by the Government or to be so established or maintained.

69. **UPPCL Environment and Social Policy:** The UPPCL aims to resettle and rehabilitate the persons affected by its distribution projects in a manner that they do not suffer adversely.UPPCL announced a strengthened policy focusing on distribution system as of 23 July 2020. The following policy on environmental and social sustainability will be implemented by the UPPCL and DISCOMs while designing and implementing the Project.

- Ensure transparency of the project to all stakeholders through dissemination of information and consultation at every stage of project implementation.
- Maintain the highest standards of social and environmental responsibility not only towards employees but also to the consumers and the community as well.
- Minimize ecological impacts on environment, land and flora/fauna through progressive policies like consciously economizing on the requirement of the land.
- As far as possible avoid operations in environmentally sensitive areas with special respect for fragile ecosystems and their inherent biodiversity.
- As far as possible avoid areas like high mountains, hilly terrain prone to landslides, large lakes, reservoirs, and marshy places.
- Care is taken to route the lines through a minimum disturbance path.
- Avoid protected area to the extent possible.
- ROW is selected duly considering the location of different utilities such as telecommunication lines, railway circuits, and gas pipelines to avoid interference.
- Adoption of best technology / latest equipment to avoid pollution and to ensure electrical safety.
- Minimize energy losses and promote energy efficiency in all activities.
- Used transformer oil, batteries, and capacitor banks to be disposed of with utmost care as per prescribed norms to minimize any ill effect on the environment.
- Concerns and complaints of affected persons and communities should be addressed in a manner that is fair, objective, and constructive. A mechanism

shall be established to enable individuals and communities affected by any operational activities to raise their grievances.

70. The features and aspects of the previous policy which covered both transmission and distribution systems are still valid if applicable to the projects. The targeted support to vulnerable groups is only triggered when there is land acquisition, thus will not be triggered for the MFF program so long as there is no land acquisition.

(i) Loss of Privately-owned Land: The lost land will be compensated at replacement value. Wherever people lose more than 25% of holding; or remaining land holding becomes less than one standard hectare; of lands belonging to vulnerable groups, they will be offered land for land option and also be given rehabilitation grant equivalent to 750 days of minimum agricultural wages.

(ii) Loss of House and Other Assets: The loss of house, house annexure, wells and any other structure will be compensated at replacement value which will be calculated based on the Public Works Department's basic schedule rates applicable for new construction without deducting the depreciation value. Wherever there are more than 25 households then alternative resettlement sites will be developed with adequate basic infrastructure and utilities.

(iii) Squatters and Encroachers: Squatters and encroachers are generally not entitled legal compensation under Land Acquisition Act. however, in order to prevent them from further impoverishment and to improve their living standards the project will give certain targeted support and assistance to the squatters falling under vulnerable category.

(iv) Loss of Access to Common Properties: The loss of access to common properties such as wells, grazing lands, worship places etc. will be replaced in the adjacent areas.

(v) Targeted Support to Vulnerable Groups: For affected women members, it is proposed to register the allotted house site or agricultural land in the joint name of the Affected Person and his/her spouse. Any award of cash grant should also be given in the joint name of the Affected Person and his/her spouse. Other measures for women include giving transition allowance-equivalent to 20 days of minimum agricultural wages per month for six months-to women headed households of all categories, extending assistance in utilizing the government schemes on women development. These additional assistance measures are over and above the normal measures proposed for Affected Persons of any gender under Entitlement Framework. Indigenous People's Development Plans (IPDP) are to be prepared in the case of acquisition of any loss from the tribal population where their number is large for UPPCL projects. The tribal being socially cohesive groups, it is essential that they should be rehabilitated in surroundings, which are similar to the area from which they are displaced.

B. ADB Safeguard Policy Statement and Categorization

71. The objectives of ADB's Safeguard Policy Statement (2009) regarding involuntary resettlement are:

(i) to avoid involuntary resettlement wherever possible;

(ii) to minimize involuntary resettlement by exploring project and design alternatives;

(iii) to enhance, or at least restore, the livelihoods of all displaced persons in real terms relative to pre-project levels; and

(iv) to improve the standards of living of the displaced poor and other vulnerable groups.

72. ADB's Safeguard Policy Statement (2009) covers physical displacement (relocation, loss of residential land, or loss of shelter) and economic displacement (loss of land, assets, access to assets, income sources, or means of livelihoods) as a result of (i) involuntary acquisition of land; or (ii) involuntary restrictions on land use or on access to legally designated parks and protected areas. It covers displaced persons whether such losses and involuntary restrictions are full or partial, permanent or temporary.

73. The three important elements of ADB's Safeguard Policy Statement (2009) are (i) compensation at replacement cost for lost assets, livelihood, and income prior to displacement; (ii) assistance for relocation, including provision of relocation sites with appropriate facilities and services; and (iii) assistance for rehabilitation to achieve at least the same level of well-being with the project as without it. The Safeguard Policy Statement gives special attention to poor and vulnerable households to ensure their improved well-being as a result of project interventions.

C. Policy Framework Gaps and Provisions

74. Given that the Right to Fair Compensation and Transparency in Land Acquisition, Rehabilitation and Resettlement Act (2013) does not apply for this Project, the provisions of the Environment and Social Policy of UPPCL and ADB's Safeguard Policy Statement (2009) will apply which provide that any land lost will be compensated at replacement value. While significant impacts are not anticipated for the MFF, in the event of any loss of house, house annexure, wells and any other structure, these will be compensated at replacement value which will be calculated based on the Public Works Department's basic schedule rates applicable for new construction without deducting the depreciation value. Compensation for each potential impact category is outlined in the RP in order to fully align with ADB's Safeguard Policy Statement (2009). Further, as per the Environment and Social Policy of UPPCL, there are no regulatory requirements for preparation of an RP or its disclosure, nor consultation or a specific grievance redress mechanism. In order to meet these gaps, this document and the RP have been prepared and will be disclosed, consultation will continue to be undertaken throughout the Project and a GRM will be established.

75. Table 8 present the gaps analysis between national/state laws and regulations and ADB's Safeguard Policy Statement (2009) provisions.

Table 8: Comparison of Involuntary Resettlement Requirements of ADB and Government of India

Project Stage	ADB	Government of India	Gaps for the Project
Screening and categorization	• Screen the project early on to identify past, present, and future involuntary resettlement impacts and risks. Assigns categories based on potential impacts.	• The electricity Act-2003 and The Indian Telegraph Act, 1885 do not refer to such policy principles.	• Forms and template for screening and due diligence activities are developed and included in Appendices.
Meaningful Consultation	• Carry out meaningful consultations	• The electricity Act-2003 and The Indian	• Consultation forms are developed and

Project Stage	ADB	Government of India	Gaps for the Project
	with affected persons, host communities, and concerned non-government organizations (NGOs).	Telegraph Act, 1885 do not refer to such policy principles.	included in Appendix 8.
Grievance redress Mechanism	• Establish a grievance redress mechanism to receive and facilitate resolution of the affected persons' concerns.	• The electricity Act-2003 and The Indian Telegraph Act, 1885 do not refer to such policy principles.	• A culturally appropriate GRM is to be established to address program related grievances.
Preparation and disclosure of resettlement plan	• Prepare a resettlement plan elaborating on displaced persons' entitlements, the income and livelihood restoration strategy, institutional arrangements, monitoring and reporting framework, budget, and time-bound implementation schedule • Disclose a draft resettlement plan, including documentation of the consultation process in a timely manner, before project appraisal, in an accessible place and a form and language(s) understandable to affected persons and other stakeholders.	• Not specified.	• RP has been prepared and will be disclosed.
Negotiated Settlement	• The borrower will engage an independent	• The electricity Act-2003 and The Indian	• A format for "consent to support" is

Project Stage	ADB	Government of India	Gaps for the Project
	external party to document the negotiation and settlement processes. • The borrower will agree with ADB on consultation processes, applicable policies, and laws; third-party validation; mechanisms for calculating the replacement costs of land and other assets affected; and record-keeping requirements. • For voluntary donation[1], due diligence is needed to: (i) verify that the donation is in fact voluntary and did not result from coercion, using verbal and written records and confirmation through an independent third party; (ii) ensure that voluntary donations do not severely affect the living standards of affected persons and benefit them directly; and (iii) in case of failure of negotiation there will be no acquisition.	Telegraph Act, 1885 do not refer to such policy principles. • The state act has provision for direct purchase with transparent verification procedure.	developed to keep records for negotiated settlement, voluntary donation and third-party acknowledgement . • The process is transparency and no coercion is to be ensured.
Compensation payment	• Pay compensation	• Not specified.	• In case compensation is

Project Stage	ADB	Government of India	Gaps for the Project
	and provide other resettlement entitlements before physical or economic displacement. Implement the resettlement plan under close supervision throughout project implementation.		requested, it will be provided before any displacement.
Monitoring	• Monitor and assess resettlement outcomes, their impacts on the standards of living of displaced persons, and whether the objectives of the resettlement plan have been achieved by taking into account the baseline conditions and the results of resettlement monitoring. Disclose monitoring reports.	• Not specified.	• Monitoring reports are be to prepared semi-annually and disclosed.
Non-title holders	• Ensure that displaced persons without titles to land or any recognizable legal rights to land are eligible for resettlement assistance and compensation for loss of nonland assets.	• They are generally not entitled legal compensation under Land Acquisition Act. However, targeted support and assistance to the squatters falling under vulnerable category are given.	• Non-titled persons are entitled to compensation for the losses of non-land assets.

Project Stage	ADB	Government of India	Gaps for the Project
Vulnerability	• Vulnerable groups, especially those below the poverty line, the landless, the elderly, women and children, and Indigenous Peoples, and those without legal title to land, • Ensure that displaced persons without titles to land or any recognizable legal rights to land are eligible for resettlement assistance and compensation for loss of nonland assets.	• Affected women • Any award of cash grant should also be given in the joint name of the Affected Person and his/her spouse. Other measures for women include giving transition allowance-equivalent to 20 days of minimum agricultural wages per month for six months-to women headed households of all categories, extending assistance in utilizing the government schemes on women development.	• Vulnerable people are (i) below poverty line (BPL) as per the state poverty line; (ii) female or minor (under 18 years) or elder (above 60 year) or differently abled persons headed; (iii) scheduled caste or tribe; and households who are landless; and (vi) who are without legal title to land. The vulnerable status for persons without legal title is determined based on the socioeconomic profile. • In case of compensation is requested, then it will be given commensurate to the impacts on non-land assets.

[1] Voluntary donation is not directly covered under ADB SPS but by ADB good practices.

D. Anticipated Impacts and Eligibility Criteria

76. **Anticipated impacts from output 1:** The scope of output 1 is limited to (i) rehabilitation/replacement of the existing low voltage distribution network by replacing bare conductors with aerial bundled (AB) cables; and (ii) replacing the service wires with armoured cables. The replacement of low voltage conductors, service wires will not have any involuntary resettlement or livelihood disruption impacts as no new poles are to be erected and only the bare conductors are to be replaced with AB cables, which basically bundle overhead power lines tightly together.

77. **Anticipated impacts from output 2**: It is envisaged that the distribution system improvements under output 2 will not include involuntary resettlement impacts that are deemed significant. No land acquisition under law is anticipated. Installation of new 11 kV lines are generally drawn on government land (i.e. along public roads) and only in very rare circumstances, primarily due to technical reasons, the line may be drawn through private (agricultural) land. In similar subprojects, during planning, whenever it is realised that a line will be passing through private land, the DISCOMs have advised turn key contractors (TKCs) to work out an alternative route so as to ensure that the line does not pass through private land and either passes through government land or is aligned along the boundary of two agricultural plots. A similar process is suggested to be followed for output 2 under this Project.

78. However, in some cases, this may not be possible. As such, additional due diligence has been conducted in June and October 2019 to understand the scope of potential impacts on private land which is outlined in the RP. As the exact alignment is not known, information presented in the RP was based on tentative designs which should not be considered as final.

79. For the purpose of developing a budget for the RP the following assumptions have been made (i) for tree cutting/trimming costs a sum of Rs1000 per km. has been allocated (the total length of 11 kV line to be installed across PVVNL and DVVNL is 16,926 kms); (ii) for compensation for crop loss a sum of Rs10,000 has been allocated per habitation (a total of 2,200 habitations are likely to be covered across PVVNL and DVVNL under the feeder separation component); and (iii) for compensation of loss of land due to erection of poles a sum of Rs3,000 is allocated per sq. foot of agricultural land likely to be impacted. It is estimated that 2% of the habitations to be covered by the feeder separation works based on the sample, that is 44 habitations are likely to be affected due to erection of poles in private agricultural land and 10 poles are erected at each habitat.

- **Impacts on Private Land**: Based on the transect surveys, it is estimated that none of the households who have private land will be affected for component two of the Project.
- **Impacts on Structures**: No impacts on any structures (residential, commercial or institutional) are anticipated for component two of the Project, especially given the ability to alter the feeder alignment and pole placement.
- **Temporary Impacts on Crops and Trees**: For new line installations under component two of the Project, there may be some temporary impacts on crops and trees. These will be avoided, wherever possible, but may require tree trimming in the right of way; when lines are installed along agricultural boundaries or if lines are drawn through private agricultural land. The DISCOM, through TKC will pay compensation, as per the entitlement matrix (EM) for such temporary impacts and keep a record of affected households (AHs) who receive payments. After civil works are completed the DISCOM (through the TKCs) will ensure any affected agricultural land is restored to its previous condition.

E. Measures to avoid and reduce project impacts

80. The DISCOMs and its TKCs with support from PMAs will seek to ensure that all new 11 kV lines are drawn on government and/or public land (scenario 1).

81. During planning, when it is realized that a line will have to pass through private land, the DISCOMs and TKCs needs to, as a first option, “work out an alternative route so as to ensure that the line doesn’t pass through private land and passes either through government land or is aligned along the boundary of two agricultural lands.”

82. In cases where the line needs to pass through private land (scenario 2), it shall be the responsibility of the DISCOMs TKCs with support from PMAs to conduct due diligence (attached as Appendix 7) and have a dialogue with the affected persons and village sarpanch (headman/woman) and to record his/her consent for erecting the poles in his village. The DISCOMs and TKCs with support from PMAs will have to use the prescribed formats for recording the discussions with and consents from the affected persons, and village headman/woman (Sarpanch) (attached as Appendix 8). The affected persons will not be coerced or intimidated in any way.

83. In the event there is no alternative, consultations fail, and the line must pass through an affected persons agricultural land, then compensation as per the entitlement matrix is to be paid.

84. Table 9 summarises two emerging scenarios from the point of view of impact on land while laying new 11 kV distribution lines, each of which will require a different process.

Table 9: Scenario details and required process

Scenario	Details (location of poles)	Required Process
Scenario 1	Poles erected on government land along the roads or Poles erected on land along the boundary of two agricultural fields (these narrow strips of land are not privately owned)	Record of land ownership is to be collected and kept by the DISCOMs, PMAs and TKCs to demonstrate that the land is owned by government or public entities.
Scenario 2	Poles erected on private land	If an alternative route is not possible, then discussions on consent to support with the affected persons are required. The DISCOMs, PMAs and TKCs must complete (a) the social due diligence report (SDDR) attached as Appendix 7; and (b) consultation and consent to support checklist as per the format attached as Appendix 8. In the event that the affected person is not willing to donate and there is no alternative route then compensation as per the entitlement matrix is required.

F. Socioeconomic Information/Surveys

85. The socio-economic profile has been prepared based on (i) analysis of secondary data available from the Census, 2011 and Socio Economic and Caste Census (SECC, 2011); and (ii) household survey, conducted in February/March 2019, covering a sample of 840 households (432 and 408 households in PuVVNL and MVVNL respectively) across 21 habitations.

86. As per Census 2011, PuVVNL had a rural population of 55.14 million (8.55 million households) of which 44 million (86%) were residing in habitations with a population of more than 1,000 people. In MVVNL of the rural population of 48.55 million (8.41 million households) 42 million (81%) were residing in habitations with a population of more than 1,000 people. The household survey covered a population of 5,168 people in 840 households. The average household size is 6 persons. While 54% (2,776) of the population covered by the household survey were male, 46% (2,392) were females. The gender of the chief wage earner (CWE) was male for 96% and female for 4% of the households.

87. As per Census 2011, other backward class (OBCs) constituted 40% of the rural population in Uttar Pradesh.[3] As per the household survey 42% of the population covered (5,168 people) belonged to OBCs. As per Census 2011, 22% of the rural population residing in habitations with a population of more than 1,000 people in PuVVNL and 24% in MVVNL, belonged to scheduled castes (SCs). The proportion of SCs in the population covered by the household survey is 28% in both PuVVNL and MVVNL. In 2011, only 1.57% of the rural population residing in habitations with a population of more than 1,000 people in PuVVNL and 0.2% in MVVNL belonged to scheduled tribes (STs). In comparison the proportion of STs among the total population covered by the household survey is around 5% in both PuVVNL and MVVNL. Given that only component one of the Project, which includes replacement of low voltage conductors, service wires and installation of electricity meters will be implemented in PuVVNL and MVVNL, and it is not expected to have any involuntary

[3] The state has around 200 other backward class (OBC).

resettlement or livelihood disruption impacts no impacts are expected on the SC and ST population. Refer to Tables 10 and 11.

88. As per Census 2011, around 9% of households in PuVVNL and 7% in MVVNL were women headed households (Table 11). As per Census 2011, the overall literacy rate in the state is 67.68%, of which the male literacy stands at 77.28% while the female literacy rate is 57.18%.

Table 10: Total Population Covered by Household Survey Disaggregated by Sex and Social Groups (No. And %)

Caste	Total population	% of total population	Males	% males	Females	% females
General	1,287	24.90	698	25.14	589	24.62
OBC	2,193	42.43	1,172	42.22	1,021	42.68
SCs	1,438	27.83	781	28.13	657	27.47
STs	250	4.84	125	4.50	125	5.23
Total	**5,168**	**100.00**	**2,776**	**53.71**	**2,392**	**46.28**

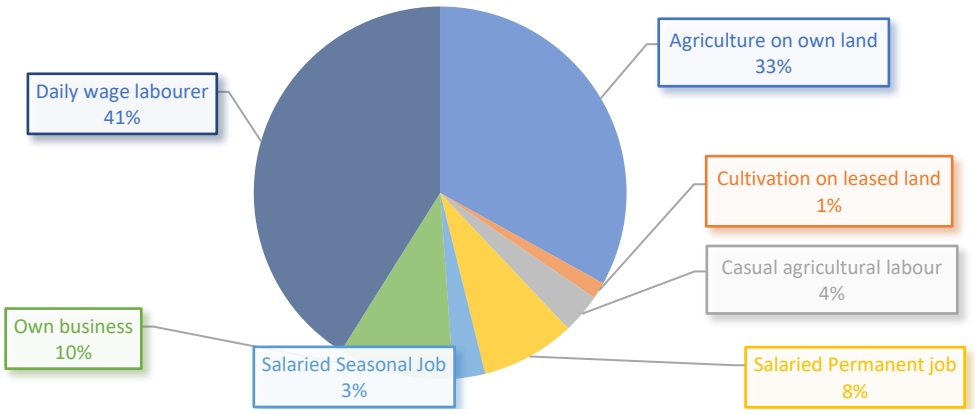
Table 11: Rural Population, Households, SC and ST Population in Rural Habitations in PuVVNL and MVNNL, Census 2011

Parameters / DISCOMs	PuVVNL	MVVNL
Rural population (in Million)	55.14	48.55
Number of rural households (in Million)	8.55	8.41
Total rural population in habitations with > 1000 population (in Million)	44.27	41.86
Proportion of rural population in habitations with > 1000 population (%)	80.29	86.22
SC population in habitations with over 1000 population (in Million)	9.66	10.22
SC population as a proportion of rural population residing in villages with > 1,000 population (%)	21.83	24.40
ST population in habitations with > 1,000 population (in Million)	0.69	0.08
ST population as a proportion of rural population residing in villages with > 1,000 population (%)	1.57	0.20
Women headed households in habitations with > 100 population (in Million)	0.78	0.61
% of women headed households as a proportion of rural households	9.2	7.2

89. Most of the surveyed households (41%) reported that the “main source of income” is “daily wage labour.” The other significant categories for main source of income of the households include “agriculture on own land” (33%) “own business”[4] (10%) and salaried permanent job (8%). Refer to Figure 5.

[4] The category of “own business” includes artisan, auto driver, betel shop, cattle rearing, contractor, cultivation on leased land, driver, electrician, embroidery hand, gardening, general merchant shopkeeper, handicraft work, handloom, juice vending, meat shop, pearl garland making, politician, potter, tuition centre, saloon, sewing machine repair shop, stitching / tailoring shop, street vendor, vegetable shop

Figure 5: Distribution of surveyed households by main source of income



90. While most women, across the surveyed villages, are homemakers some are also engaged in jobs outside their homes as school teachers, community development workers (including ASHA workers and *Anganwadi* workers), running entrepreneurial ventures from home (*Chikan* embroidery, pearl garlands, weaving cotton thread for sarees, packaging and catering), running shops (tailoring, stitching), etc. Most of the women are members of self-help groups (SHGs) and save ₹50 every month and borrow from their group in case of need at an interest rate of 2% per month. Further, a positive trend has been an increase in the number of girls completing their school education and seeking college education in nearby towns and cities.

91. A little over half of the households covered by the survey have a monthly household income of ₹5,000-10,000. While 36% of the households have a monthly income below ₹5,000 only 13% have a monthly income of more than ₹10,000 (Figure). The mean monthly income of households surveyed is ₹5,633.

92. A comparison of the findings from the household survey and the data available from Census 2011 shows that there have been significant improvements in the economic status of rural households during this period (2011-2019). As per the SECC (2011) majority of rural households in PUVVNL (70%) and MVNNL (77%) had a monthly income of less than ₹5,000. Further, only 22% of rural households in PuVVNL and 16% in MVVNL had a monthly income ranging from ₹5,000-10,000. Only 10 and 6% of rural households in PuVVNL and MVVNL had a monthly income of more than ₹10,000 (Refer to Table 12).

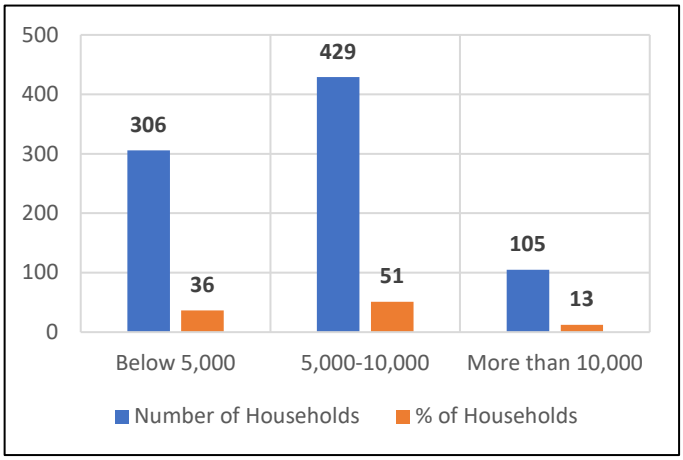


Figure 6: Distribution of households across income categories (No. and %)

Table 12: Proportion of Households Across Different Income Categories in PuVVNL and MVVNL as per SECC, 2011[5]

	PuVVNL	MVVNL
% of households with monthly income of less than ₹5,000 as a proportion of all rural households	70	77
% of households with monthly income of ₹5,000-10,000 as a proportion of all rural households	22	16
% of households with monthly income of more than ₹10,000 as a proportion of all rural households	10	6

93. 57% of all households surveyed across PuVVNL and MVVNL possess below poverty line[6] (BPL) cards (32.2% in PuVVNL and 82.8% in MVVNL).

94. All households covered by the survey have access to electricity. While 56% of households have had access to electricity for less than 3 years, 44% have had access for more than 3 years. Much of the progress related to electrification of rural households in the state has been made since 2017 under the SAUBHAGYA program.

95. All households covered by the survey are connected to the government grid and have a sanctioned load of 1 KW. A vast majority of households (93%) have metered connections. The proportion of households with metered connections is marginally higher in MVVNL (95%) as compared to PuVVNL (90%) primarily because most of the households in MVVNL have been connected for longer.

G. Compensation/Income Restoration

96. The Entitlement Matrix (Table 13) summarizes the main types of losses and the corresponding entitlements in accordance with ADB's Safeguard Policy Statement (2009) and UPPCL's Environment and Social Policy.

Table 13: Entitlement Matrix

	Type of Loss	Affected Persons/Institutions	Entitlement	Details	Responsibility
1	**Private land for 11kV pole installation**	Legal titleholders	Consent for pole erection	• The poles and lines will follow existing roads or vacant public area or government • If there is any interruption to private land, consultation and prior consent will be sought with 3rd party signature. • For impact unavoidable and unacceptable to the owners of assets, compensation will be provided	• DISCOMs and TKC

[5] Government of India. 2011. Socio-Economic Case Census 2011. https://secc.gov.in/welcome
[6] Below poverty line in India is defined as a family earning Rs11,500 per annum.

	Type of Loss	Affected Persons/Institutions	Entitlement	Details	Responsibility
				at replacement cost[1]	
2	**Trees**	All affected households (titled holders and non-titled holders)	Compensation at market value/replacement cost	• Compensation at replacement cost to be computed with assistance of horticulture department. • In case of cutting trees, for fruit bearing trees compensation at average fruit production for next productive years to be computed at market value. • In case of cutting trees, or timber trees compensation at market value based on type of trees and timber will be retained by the owner.	• DISCOMs and TKC
3	**Crops and other agricultural assets**	All affected households (titled holders, sharecroppers, lease holders and non-titled households)	Compensation at market value/ replacement cost	• Compensation at market value to be computed with assistance of agriculture department. • Advance notice to Affected Persons to harvest crops. • In case of standing crops, cash compensation at market value to be calculated of mature crops based on average production.	• DISCOMs and TKC
4	**Damages to structures**	Legal titleholders, non-titleholders, tenants	Repair damages or provided cash compensation to repair damages.	• Compensation for repair of structures at replacement cost. • Cash assistance at market rate for shifting, registration and other charges, if any.	• ·DISCOMs and TKC
5	**Vulnerable households**	(i) below poverty line (BPL) as per the state poverty line; (ii) female or minor (under	In kind support	• Extending assistance in utilising the government schemes for vulnerable households.	• DISCOMs and TKC

	Type of Loss	Affected Persons/Institutions	Entitlement	Details	Responsibility
		18 years) or elder (above 60 year) or differently abled persons headed; (iii) scheduled caste or tribe; and households who are landless; and (vi) who are without legal title to land. The vulnerable status for persons without legal title is determined based on the socioeconomic profile.			
6	**Unforeseen impacts**	Other unforeseen impacts related to loss of assets or livelihood not previously identified.	Compensation at replacement cost commensurate to the impacts	Unforeseen impacts should be documented and mitigative measures have to be proposed within the overall principles and provisions of Entitlement Matrix, the Legal Framework in Chapter VII and the ADB's Safeguard Policy Statement 2009.	• DISCOMs and TKC

[1] The rate of compensation for acquired housing, land and other assets will be calculated at full replacement costs. The calculation of full replacement cost will be based on the following elements: (i) fair market value; (ii) transaction costs; (iii) interest accrued, (iv) transitional and restoration costs; and (v) other applicable payments, if any.

H. Existing Institutional Capacity to Undertake Assessment

97. UPPCL has formulated a Social Policy and Procedure (SP&P) to provide an overall policy and procedural framework to address all adverse social and resettlement impacts systematically arising out of its transmission and distribution projects.[7]

98. The SP&P is meant to be implemented by UPPCL as well its successive companies including DISCOMs for all its projects and so will also need to be applied to the Project.

[7] UPPCL Environmental and Social Policy (https://uprvunl.org/uppcl/en/article/environmental-and-social-policy)

99. The SP&P is meant to be operationalized via social and environmental cell (SEC) under the chief engineer (Planning) at the corporate office in Lucknow headed by a chief engineer (Planning) who is responsible for the overall management of the social aspects associated with UPPCL operations and dealing with grievances at corporate level. At zonal level, UPPCL has a Resettlement and Rehabilitation (R&R) Implementation Committee and the zonal general manager of the DISCOMs (assisted by existing divisional engineers) are meant to be responsible to take care of R&R issues and implementation of social aspects at field level. Most of the corporate and zonal staff have an electrical engineering background. Twenty years ago, the SEC was operational and had experience in implementing the externally funded projects including World Bank and Canadian International Development Agency funded projects. However, consultations with UPPCL have identified that the SEC is not currently operational. Further, the proposed Project will be the first ADB support to UPPCL. Therefore, training will be required on land acquisition, resettlement, and livelihood monitoring and reporting requirements of ADB's Safeguard Policy Statement (2009).

IV. SUBPROJECT SCREENING AND ASSESSMENT PROCESS

100. The SARF outlines the policies, procedures, and institutional requirements for further subproject implementation.

A. Subproject Component Eligibility Criteria

101. In accordance with the eligibility criteria and approval process stipulated in Schedule 4 to the FFA and FAM, the following subproject component eligibility criteria will be applied for the selection of components by turnkey contractors:

(i) All components involving activities included in the ADB Prohibited Investment Activities List (list provided in Appendix 5) must be excluded from the Project.

Environment

(ii) All components/activities that trigger environment category A (e.g. components/activities with significant adverse environmental impacts that are irreversible, diverse, or unprecedented) must be excluded from the Project.

(iii) Components/activities that result in the significant conversion or degradation of natural habitat or which are within a critical habitat[8] must be excluded from the Project.

(iv) Components/activities will not encroach on precious ecosystems or ecologically sensitive areas including legally protected areas such as National Parks, Wildlife Sanctuaries; natural World Heritage sites; Ramsar sites, important bird areas; key biodiversity areas; reserve/protected forest areas; biodiversity heritage sites; wetlands; etc.

(v) Components/activities requiring new poles or lines to be constructed will not encroach on designated buffer zones or corridors between ecologically sensitive areas; conversion of lines to ABC using existing route alignments will only be permitted if the risks to elephants can be avoided by virtue of location and/or design.

(vi) Components/activities with new poles or lines constructed in community or private forest must be excluded, unless it can be demonstrated that no trees need to be cut; conversion of lines to ABC using existing route alignments is permitted.

(vii) Components/activities which would result in significant damage to physical cultural resources or require physical cultural resources to be removed from their current location must be excluded.

(viii) Components/activities will not encroach on historical/cultural areas including ASI monuments or their buffer zones, cultural World Heritage Sites and their buffer zones etc.

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[8] As described in ADB's Safeguard Policy Statement (2009), critical habitat is a subset of both natural and modified habitat that deserves particular attention. Critical habitat includes areas with high biodiversity value, including habitat required for the survival of critically endangered or endangered species; areas having special significance for endemic or restricted-range species; sites that are critical for the survival of migratory species; areas supporting globally significant concentrations or numbers of individuals of congregatory species; areas with unique assemblages of species or that are associated with key evolutionary processes or provide key ecosystem services; and areas having biodiversity of significant social, economic, or cultural importance to local communities. Critical habitats include those areas either legally protected or officially proposed for protection, such as areas that meet the criteria of the World Conservation Union classification, the Ramsar List of Wetlands of International Importance, and the United Nations Educational, Scientific, and Cultural Organization's world natural heritage sites

(ix) Components/activities with new feeder lines constructed across school compounds or buildings must be excluded; conversion of existing lines to ABC will only be permitted if school compounds are not crossed, or minor rerouting takes place to avoid them.

Social

(x) All Involuntary Resettlement category A subproject components should be excluded from the Project.[9]

(xi) All Indigenous Peoples category A and B subproject components (e.g. expected to have any impacts on Indigenous Peoples) shall be excluded from the Project.

(xii) The private land and assets will be avoided as much as possible. Right of ways of existing roads, and vacant government land will be explored first for erecting poles and installing lines. If there are any interference into private land and assets, the procedure of consent to support and/or compensation should be followed.

(xiii) The augmentation work will be undertaken within the existing premises of the current substations, and government land available which are free from informal settlers. No compulsory land acquisition will be adopted for any proposed augmentation work.

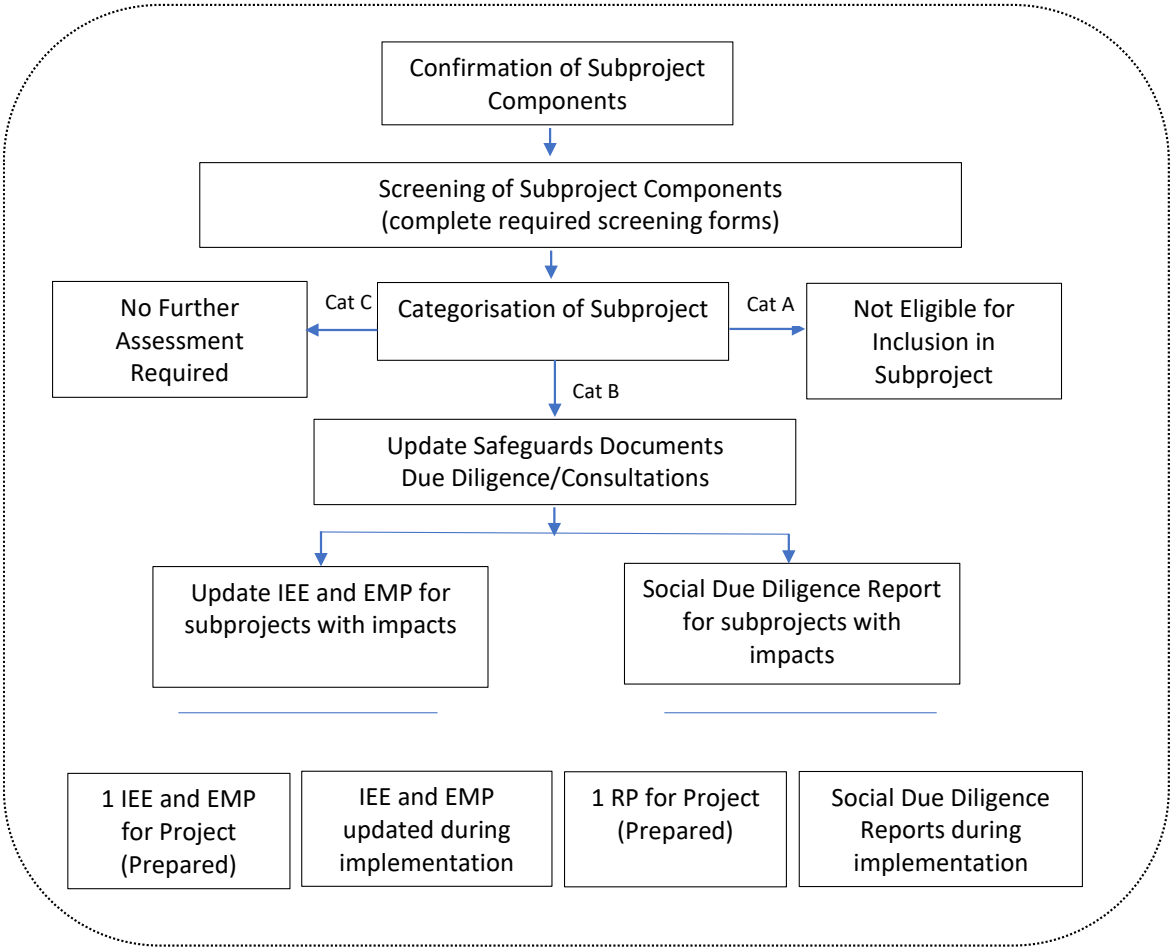
(xiv) There will be no new substations, thus land acquisition for new substations is not required under the project.

B. Procedures for Further Environmental and Social Assessments of Subprojects

102. Figure 7 show the flow chart of the further environmental and social assessment process to be followed for the Project. The process is further elaborated in subsequent paragraphs.

[9] Category A triggered if 200 or more persons will experience major impacts, which are defined as (i) being physically displaced from housing, or (ii) losing 10% or more of their productive assets (income generating)

Figure 7: Further Environmental and Social Assessment Process for the Project



103. Subprojects will first be screened and categorized for environmental and social impacts and risks in accordance with ADB's Safeguard Policy Statement (2009) and the requirements set out in this SARF. If subproject components/activities trigger category A they are not eligible for inclusion. Subproject components/activities that are category C do not require any further assessment, although the project-level EMP in the IEE should still be followed.[10]

104. Further safeguards assessment will then be undertaken for category B subproject components/activities and appropriate safeguards documentation (i.e. updated IEE and SDDRs) prepared, for review and clearance by ADB prior to any construction works taking place. The executing agency for the Project, UPPCL is ultimately responsible for ensuring that the DISCOMs, supported by consultants, undertake subproject screening and update or prepare the required environmental and social safeguards documents (i.e. updated IEE and SDDRs) in accordance with ADB's Safeguard Policy Statement (2009) and the SARF, submitting these to ADB as part of the technical feasibility report, obtaining ADB clearances, and ensuring the safeguard documents (i.e. updated IEE and SDDRs) are disclosed locally and on ADB's website prior to the commencement of construction works by the turnkey contractor.

105. Safeguard documents (i.e. updated IEE and SDDRs) may be further updated following detailed surveys and design by the contractors if required; updates will be subject to ADB clearances and disclosure requirements.

[10] However, the IEE will still be updated in respect of a sample of ABC subprojects as detailed in the next section, even if all the components/activities under these subprojects are determined to be category C

106. The ADB project officer will be responsible for clearing the consolidated screening forms and safeguard documents (updated IEE and SDDRs) for each subproject following Board approval and ensuring they have been prepared in accordance with ADB's Safeguard Policy Statement (2009) and this SARF. However, in the event the categorization is borderline, site-specific environmental assessment or compensation payments are required for a subproject, then they should seek the advice of environment and social safeguards specialists.

a. **Screening and Categorization**

107. Environmental and social screening and categorization will be conducted utilizing the screening checklists (environment, involuntary resettlement, and indigenous people) presented in Part D of Appendix 5. On confirmation of subproject components/activities for inclusion in each subproject, UPPCL will complete one set of checklists per subproject covering all components/activities to be included in that subproject and make a recommendation for the proposed environment, involuntary resettlement, and indigenous peoples categorizations for concurrence by ADB.

108. Completion of the screening checklists will be informed by completion of the required screening forms (Appendix 5) for all subproject components/activities; the consolidated set of screening forms for each division (i.e. division is an administrative unit of the DISCOM and each subproject consists of 10 -15 divisions) will be submitted to ADB as the project progresses for clearance of the subproject categories. Since some subprojects may be implemented by the DISCOMs/contractors on a rolling basis not all components/activities may be confirmed upfront. Works can commence in a particular division upon ADB's clearance of the consolidated set of screening forms for that division, provided no further due diligence is required for subproject components/activities as discussed in paras 111-113.

109. The subproject environment category will be determined by its most environmentally sensitive component/activity based on subproject location. If a component/activity is found to be environment category A, it will not be eligible for consideration under the project. It is anticipated that the subproject components/activities for conversion to ABC will generally be environment category C unless there are locational features that could trigger category B. If conversion to ABC subprojects are not automatically category C based on a negative response to all the screening checklist questions further consideration will be given, in consultation with the ADB environment safeguards specialist, to the potential locational impacts of the most environmentally sensitive component/activity in order to determine the categorization. For feeder separation all subproject component/activities are likely to be categorized as environment category B given that the construction of new lines is involved.

110. The project has minor resettlement impact as it is a distribution intervention of converting to ABC and separating 11 kV feeders without any new substations. The project does not require any land acquisition as all work will be done within the premises of existing substations and the distribution lines will mostly follow existing road or vacant government or public areas, thus most of the subproject categories are expected to be either C (including all ABC subprojects) or B for resettlement. If a subproject component/activity is found to be resettlement category A, then the component/activity will not be eligible for further consideration under the Project.

b. **Update of IEE/Environmental Due Diligence**

111. An IEE has been prepared for the Project based on sample component/activities; however, as components/activities will not be confirmed until the implementation stage further environmental due diligence is required.

- **IEE update for Subprojects for Conversion to ABC (covering all DISCOMs, subprojects and components/activities)**

  These subprojects regardless of categorization will apply the project-level EMP with the relevant requirements included in the contract documents to address the health and safety and waste related issues.

  In updating the IEE, using the IEE update template in Appendix 6, site visits and consultations will be undertaken by the TRTA Consultant for a small sample of subproject components/activities for one ABC subproject of each DISCOM, based on the most environmentally sensitive zone/district (on wider presence in the zone/district of national parks, wildlife sanctuaries, reserve and protected forests, key biodiversity areas etc.) involved. In this respect, the IEE will be updated, cleared by ADB, and disclosed.

  Inputs to the screening forms for the remaining subproject components/activities will be completed by the DISCOMs, consolidated for each division, and submitted to ADB per para. 107 for clearance prior to the commencement of any construction works associated with them. In most, if not all, cases further detailed assessment of conversion to ABC over and above inputs to the screening form will not be required.

  The need for the DISCOMs to update the IEE/EMP before commencing any works under the ABC subprojects will be confirmed by ADB, on receipt of the consolidated set of screening forms following completion of site survey verifications. In the event a site-specific EMP is required, its provisions should also be incorporated into the contract.

- **IEE update for Feeder Separation Subprojects (anticipated as 13 annexes to the IEE covering 13 subprojects and their associated components/activities)**

  Each feeder separation subproject will be the subject of an annex to the updated IEE with all applying the project-level EMP with relevant requirements included in the contract documents.

  In updating the IEE, using the IEE update template in Appendix 6, site visits and consultations will be undertaken by the TRTA Consultant for a sample of components/activities under each subproject, based on the most environmentally sensitive district involved. The IEE will be updated in respect of each subproject, cleared by ADB, and disclosed prior to the commencement of any works under that subproject.

  Inputs to the screening forms and consultation proformas for the remaining subproject components/activities will be completed by the DISCOMs, consolidated for each division, and submitted to ADB per para. 107 for clearance prior to the commencement of any construction works associated with them. Further detailed assessment over and above inputs to the screening forms and consultation proformas will not be required of the DISCOM unless screening identifies it is required, in which case a site-specific assessment and EMP will need to be prepared and be incorporated into the updated IEE and relevant contract documentation. The need for the DISCOMs to further update the IEE/EMP by completing a site-specific assessment and EMP before the contractor commences work will be confirmed by ADB, on the receipt of the consolidated set of screening forms and consultation proformas for each division following completion of site survey verifications. Any such updates to the IEE/EMP will also be subject to ADB clearance, and disclosure before the start of works. In the event a site-specific EMP is required, its provisions should also be incorporated into the contract.

  For the components/activities involving existing substations the environmental audit form (Appendix 5) will be completed and submitted to ADB as part of the

consolidated screening forms in order to identify the short-term and long-term corrective actions for existing facilities (corrective actions are included as part of the project-level EMP in the IEE) that the DISCOMs will need to implement in order to ensure existing facilities meet the ADB's Safeguard Policy Statement (2009) requirements and do not endanger contractors entering the substations to undertake works.

Screening forms and consultation proformas will be completed for all components/activities prior to the detailed designs for those components/activities being approved by the DISCOMs and the commencement of any construction works associated with them.

c. Resettlement Plan/Social Due Diligence

112. A resettlement plan has been prepared for the Project based on the survey results of sample subproject component/activities.

113. Resettlement impact will be avoided and/or minimized, however, if there are any impacts on private assets based on the screening result such as erecting poles and/or cutting of trees on private land, social due diligence will be undertaken by the DISCOM and contractor to seek consents to support. For losses which are unavoidable and unacceptable to the owners of the assets, compensation will be given to commensurate to the impacts in accordance with the resettlement plan. The social due diligence result and compensation details will be documented in a Social Due Diligence Report (SDRR) using the format developed for the project in Appendix 7. The SDDR should be submitted by the DISCOMs to ADB for review and clearance prior to the commencement of construction works it relates to.

V. CONSULTATION, PARTICIPATION AND INFORMATION DISCLOSURE

114. Per ADB's Safeguard Policy Statement (2009), meaningful consultations need to be undertaken particularly for category B subprojects as part of the further safeguards assessments and documented in the preparation of safeguards documents. Meaningful consultation should inform the safeguards assessment before the commencement of any construction works but should also continue throughout project implementation. Consultations at different stages may take the form of public meetings in villages, focus groups e.g. for women, or one-on-one consultations with landowners, adjacent residents etc.

115. Given the current COVID-19 pandemic, in undertaking any face to face consultations it will need to be ensured by the DISCOM and contractor that national COVID-19 requirements[11] and WHO meeting[12] and hand hygiene[13] guidelines are followed, including awareness raising activities for those undertaking consultations, minimizing travel requirements, undertaking screening health checks to confirm those going in the field are not symptomatic, providing them with adequate supplies of personal hand sanitizer and masks, ensuring social distancing of at least 1m, that masks are worn at all times during consultations, and that a register of all contacts is maintained. Consultations should also convey how the DISCOM and contractor will ensure community health and safety during construction.

A. Meaningful Consultations for Further Environmental and Social Assessment (updating of IEE and preparation of SDDR)

116. Meaningful consultations will be conducted by the DISCOMs with the assistance of TRTA consultants as part of updating of IEE and preparation of SDDR with the communities, groups, or people affected by each sample subproject component/activity on which the updated IEE is based as described in para. 110. Consultations for each subproject must ensure a representative percentage of the local community are consulted, as well as gender balance and representation of vulnerable groups.

117. Meaningful consultations will inform participants of details of the subproject and the components/activities relevant to them and the possible environmental and social impacts, collect views and opinions from affected persons, and ensure the subproject responds to them. The following agenda should be used during consultations in conjunction with the proforma in Appendix 8 to ensure that there is adequate exchange of information, views and opinion:

(i) A presentation of relevant components/activities under the subproject including photos, maps and plans;

(ii) A presentation of likely positive and negative environmental, health and safety, and social impacts and risks as discussed in this SARF covering both the construction and operational phases;

(iii) An invitation for feedback and discussion in respect of any areas of environmental and social concern that the participants may have, and suggestions for how they could be addressed;

(iv) A discussion on the potential presence of important habitats, species, physical cultural resources, or other sensitive receptors that might be adversely affected by the subproject;

[11] https://www.mygov.in/covid-19 and https://www.mohfw.gov.in/
[12] https://www.who.int/docs/default-source/coronaviruse/advice-for-workplace-clean-19-03-2020.pdf
[13] https://www.who.int/infection-prevention/campaigns/clean-hands/WHO_HH-Community-Campaign_finalv3.pdf?ua=1

(v) An explanation of the disclosure of the subproject safeguards documents, the availability and operation of the GRM and the contact details for lodging grievances, and, the availability of ADB's Accountability Mechanism; and

(vi) Acceptability of the subproject and relevant components/activities to the participants.

118. For the consultations, the dates, attendees, male/female split, details of any participants vulnerabilities, topics covered, and, views and opinions raised should be recorded and included in the safeguards documents along with details of how the subproject has responded to them using the consultation proforma included in Appendix 8. The aim is for public meetings are to be attended by at least 10% of the village population and have at least 20% representation of women excluding DISCOM and Contractor representatives. If it is not possible at the public consultation a separate gender focus group must be held to ensure the concerns of women and other identified vulnerable groups (e.g. poor) are heard. If public meetings are not possible to convene due to COVID-19 restrictions, then the same representation should be achieved through door-to-door consultations within communities.

B. Meaningful Consultation Prior to Construction Works

119. The DISCOM and contractor will be responsible for completing further consultations during subproject implementation in accordance with the SARF and Project-level EMP ─ consultation proformas (Appendix 8) should be completed by the DISCOMs with support from PMAs for applicable components/activities and submitted to ADB with the consolidated screening forms prior to the contractor's detailed designs for those components/activities being approved by the DISCOM and the commencement of any construction works associated with them.

120. For conversion to ABC cables, the Village Headman (Gram Pradhan) must be informed and the selected feeder separation route posted or distributed in the village using notices or pamphlets (in Hindi and any other appropriate language explaining in writing and visually the proposed works together with the DISCOM and contractor's contact details for more information and providing comments) posted or distributed in the village at least one month before works take place to give time to raise any concerns; the DISCOMs and their contractors should keep a record of this contact and any follow up consultation. The notices and pamphlets must inform of the availability and operation of the GRM and the contact details for lodging a grievance. If new poles are to be erected adjacent to households or in private land, then a one to one consultation with the owners/occupants is to be completed by the DISCOM and contractor and a record kept using the consultation proforma in Appendix 8.

121. For feeder separation subproject components, the Village Headman (Gram Pradhan) must be informed and the selected feeder separation route posted or distributed in the village using notices or pamphlets (in Hindi and any other appropriate language explaining in writing and visually the proposed works together with the DISCOM and contractor's contact details for more information and providing comments) at least one week before works take place to give time to raise any concerns–the DISCOMS and contractors should keep a record of this contact and any follow up consultation. The notices and pamphlets must inform of the availability and operation of the GRM and the contact details for lodging a grievance. The contractor's community liaison officer should convene the consultation meeting with the Village Headman (Gram Pradhan) to which village residents should be invited, minutes of the meeting and attendance record should be kept, and photographs taken, using the consultation proforma in Appendix 8 and ensuring that GRM contact details are shared. For landowners and owners/occupants of adjacent properties to the alignment then a one-one consultation is to be completed by the DISCOM and with support from PMAs before works and a record kept, also using the consultation proforma in Appendix 8.

C. Meaningful Consultation During Construction and Operation

122. During construction and operation, concerned DISCOMs, together with their appointed contractors are obliged to keep affected people and other stakeholders informed of subproject components/activities which are likely to create environmental and social impacts, and allow them to access necessary information about the subproject. During construction and operation each DISCOM and their contractors will continue carry out meaningful consultation and information disclosure in accordance with the project-level EMP and through:

- Divisional offices of the DISCOMs with support of contractors to provide information about the subproject component/activity including contact points, how to access the safeguards documents, details of construction timings and construction progress, and information on the GRM, including its operation and the contact details for lodging a grievance, to the Village Headman (Gram Pradhan) of all subproject villages.
- DISCOMs with support of contractors to post notices in all subproject villages providing the same information as above in order that it is conveyed to landowners and residents─notices or pamphlets will be in Hindi and any other appropriate language.
- Contractors to provide roadside signs at all construction sites to provide the same information as above. As this is a linear project, signs will be moved as needed as construction progresses─signs will be in Hindi and any other appropriate language.

123. During all works a community liaison officer should be posted in the village by the contractor for duration of works for people to consult, this can be same person as the GRM focal.

D. Information Disclosure

124. The updated IEE as per para. 108 and social due diligence report (SDDR) as per para. 110 must be submitted by DISCOMs to ADB and disclosed on ADB's website prior to the commencement of construction works. UPPCL, as executing agency, will send written endorsements to ADB for disclosing the documents on ADB's website. The reviewed updated IEE and SDDR will be disclosed on ADB's website upon receiving UPPCL's written endorsement.

125. UPPCL (and DISCOMs) will also disclose relevant safeguards information from the safeguards documents in a timely manner, in an accessible place and in a form and language(s) understandable to affected people and other stakeholders. It is recommended UPPCL disclose all safeguard documents on their own website and have a hard copy available at the nearest substation to the ongoing subproject components/activities. They should also translate the executive summary into Hindi (and other appropriate) local language and provide copies to affected Village Headman (Gram Pradhan) to be distributed to landowners and villagers.

VI. GRIEVANCE REDRESS MECHANISM

126. GRM can be an effective tool for early identification and resolution of complaints on subprojects. Under the project, it is required that an efficient consultation and grievance redress mechanism be established to assist affected persons to resolve queries and complaints, if any, in a timely manner. The guidelines on GRM will be applied at project and subproject level to assure that adequate resources are made available for the project GRM to function effectively.

127. ADB's Safeguard Policy Statement (2009) requires the establishment of a responsive, readily accessible and culturally appropriate GRM capable of receiving and facilitating the resolution of affected persons' concerns and grievances about the physical, social and economic impacts of the project. The GRM aims to (i) reduce conflict, risk of undue delay and complication in Project implementation; (ii) improve the quality of Project activities and outputs; (iii) ensure that the rights of affected persons are respected; (iv) help identify and respond to unintended impacts of Project on individuals; and (v) maximize participation, support and benefits to local communities. The proposed GRM for the Project is presented in Table 14 and Figure 8.

128. The proposed GRM, which will handle both environmental and social grievances, includes grievance redress committees (GRCs) to be setup by UPPCL (EA) at Project (corporate) level and each DISCOM HQ (IA) to provide the means for the effective resolution of complaints and issues on each subproject. The GRCs will be convened as necessary by the UPPCL or DISCOM grievance focal point (GFP) and, in addition, include a representative of the affected person, a representative of women groups, the relevant Village Headman (Gram Pradhan), the relevant zonal or DISCOM chief engineer, a nominated divisional forest officer or equivalent for environment safeguards grievances or nominated district revenue officer as nodal officer for social safeguards grievances, and, the designated GFP of the contractor dealing with the environmental or social safeguards as applicable. The GRCs will meet as and when a major grievance (i.e. grievance which cannot be resolved at contractor or DISCOM level) arises.

129. The fundamental objectives of the GRM are:

(i) To reach mutually agreed solutions satisfactory to both, the Project and the affected persons, and to resolve any Project-related grievance locally, in consultation with the aggrieved parties;

(ii) To facilitate the smooth implementation of the EMPs and RP and resolution of compensations and prevent delay in subproject implementation;

(iii) To democratize the development process at the local level, while maintaining transparency as well as to establish accountability to the affected people;

(iv) To facilitate an effective dialogue and open communication between the Project and affected persons; and

(v) To have clear definition of roles and responsibilities of the various parties involved in consideration and resolution of grievances.

Figure 8: Chart View of Grievance Handling Process

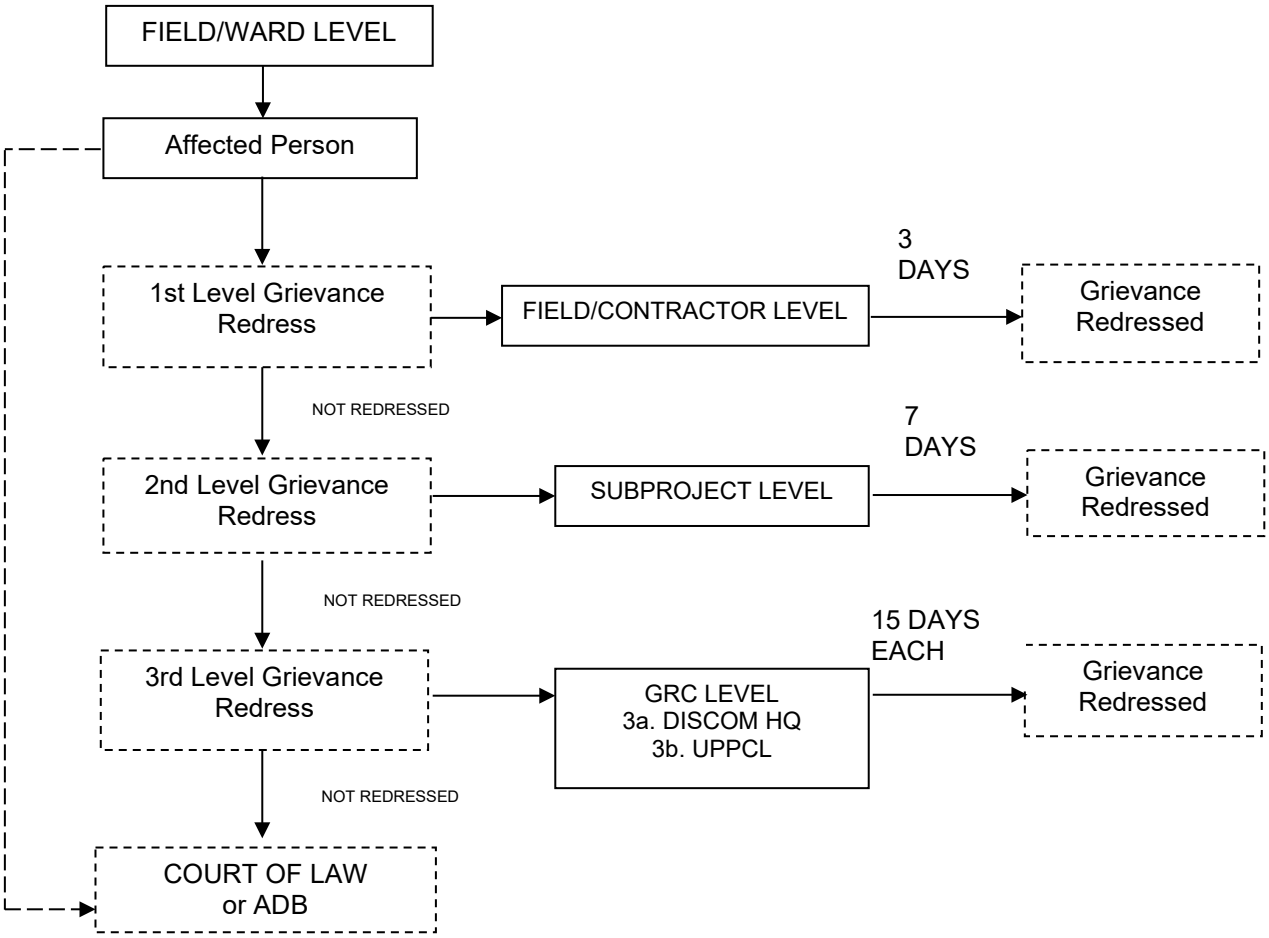


Table 14: Grievance Handling Process

Level	Name of Level	Description	Time frame[14]
1	Field level (by contractor and DISCOM field officials)	One Grievance Focal Person (GFP) will be assigned by each contractor and the DISCOM in order to receive and handle grievances. Complaints can be registered by contractor or directly to DISCOM. Contractor's GFP should receive the complaint (written or verbal) and provide acknowledgement letter to the complainer within 3 days after receipt of the complaint. Contractor's GFP should maintain data of Grievance Logbook and submit/update all necessary data related to the registered grievances to the DISCOM's GFP on a weekly basis. Upon resolution the Contractor's GFP should convey the solution to the affected person and seek their concurrence (written or verbal) that it is acceptable to them. If the grievance cannot be solved within 3 working days, then Contractor's GFP should submit	3 working days

[14] The health and safety issues and ongoing issues which pose a life-and-death risk shall be resolved immediately on receipt.

Level	Name of Level	Description	Time frame[14]
		information to the next level (DISCOM GFP at subproject level) and provide updated information to the complainant regarding the grievance resolution process being followed.	
2	MFF subproject level (DISCOM GFP)	The DISCOM GFP for each subproject should review the grievance with the support of the environment and social safeguards officers and resolve it within 7 working days. If the case is complex and requires investigation (experts' opinion) expertise or confirmations from the state bodies, the resolution period can be extended up to 15 calendar days. Upon resolution the DISCOM's GFP should convey the solution to the affected person and seek their concurrence (written or verbal) that it is acceptable to them. If the grievance cannot be resolved still, or the complaining party is not agreed with the offered solution, then the DISCOM GFP should submit information to the next level (DISCOM HQ GRC) and provide updated information to the complainant regarding the grievance resolution process being followed. DISCOM's GFP should maintain data of Grievance Logbook and submit/update all necessary data related to the registered grievances to DISCOM HQ and UPPCL on a monthly basis.	7 working days
3a	Implementing Agency level Grievance Redress Committee (DISCOM HQ)	The DISCOM GFP will request the DISCOM HQ GRC to review the grievance and resolve it within 15 calendar days. If the grievance is found invalid (after investigation of the GRC) a written response should be given to the complaining party explaining the reasons for its rejection. Otherwise a written response explaining the resolution should be provided to the complaining party and their concurrence (written or verbal) sought by the DISCOM GFP to confirm that it is acceptable to them. If the grievance cannot be resolved still, or the complaining party is not agreed with the offered solution, then the DISCOM GFP should submit information to the next level (UPPCL GFP and GRC) and provide updated information to the complainant regarding the grievance resolution process being followed.	15 working days
3b	Executing Agency level Grievance Redress Committee (UPPCL)	The UPPCL GFP will request the UPPCL GRC to review the grievance and resolve it within 15 calendar days. If the grievance is found invalid (after investigation of the GRC) a written response should be given to the complaining party explaining the reasons for its rejection. Otherwise a written response explaining the resolution should be provided to the complaining party and their concurrence (written or verbal) sought by the DISCOM GFP to confirm that it is acceptable to	15 working days

Level	Name of Level	Description	Time frame[14]
		them.	
4	Court or INRM	If the affected person is still not satisfied with the GRC decision, the affected person can submit his/her complaint to the appropriate court of law in India for its resolution. The GRM does not impede access to the country's judicial or administrative remedies, so the project affected persons can file the case to the court of law regardless of the GRM stage and process. In addition, the affected person may raise the concern with ADB Operations Department through INRM for resolution. Project-affected people can also submit complaints to ADB's Accountability Mechanism. The Accountability Mechanism provides an independent forum and process whereby people adversely affected by ADB-financed projects can voice, and seek a resolution of their problems, as well as report alleged violations of ADB's operational policies and procedures.	Depends on nature of the complaint

130. *Receiving grievances*: All the received grievances should be registered by the GFPs of contractor and DISCOMs. Submitting grievances and registration should be a straightforward process, and the affected persons should be able to submit their grievances and questions directly or through a third party. This process requires availability of (i) responsible person to receive and register the complaints (GFP); (ii) multiple points (at field, DISCOM office) for receiving grievances; (iii) procedure for acknowledging the receipt (registered and signed) and informing the complaining party about the expected timeframe for the review and resolution; and (iv) grievance logbook about the complaints and their status.

131. The complaining party should be able to submit grievance in person, by phone call, email, letter or fax, to the GFP assigned by the contractor or DISCOM. Receipt of grievance lodged in person or via phone should be acknowledged immediately by a paper issued by the GFP or other persons who received the grievance. Any documentation relating to submitting and feeding back on grievances should be in Hindi (and other appropriate) local language.

132. All the grievances, however minor, and regardless of its nature and eligibility, should be recorded in a grievance logbook in detail. Upon receipt of grievances, the contractor's GFP in coordination with the DISCOM GFP should sort them into the following categories to define if the complaint is eligible for the Project established GRM. The procedure should establish clear parameters (if complaint is caused by the Project activities) for qualifying grievance as eligible or ineligible for the Project established GRM. The following types of grievances are not eligible for resolution by the Project established GRM:

- Grievances that are not related to the Project, or
- Grievances that should be reviewed by separate, more appropriate procedures (e.g. issues of fraud and corruption).

133. *Feedback provision*: After receiving grievance, the GFP (or other responsible person) should:

- Provide acknowledgement of the grievance receipt, with response/ recommendations to complainant;

- Provide the complainant with information about the status of grievance resolution in each of the grievance resolution levels;
- If the resolution is not reached or seem to be unreachable in a given level, the grievance should be passed on to the next level and the complainant should be informed accordingly. Information to the complainant shall include the date when the case was passed on to the next level and the date by which the resolution is expected; and
- The resolution proposed at each level should be informed to the complainant.

134. In all the levels, the parties involved in resolution for grievance should closely discuss the issue and resolution alternatives with the complainant in order to come to the resolution that is reasonable and acceptable for all parties.

135. *Reporting:* The DISCOM is responsible to monitoring implementation of the Project established GRM and reflect the outcomes in the safeguard monitoring reports.

- The GFP of the contractor should document and monitor the grievance status in a grievance logbook. All grievances, no matter how minor, and regardless if immediately resolved by the contractor, will be logged.
- GFP of the contractor should report to GFP of the DISCOM on GRM on weekly basis and immediately inform them on receipt of any grievance.

136. GFP of the DISCOM will record all grievances, no matter how minor, and regardless if immediately resolved by the contractor, in a tracking table (provided by ADB–Table 15) and report on a monthly basis to the UPPCL GFP and to ADB on semi annual basis through the safeguard monitoring reports and immediately inform them of any grievance which reaches level 3a or 3b of the GRM. Besides, all grievances and their status along with details of the grievance and their resolution should be reflected in the safeguard monitoring reports.

Table 15: Grievance Registration Form

(Project: Uttar Pradesh Power Distribution Network Rehabilitation)

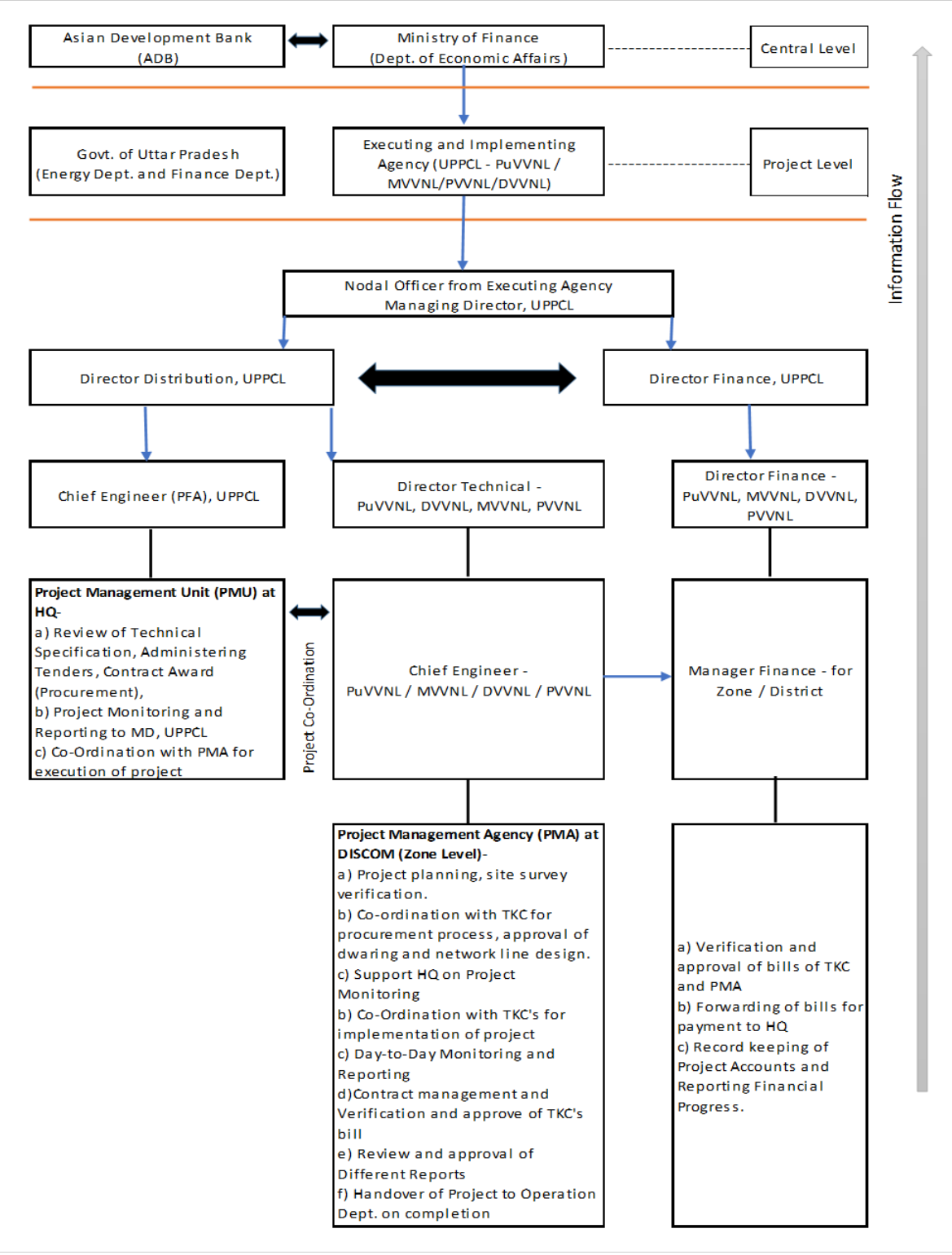
No	Title of complaint	Type of complaint	Date received	Name of plaintiff	Contact details of plaintiff	Summary of complaint	Action taken	Status of complaint / date	Notes/ comments

VII. INSTITUTIONAL ARRANGEMENTS AND RESPONSIBILITIES

A. Project Implementation Arrangements

137. Figure 9 shows the overall Project organisation structure.

Figure 9: Project Organization Structure



138. The main institutions that will be involved in environmental and social management activities are UPPCL as the Project executing agency and the four DISCOMs as Project implementing agencies. Three sets of consultants will provide safeguards support to UPPCL and the DISCOMs to help them implement the Project,

(i) TRTA consultants will be recruited by ADB under the accompanying TRTA project to (a) support the DISCOMs with updating the IEE and preparing social due diligence reports in accordance with the SARF for clearance by ADB prior to the commence of construction works, and assist with updating them during further implementation if required; (b) provide safeguards capacity development to UPPCL, the DISCOMs, and their consultants and contractors; and (c) ensure UPPCL, the DISCOMs, and their consultants are undertaking adequate safeguards supervision and monitoring during project implementation. The TRTA consultants will comprise national environment and social assessment specialists, international environment and national environment, health and safety supervision specialists and national social development specialist. TOR for the safeguards TRTA consultants are included in the TA paper.

(ii) PMC at UPPCL will assist UPPCL and their Project Management Unit (PMU) in overall coordination and project management. They will support the executing agency prepare environmental and social monitoring reports during project implementation, help establish the GRM and address grievances received, and help ensure compliance with the safeguard requirements including the SARF, IEE, EMPs, and RP. The PMC contract has already been advertised, it is currently scheduled to include one environment specialist for 4 person months, and one social specialist for 4 person months, these time inputs are for a period of 24 months and given project implementation is until 2029 will need to be extended given the duration of the Project and the number of subproject component/activities involved.

(iii) Four PMA (consultant teams) to support each of the DISCOMs with day to day project implementation. They will support the implementing agencies in completing environment and social screening forms, undertaking site visits and consultations, establishing the GRM and addressing grievances received at subproject level, supervising and monitoring their contractors day to day work, and ensuring compliance with the safeguard requirements including the SARF, IEE, EMPs, and RP. The PMAs' contract has already been advertised, it does not include dedicated environment and social specialists. However, the PMA consultant team will be required to support the DISCOMs in ensuring adequate supervision and monitoring of project implementation.

139. Responsibility for environmental and social management and compliance with ADB's Safeguard Policy Statement (2009) requirements ultimately lies with UPPCL. UPPCL has the ultimate responsibility for all aspects of the Project. A PMU will be established within UPPCL which will be responsible for the overall management of the technical, environmental, and social aspects of the Project with the support of the PMC. UPPCL will be required to nominate as part of the PMU at least one suitably qualified and experienced staff to be receiving trainings and act as their (i) environmental focal; (ii) occupational health and safety focal; and (iii) social focal (also acting as GFP for UPPCL) to liaise with the DISCOMs.

140. Each DISCOM will act as implementing agency for their respective jurisdictions and a nominated DISCOM Project Manager will be responsible for the day to day management of the technical, environmental, and social aspects of the Project. In addition, each DISCOM will be required to nominate at least one suitably qualified and experienced staff to receive

trainings and act as environment focal, health and safety focal, and community liaison/GFP for the DISCOM.

141. UPPCL and the DISCOMs will ensure that the specified staff resources and adequate environmental and social management and monitoring budgets are available to the Project and utilized as necessary for timely and satisfactory safeguards implementation.

142. Each contractor, for each contract package if they are awarded multiple contracts, will nominate the following to receive trainings prior to the commencement of works and ensure compliance with the safeguard requirements including the SARF, IEE, EMPs, and RP (i) one appropriately qualified and experienced, dedicated Environment Officer designated with responsibility for ensuring implementation of the project-level EMP and any site-specific EMP included in the updated IEE; (ii) one appropriately qualified and experienced, dedicated Health and Safety Officer designated with responsibility for ensuring implementation of the health and safety requirements under the project-level EMP and any site-specific EMP included in the updated IEE; (iii) one appropriately qualified and experienced, dedicated community liaison officer who will also act as the GFP for the contractor to undertake consultations and deal with any grievances received by the subproject; and (iv) appropriately qualified and experienced environment, health and safety site supervisors (several site supervisions will be required, the actual number depending on the scheduling of works) responsible for day to day implementation of the EMPs who will be permanently based on-site for the duration of all construction works being undertaken for each subproject component/activity implemented.

143. The main responsibilities of each institution are listed below (this is not an exclusive list):

a. **UPPCL (PMU) Responsibilities with Support PMC**

(i) Ensure that all environment and social safeguards requirements as given in ADB's Safeguard Policy Statement (2009), this SARF, applicable laws and rules of the Government of India and Uttar Pradesh Government, and UPPCL social and policy procedure (SP&S) and environmental framework and safeguards (EFS) for transmission and distribution projects, the IEE, EMPs, and RP are being fully complied with during all tranches and stages of the subprojects supported by the Project, including counterpart funded components/activities.

(ii) Nominate at least one suitably qualified and experienced staff to act as the PMU's (a) environmental focal, (b) occupational health and safety focal, and (c) social focal (also acting as GFP for UPPCL) to liaise with the DISCOMs.

(iii) Ensure that all required environment and social safeguards documents (i.e. consolidated screening forms, consultation proformas, updated IEE, social due diligence reports) are prepared as required by the DISCOMs for all subprojects and components/activities prior to the DISCOM's approval of the contractor's detailed designs and the commencement of any construction works associated with them.

(iv) Review and approve all environment and social safeguards related documents prepared (consolidated screening forms, consultation proformas, updated IEE, social due diligence reports, safeguard monitoring reports etc.) seeking recommendations and clarifications from the DISCOMs where necessary prior to endorsement and submission to ADB for clearance and disclosure on the ADB website.

(v) Timely endorsement and signing of key documents and forwarding to the respective agency such as documents required for the processing of tree cutting permission, etc.

(vi) Taking proactive and timely measures to address any environment and social safeguards related challenges at the national or state level such as delays in processing of clearances (during pre-construction stage) or significant grievances.

(vii) Ensure that the DISCOMs have access to the SARF, IEE, EMPs and RP and that they fully understand their responsibilities to implement the requirements set out therein and to mitigate the environmental and social impacts associated with the design, pre-construction, construction, and operational and maintenance stages of the Project and, supported by the TRTA consultants, provide necessary safeguards training to their staff and contractors.

(viii) Ensure that the requirements of the SARF, EMPs and RP as relevant to the contractor are incorporated by the DISCOMs in the contract documents for each subproject.

(ix) Support the DISCOMs in reviewing and approving contractor sub-plans e.g. construction EMPs plus traffic management plans, construction waste management plans, and health and safety plans.

(x) Support the DISCOMs in undertaking ongoing consultation and establishing and implementing the GRM, ensuring effective implementation of the GRM and that all relevant concerns and complaints are being promptly and effectively addressed by the DISCOMs.

(xi) Supervise and monitor that the SARF, EMPs and RP are being properly implemented.

(xii) Ensure that the DISCOMs submit their quarterly reports for consolidation into and prepare the semi-annual combined environmental and social monitoring reports.

(xiii) Submit semi-annual combined environmental and social monitoring reports to ADB.

(xiv) In case unanticipated environmental and social impacts occur during the Project implementation stage, including design changes, for example, due to site conditions encountered by contractors following the approval of detailed designs, inform ADB, and, as required, ensure the DISCOMs update the IEE, EMPs and RP for clearance by ADB before any changes are implemented by the contractor.

(xv) In case of non-compliance, inform ADB, and prepare in consultation with relevant government agencies and implement as necessary a corrective action plan for clearance by ADB.

b. **DISCOM (Project Manager) Responsibilities with Support PMAs**

(i) Together with UPPCL, ensure that all environment and social safeguards requirements as given in ADB's Safeguard Policy Statement (2009), this SARF, applicable laws and rules of the Government of India and Uttar Pradesh Government, and UPPCL SP&S and EFS for transmission and distribution projects, the IEE, EMPs, and RP are being complied with during all tranches and stages of respective subprojects supported by the Project, including counterpart funded components/activities.

(ii) Nominate at least one suitably qualified and experienced environment focal, health and safety focal, and community liaison focal who will also act as the GFP for the DISCOM.

(iii) Prepare all required environment and social safeguards documents (i.e.

consolidated screening forms, consultation proformas, updated IEE, social due diligence reports) for all subprojects and components/activities and obtain ADB clearance prior to the DISCOM's approval of the contractor's detailed designs and the commencement of any construction works associated with them.

(iv) Undertake site visits and consultations with villagers and landowners and complete the environment and social screening forms and consultation proformas for all subproject components/activities in accordance with the SARF requirements.

(v) Provide necessary support and all required documentation to the TRTA consultants to enable them, on behalf of the DISCOMs, to adequately support preparation of the updated IEE and SDDRs in accordance with the SARF requirements.

(vi) Obtain necessary permits and/or clearances from relevant government agencies (except those required to be obtained by the contractor) ensuring that all necessary regulatory clearances are obtained before the contractor is given permission to commence any construction works on the relevant components/activities.

(vii) Timely endorsement and signing of key documents and forwarding to the respective agency such as documents required for the processing of tree cutting permission by contractor, etc.

(viii) Implement the SARF, EMPs and RP in respect of actions which have been allocated to the DISCOMs during the design, pre-construction, construction, and operation and maintenance stages.

(ix) Ensure that the requirements of the SARF, EMPs and RP as relevant to the contractor are incorporated in the contract documents for each subproject.

(x) Ensure that the contractors have access to the SARF, IEE, EMPs and RP and that they fully understand their responsibilities to implement the requirements set out therein and mitigate environmental and social impacts associated with their design, pre-construction and construction activities and with support of UPPCL/TRTA consultants provide necessary safeguards training to them.

(xi) Review and approve contractor sub-plans e.g. construction EMPs plus traffic management plans, construction waste management plans, and health and safety plans.

(xii) Undertake ongoing consultation and establish and implement the GRM, ensuring effective implementation of the GRM and that all relevant concerns and complaints are being promptly and effectively addressed at DISCOM level.

(xiii) Undertake the requisite quantitative environmental and social monitoring as set out in the EMPs and RP during design, pre-construction, construction and operation.

(xiv) Supervise and monitor that the SARF, EMPs and RP are being properly implemented on a day to day basis.

(xv) Ensure that the contractors submit monthly environmental and social management reports (to be included as part of contractors' monthly progress reports) for consolidation into and prepare quarterly reports on environmental and social safeguards.

(xvi) Submit quarterly reports on environmental and social safeguards to UPPCL for consolidation into the semi-annual combined environmental and social

monitoring reports.

(xvii) In case unanticipated environmental and social impacts occur during the Project implementation stage, including any design changes, inform UPPCL, and, as required, update the IEE, EMPs and RP in consultation with relevant government agencies for clearance by ADB before any changes are implemented.

(xviii) In case of non-compliance, inform UPPCL, and help prepare in consultation with relevant government agencies and implement as necessary a corrective action plan for clearance by ADB.

c. **Turnkey Contractors' Responsibilities**

(i) Nominate the:

a. appropriately qualified and experienced, dedicated Environment Officer designated with responsibility for ensuring implementation of the project-level EMP and any site-specific EMP included in the updated IEE;
b. appropriately qualified and experienced, dedicated Health and Safety Officer designated with responsibility for ensuring implementation of the health and safety requirements under the project-level EMP and any site-specific EMP included in the updated IEE;
c. appropriately qualified and experienced, dedicated community liaison officer who will also act as the GFP for the contractor to undertake consultations and deal with any grievances received by the subproject; and
d. appropriately qualified and experienced environment, health and safety site supervisors (several site supervisions will be required, the actual number depending on the scheduling of works) responsible for day to day implementation of the EMPs who will be permanently based on-site for the duration of all construction works being undertaken for each subproject component/activity implemented.

(ii) Confirm line alignments for the conversion to ABC and 11 kV feeders for approval by the DISCOMs, provide the inputs required for completing the subproject screening forms for subproject components/activities to the DISCOMs.

(iii) Assist the DISCOMs in undertaking consultation; disclose the proposed line alignment for feeder separation, including pole locations in private land, prior to the consultation.

(iv) Obtain the details of any landowners on whose land poles are to be erected and record the discussions with and consents from the affected persons, and village headman/woman.

(v) Implement the requirements of the SARF, EMPs and RP as relevant to the contractor and as incorporated in the contract documents, and specifically the project-level EMP and any site-specific EMPs included in the updated IEE, in respect of actions allocated to the contractor during the design, pre-construction and construction phases.

(vi) Inform the DISCOM if there is a need to review and update EMPs (and the IEE if required) based on site conditions i.e. a change in subproject scope or design is required and, if needed, provide documentation to update the IEE and EMPs.

(vii) Prepare sub-plans including construction EMPs plus traffic management plans, construction waste management plans, and health and safety plans as specified in the project-level EMP for review and approval by the DISCOM.

(viii) Ensure that construction workers including all formal and informal subcontractors understand their responsibilities to implement the EMPs and RP and mitigate environmental and social impacts associated with their design, pre-construction and construction activities and with support of UPPCL and the DISCOM provide training to construction workers as required.

(ix) Support the DISCOM in undertaking ongoing consultation and implementing the GRM.

(x) Undertake the requisite quantitative environmental monitoring as set out in the EMPs during detailed design, pre-construction, and construction.

(xi) Submit monthly environmental management reports to the DISCOM (as part of the contractors' monthly progress reports). These reports will identify the details of work undertaken over the reporting period and document the environmental and social measures including monitoring activities that have been carried out on a component/activity basis, problems encountered, and follow-up actions that were taken (or will be taken) by the contractor to correct the problems.

(xii) In case unanticipated environmental and social impacts occur during the Project implementation stage, including design changes, for example, due to site conditions encountered by contractors following the approval of detailed designs, inform DISCOM, and, as required, help them to update the IEE, EMPs and RP for clearance by ADB before any changes are implemented.

(xiii) In case of non-compliance, inform the DISCOM, and help the DISCOM prepare and implement as necessary a corrective action plan for clearance by ADB.

d. **PMC and PMA Responsibilities**

144. Given UPPCL and DISCOM do not currently have adequate capacity and have not previously implemented an ADB project, the PMC and PMA consultant teams can complement and backstop UPPCL and the DISCOMs in meeting their responsibilities as outlined above, including but not limited to:

(xiv) undertaking site visits and consultations with villagers and landowners and completing the environment and social screening forms and consultation proformas for subproject components/activities in accordance with the SARF requirements;

(xv) providing necessary support and documentation to the TRTA consultants to enable them to provide the updated IEE and social due diligence reports for subprojects;

(xvi) reviewing contract documents to ensure SARF, EMPs and RP requirements as relevant to the contractors have been included, or assisting with variations if required;

(xvii) reviewing contractor sub-plans e.g. construction EMPs plus traffic management plans, construction waste management plans, and health and safety plans;

(xviii) establishing environmental and social monitoring and reporting procedures that are in accordance with ADB's Safeguard Policy Statement (2009), SARF, EMPs and RP requirements;

(xix) providing input on safeguards and GRM for regular project progress reports;

(xx) undertaking environmental and social compliance supervision and monitoring; and

(xxi) preparing the semi-annual combined environmental and social monitoring reports.

e. ADB's Responsibilities

(i) review and approval of subproject component/activity eligibility in accordance with the subproject component eligibility criteria and the subproject safeguards categorizations;

(ii) review and clearance of subproject safeguard documentation prepared by UPPCL and DISCOMs i.e. updated IEE, social due diligence reports prior to approval to commence works;

(iii) review and clearance of semi annual combined environmental and social monitoring reports;

(iv) disclosure of all cleared documents on the ADB website in accordance with ADB's Safeguard Policy Statement (2009);

(v) conduct review mission regularly including site visits as needed during the Project implementation to confirm compliance with the SARF, EMPs and RP;

(vi) in case of significant issues, conduct supervision missions with detailed review by ADB's safeguard specialists/officers or consultants;

(vii) review the semi-annual combined environmental and social monitoring reports submitted by UPPCL to ensure that adverse impacts and risks are mitigated as planned and agreed with ADB;

(viii) work with UPPCL and DISCOMs to rectify to the extent possible any failures to comply with their safeguard commitments, as covenanted in the loan agreement, and exercise remedies to re-establish compliance as appropriate; and

(ix) prepare a project completion report that assesses whether the objective and desired outcomes of the SARF, EMPs and RP have been achieved, taking into account the baseline conditions and monitoring results.

A. Institutional Capacity Development

145. Given UPPCL and DISCOM do not currently have adequate capacity and have not previously implemented an ADB project, as well as the consultant support, which is to be provided, training activities are required. Table 16 shows the training activities; DISCOM training centers can be used to provide the trainings. Renumeration costs for consultants (resource persons) are separate to the below breakdown.

Table 16: Summary of Training Activities

Item	Attendees	Delivered By	Number	Timing	Estimated Cost ($)	Budget Source
ADB's Safeguard Policy Statement (2009), SARF, undertaking Screening and Categorization, Meaningful Consultations, and Assessment of Subprojects including Auditing of Existing	UPCCL safeguard focals, DISCOM PM and safeguard focals, PMA consultants contractor EHS staff	TRTA Consultants (Environmental, H&S and Social Experts)	x2 per DISCOM, maximum attendees 40 number.	Delivered at commencement of Tranche 1	12,000	UPPCL contribution

Item	Attendees	Delivered By	Number	Timing	Estimated Cost ($)	Budget Source
Substations						
a. PCB awareness and national requirements, and b. Hazardous materials and waste management system/procedure (train-trainers)	UPCCL safeguard focals DISCOM PM and safeguard focals DISCOM O&M Staff PMA Consultants Contractor EHS Staff	TRTA Consultants (Hazardous Materials and Waste Management Expert)	x2 per DISCOM, maximum attendees 40 number.	Delivered at commencement of Tranche 1	12,000	UPPCL contribution
ADB's Safeguard Policy Statement (2009), EHS Guidelines, Implementing EMP and RP and Preparing Environmental and Social Monitoring Reports	UPCCL Safeguard Focals DISCOM PM and Safeguard Focals PMC E&S Specialists PMA consultants contractor EHS staff	TRTA Consultants (Environmental, H&S and Social Experts)	x2 per DISCOM, maximum attendees 40 number.	Delivered at commencement of Tranche 1 with refresher prior to commencement Tranche 2	24,000	UPPCL contribution
GRM requirements	UPPCL GFP DISCOM GFP contractor GFP GRC representatives	TRTA consultants	x1	Delivered at commencement of Tranche 1	1,500	UPPCL contribution
a. EMP and RP implementation for detailed design and pre-construction, b. EMP and RP implementation for construction, and c. EMP for operation and maintenance. (train-trainers)	DISCOM PM and safeguard focals DISCOM O&M staff PMA consultants contractor design team contractor construction team contractor EHS staff	TRTA consultants (Environmental, H&S and social experts)	x2 per DISCOM, maximum attendees 40 number.	Delivered during Tranche 1 with refresher during Tranche 2	24,000	UPPCL contribution
Contingency	@ 10% contingency				7,350	
	Total				**80,850**	

B. Budget for SARF Implementation

146. Adequate budget and resources should be allocated to implement the SARF and prepare safeguards documents for subprojects as well as for trainings as detailed in Table 16. Budget and resources for subproject implementation will be included in the IEE and RP. The budget required for resettlement has been prepared and included in the RP.

Table 17: SARF Implementation Budget

Item	Description	Total Cost ($)	Budget Source
TRTA Consultants; national environment and social assessment specialists	Environment Assessment Specialist – 14PM Social Development Specialist – 6PM Consultation Expert – 4PM	139,100	TRTA
TRTA Consultants; international and national environment and social capacity development specialists	Environment Capacity Development Specialist – 2PM International H&S Capacity Development Specialist – 2PM national Social Development Specialist – 1PM national Hazardous Materials and Waste Management Expert – 2PM national	72,800	TRTA
TRTA Consultants; national environment, health and safety supervision and monitoring specialists	Environment, H&S Supervision Specialist – 8PM	40,000	TRTA
Consultation, Information Dissemination, Local Travel, and Other Administrative Expenses	During subproject preparation and construction	25,000	TRTA
UPPCL Focals (internal staff costs)	Environmental Focal -–12 PM Social Focal (GFP) -–12 PM Occupational H&S Focal -–12 PM	-	UPPCL internal staff cost
PMC	Environment Specialist -–4 pm Social Specialist -–4 pm	-	PMC Consultant Contract Cost (estimate $48,000)
DISCOM Focals (internal staff costs)	Environment Focal x4 -–18 PM Health and Safety Focal x4 -–18 PM Community Liaison Focal (GFP) x4 -–18 PM	-	DISCOMs internal staff cost
PMA Consultants	Consultant Team from each PMA	-	PMA Consultant Contract Cost
Trainings	As per Table 16	80,850	UPPCL contribution
Contingency	@ 10% contingency	35,775	
	Total	**393,525**	

VIII. MONITORING AND REPORTING

A. Environmental Monitoring and Reporting

147. The Project-level EMP included in the IEE includes an environmental monitoring plan including (i) qualitative and quantitative monitoring tasks to ensure mitigation measures have been implemented effectively during each phase; (ii) schedule and responsibilities for monitoring tasks; and (iii) monitoring costs; any site-specific monitoring requirements will be included in a site-specific EMP in the updated IEE. Environmental monitoring will consist of routine systematic checking that the mitigation measures included in the EMPs have been implemented effectively by the DISCOMs and their contractors during each stage of the Project.

148. UPPCL PMU and the DISCOMs will monitor the implementation status of the EMPs, including identifying any non-compliances, proposing actions and a timeline for implementation of corrective actions and following up on the status of previous non-compliances.

149. UPPCL will establish a system for preparing semi-annual environmental monitoring reports up until the completion of construction reverting to annual reports up until project completion, or longer if recommended on completion (to be combined with social monitoring reports) and obtaining inputs to the reports from the four DISCOMs. Progress on the implementation of the EMPs as well as the results of quantitative monitoring will be included in the environmental monitoring reports. The format of the combined safeguard monitoring reports is attached as Appendix 9.

150. UPPCL will submit the environmental monitoring reports for ADB's review and disclosure on their website. For semi-annual reports 1st semester environmental monitoring report is due every 2nd week of July to cover the monitoring period January to June. 2nd semester environmental monitoring report is due every 2nd week of January to cover the period July to December.

151. The safeguard monitoring reports will need to be disclosed on the ADB website as well as locally ─ it is recommended that UPPCL disclose all safeguard monitoring reports on their own website and have a copy of relevant reports available at the nearest substation to the subprojects.

B. Resettlement Monitoring and Reporting

152. Resettlement monitoring will be the responsibility of UPPCL, the consultant/staff assigned to the Project will be responsible for preparing semi-annual monitoring reports. Regular monitoring activities will be carried out by the DISCOMs to assess implementation progress of seeking approval for affected assets from private landowners and disbursal of compensation, due, if any. Semi-annual monitoring reports on compliance with the entitlement matrix, the status of compensation payments, the completion of social safeguards screening checklists, consultations and grievances will be prepared on a semi-annual basis and submitted to ADB. The format of the combined safeguard monitoring reports is attached as Appendix 9. The submission arrangement is the same with that of environment as above. These reports will be disclosed on the ADB website and to affected people.

APPENDIX 1: INDICATIVE LIST OF DISTRICT ALLOCATION TO TRANCHES FOR ADB FUNDS

Name of Sub Project	Districts Included in Each Subproject			
AB Cabling Subproject				
PuVVNL / Varanasi	Ghazipur	Jaunpur	Varanasi	Chandauli
PuVVNL / Mirzapur	Mirzapur	-	Sonbhadra	Sant Ravidas Nagar
PuVVNL /Allahabad	Fatehpur	Kaushambi	Allahabad	Pratapgarh
PuVVNL /Gorakhpur	Kushinagar	Maharajganj	Gorakhpur	Deoria
PuVVNL / Basti	Sant Kabir Nagar	Siddharth Nagar	Basti	-
PuVVNL / Azamgarh	Ballia	-	Azamgarh	Mau
MVVNL / Faizabad	Ambedkar Nagar	Amethi	Faizabad	Sultanpur
	Barabanki	-	-	-
MVVNL / Devipatan	Bahraich	Shravasti	Gonda	Balrampur
MVVNL / Bareilly-I	Shahjahanpur	-	Baduan	-
MVVNL / Bareilly-II	Pilibhit	-	Bareily	-
MVVNL / Lucknow-I	Sitapur	-	Kheri	-
MVVNL / Lucknow-II	Raebareli	Unnao	Hardoi	-
MVVNL / Lucknow-LESA	Lucknow	-	-	-
Feeder Separation SubProjects				
DVVNL / Agra -–II	Mathura	Firozabad	Mainpuri	-
DVVNL / Agra -–I	Agra	-	-	-
DVVNL / Aligarh	Hathras	Kasganj	Aligarh	Etah
DVVNL / Jhansi	Jalaun	-	Jhansi	Lalitpur
DVVNL / Banda	Hamirpur	Mahoba	Chitrakoot	Banda
DVVNL / Kanpur	Kanpur Dehat	-	Etawah	Auraiya
	-	-	Farrukhabad	-
DVVNL / Kanpur	Kanpur nagar	-	Kannauj	-

Name of Sub Project	Districts Included in Each Subproject			
PVVNL / Meerut	Meerut	-	Baghpat	-
PVVNL / Ghaziabad	Ghaziabad	-	-	-
PVVNL / Bulandshahar	Bulandshahar	-	Hapur	-
PVVNL / Noida	GB Nagar	-	-	-
PVVNL / Saharanpur	Saharanpur	-	Muzaffarnagar	Shamli
PVVNL / Moradabad	Amroha/ JPNagar	Rampur	Sambhal	Moradabad
	Bijnor	-	-	-

APPENDIX 2: DISTRICT WISE PROJECT ACTIVITIES FOR ADB AND COUNTERPART FUNDS

PuVVNL (AB Cabling using ADB Funds)

Name of the District	Number of Habitations	Length of AB Cables to be installed (km)	Number of poles to erected(replacement, relocation and new)
Allahabad	1534	945	5287
Azamgarh	694	522	1895
Ballia	910	787	3184
Basti	654	419	1874
Chandauli	596	320	2066
Deoria	886	529	3226
Fatehpur	1064	1307	4697
Ghazipur	696	404	2522
Gorakhpur	963	369	3055
Jaunpur	928	560	2738
Kaushambi	453	403	1516
Kushinagar	853	559	2586
Maharajganj	977	527	3699
Mau	229	248	639
Mirzapur	465	677	1323
Pratapgarh	801	600	2430
Sant Kabir Nagar	463	271	1502
Sant Ravidas Nagar	930	223	727
Siddharth Nagar	671	288	1854
Sonbhadra	465	328	1373
Varanasi	772	577	2547
Total	**16004**	**10864**	**50740**

MVVNL (AB Cabling using ADB Funds)

Name of the District	Number of Habitations	Length of AB Cables to be installed (km)	Number of poles to erected(replacement, relocation and new)
Ambedkar Nagar	303	554	1835
Amethi	208	538	1853
Baduan	533	1029	3627
Bahraich	761	1660	5786
Balrampur	531	1178	4123
Barabanki	697	940	3867
Bareily	800	960	11165
Faizabad	503	1073	4877
Gonda	353	605	2036
Hardoi	704	1262	4774
Kheri	962	1674	6094
Lucknow	500	1126	3940
Pilibhit	650	1833	6213
Raebareli	504	1132	3866
Shahjahanpur	797	1411	5100
Shravasti	193	369	1271
Sitapur	1121	1832	6438
Sultanpur	421	844	2938
Unnao	728	1229	4421
Total	**11269**	**21248**	**84224**

PVVNL (AB Cabling using Counterpart Funds)

Name of the District	Number of Habitations	Length of AB Cables to be Installed (km)	Number of Poles to be erected (replacement, relocation and new)
Meerut	500	266.77	2033
Hapur	250	349.47	2455
GB Nagar	107	110.41	788
Bulandshahr	732	601.23	4422
Baghpat	232	89.65	1248
Ghaziabad	153	125.57	1103
Saharanpur	946	431.30	3428
Mujaffarnagar	525	475.59	4960
Shamli	270	381.30	3150
Bijnor	968	268.55	3580
Rampur	282	347.45	2117
Moradabad	514	945.77	9015
Sambhal	353	578.32	6121
JP Nagar	232	325.15	3465
Total	**6064**	**5296.53**	**47885**

DVVNL (AB Cabling using Counterpart Funds)

Name of the District	Number of Habitations	Length of AB Cables to be Installed (km)	Number of Poles to be erected (replacement, relocation and new)
Aligarh	926	858.19	8589
Mahamaya Nagar	664	559.83	5591
Firozabad	559	264	2640
Mainpuri	577	378	3780
Kanpur Nagar	372	343	3430
Kanpur Dehat	406	294	2943
Auraiya	348	448	4480
Etah	515	561	2860
Kashiram Nagar	415	285	1432
Farrukhabad	415	419	1982
Kannauj	261	443.45	1825
Etawah	435	446.32	2043
Agra	897	1177	13965
Mathura	1532	2174	22007
Jhansi	458	1100	11093
Lalitpur	332	1087	11850
Jalaun	489	1148	12632
Banda	437	614.6	4917
Chitrakoot	204	264	2112
Hamirpur	354	572	5720
Mahoba	336	462	4620
Total	**10932**	**13898.39**	**130511**

PVVNL (Feeder Separation using ADB Funds)

Name of District	Number of new feeders	Length of new 11 kV line (bare)	Length of 11 kV AB Cables	Length of 11 kV UG Cables	LT line (bare)	LT Line (AB Cables)	Number of new DTR	No. of Control room extenstion
Baghpat	10	124	3	3	10	11	130	4
Meerut	43	515	10	10	39.7	44	534	17
Ghaziabad	21	250	8.7	6	19.7	20	295	6
Hapur	18	200	5.3	5	19.2	18	265	7
Bulandshahar	117	1530	31.1	30	118.7	117	1672	31
GB Nagar	20	271	6	6	20	21	300	6
Saharanpur	67	847	20.55	20	68.4	68	992	21
Muzaffarnagar	32	403	10	8	33.2	32	448	10
Shamli	16	164	5	6	16	16	231	6
Amroha/ JP Nagar	17	216	5.65	5	17.2	17	254	5
Moradabad	33	410	11.4	10	407	33	492	9
Rampur	23	280	11.65	11.2	22.6	23	326	5
Sambhal	21	260	8.46	7	20.3	20	294	7
Bijnor	46	596	12	12	46.7	47	683	16
Total	**484**	**6066**	**148.81**	**139.2**	**858.7**	**487.1**	**6916**	**150**

DVVNL (Feeder Separation using ADB Funds)

Name of District	Number of new feeders	Length of new 11 kV line (bare)	Length of 11 kV AB Cables	11 kV UG Cables (Nos.)		LT line (bare)	LT Line (AB Cables)	Number of new DTR	No. of Control room extenstion
				Road Crossing	Railways Crossing				
Agra	157	2528	0	4	3	0	0	251	0
Mainpuri	44	760	0	3	3	0	0	186	0
Mathura	4	62	0	2	2	0	0	19	0
Firozabad	48	803	0	3	2	0	0	123	0
Aligarh	33	537	0	3	2	0	0	91	0
Hathras	28	444	0	3	3	0	0	74	0
Etah	5	90	0	2	2	0	0	24	0
Kasganj	15	229	0	3	2	0	0	40	0
Kanpur Dehat	61	1080	0	3	2	0	0	279	0
Etawah	1	17	0	3	2	0	0	2	0
Auraiya	1	15	0	3	3	0	0	2	0
Farrukhabad	13	213	0	4	2	0	0	45	0
Kanpur nagar	70	1246	0	4	4	0	0	313	0
Kannauj	31	537	0	3	2	0	0	134	0
Jhansi	11	261	0	3	3	0	0	25	0
Jalaun	26	617	0	2	2	0	0	61	0
Lalitpur	11	260	0	3	2	0	0	27	0
Banda	12	284	0	3	3	0	0	26	0
Chitrakoot	11	263	0	2	3	0	0	22	0
Hamirpur	11	260	0	3	2	0	0	25	0
Mahoba	15	355	0	2	2	0	0	30	0
Total	**608**	**10859.8**	**0**	**61**	**51**	**0**	**0**	**1799**	**0**

APPENDIX 3: NATIONAL AMBIENT AIR QUALITY, NOISE LEVEL, AND WATER QUALITY STANDARDS

National Ambient Air Quality Standards (MOEF&CC, 2009)

Pollutant	Time Weighted Average	Concentration in Ambient air (μg/m^3)	
		Industrial, Residential, Rural and Other Areas	Ecologically Sensitive Areas
Sulphur Dioxide (SO2)	Annual Average*	50	20
	24 hr**	80	80
Oxides of Nitrogen (as NO2)	Annual Average *	40	30
	24 hr**	80	80
Particulate Matter: PM10 (<10 μm)	Annual Average *	60	60
	24 hr**	100	100
Particulate Matter: PM2.5 (<2.5 μm)	Annual Average *	40	40
	24 hr**	60	60
Lead	Annual Average *	0.5	0.5
	24 hr**	1.0	1.0
Carbon monoxide mg/m3	8 hr	2.0	2.0
	1 hr	4.0	4.0

* Annual Arithmetic mean of minimum 104 measurement in a year taken for a week 24 hourly at uniform interval.

** 24 hourly or 8 hourly or 1 hourly monitored values should meet 98 percent of the time in a year

Source: MOEF&CC notification Central Pollution Control Board (1997) National Ambient Air Quality Monitoring Series, NAQMS/a/1996-97.

National Ambient Noise Level Standards*

Area Code	Category	Limits in Decibels (dB A)	
		Day Time	Night Time
A	Industrial	75	70
B	Commercial	65	55
C	Residential	55	45
D	Silence Zones	50	40

Note: (1) Daytime: 6 AM to 9 P.M., Night-time 9 PM to 6 AM;
(2) Silence zone is an area up to 100 m around premises as hospitals, educational institutions and courts.

Source: Central Pollution Control Board, New Delhi

* ADB's Safeguard Policy Statement (2009) requires the more stringent of national and WHO noise 1hr LAeq guidelines to be adhered to, the latter apply on an individual receptor not area basis and for industrial receptors require a level of 70dBA daytime as well as nighttime limit to be met which is more stringent than national.

Indian Standard Drinking Water Specification: IS 10500:1991

Sl. No.	Substance/ Characteristic	Desirable Limit	Permissible limit	Remarks
1	Colour, Hazen units, Max	5	25	Extended to 25 if toxic substance are not suspected in absence of alternate sources

Sl. No.	Substance/ Characteristic	Desirable Limit	Permissible limit	Remarks
2	Odour	Unobjectionable		a) Test cold and when heated
				b) Test at several dilution
3	Taste	Agreeable		Test to be conducted only after safety has been established
4	Turbidity NTU, Max	5	10	
5	pH value	6.5 to 8.5	No relaxation	
6	Total Hardness (as $CaCO_3$ mg/lit)	600	600	
7	Iron (as Fe mg/lit, Max	0.3	1.0	
8	Chlorides (as Cl mg/lit Max	250	1000	
9	Residual Free Chlorine, mg/lit Max	0.2		To be applicable only when water is chlorinated. Treated at consumer end. When protection against viral infection is required, it should be Min 0.5 mg/lit
10	Dissolved Solids mg/l, Max	500	2000	
11	Calcium (as Ca) mg/l, Max	75	200	
12	Copper (as Cu) mg/l, Max	0.05	1.5	
13	Manganese (Mn) mg/l Max	0.1	0.3	
14	Sulphate (As SO_4), Max	200	400	May be extended up to 400 provided (as Mg) does not exceed 30
15	Nitrate (as NO_3) mg/l, Max	45	100	
16	Fluoride (as F) mg/l, Max	1.0	1.5	
17	Phenolic Compounds (as C_6H_6OH) mg/l Max	0.001	0.002	
18	Arsenic (as As mg/l	0.05	No relaxation	To be tested when pollution is suspected
19	Lead (as Pb) mg/l	0.05	No relaxation	
20	Anionic Detergents (as MBAS) mg/l	0.2	1.0	
21	Chromium (as Cr) mg/l	0.05	1.0	To be tested when pollution is suspected
22	Mineral Oil mg/l	0.01	0.03	
23	Alkalinity mg/l	200	600	
24	Total Coliform	95% of the sample should not contain coliform in 100 ml. 10 coliform /100 ml		

APPENDIX 4: ADB PROHIBITED INVESTMENT ACTIVITIES LIST

The following activities do not qualify for the Asian Development Bank financing:

(i) Production or activities involving harmful or exploitative forms of forced labour[15] or child labour;[16]

(ii) Production of or trade in any product or activity deemed illegal under host country laws or regulations or international conventions and agreements or subject to international phase-outs or bans, such as (a) pharmaceuticals,[17] pesticides, and herbicides,[18] (b) ozone-depleting substances,[19] (c) polychlorinated biphenyls[20] and other hazardous chemicals,[21] (d) wildlife or wildlife products regulated under the Convention on International Trade in Endangered Species of Wild Fauna and Flora,[22] and (e) transboundary trade in waste or waste products;[23]

(iii) Production of or trade in weapons and munitions, including paramilitary materials;

(iv) Production of or trade in alcoholic beverages, excluding beer and wine;[24]

(v) Production of or trade in tobacco;

(vi) Gambling, casinos, and equivalent enterprises;

(vii) Production of or trade in radioactive materials,[25] including nuclear reactors and components thereof;

(viii) Production of, trade in, or use of un-bonded asbestos fibers;[26]

(ix) Commercial logging operations or the purchase of logging equipment for use in primary tropical moist forests or old-growth forests; and

(x) Marine and coastal fishing practices, such as large-scale pelagic drift net fishing and fine mesh net fishing, harmful to vulnerable and protected species in large numbers and damaging to marine biodiversity and habitats.

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[15] Forced labor means all work or services not voluntarily performed, that is, extracted from individuals under threat of force or penalty.

[16] Child labor means the employment of children whose age is below the host country's statutory minimum age of employment or employment of children in contravention of International Labor Organization Convention No. 138 "Minimum Age Convention" (www.ilo.org).

[17] A list of pharmaceutical products subject to phaseouts or bans is available at http://www.who.int.

[18] A list of pesticides and herbicides subject to phaseouts or bans is available at http://www.pic.int.

[19] A list of the chemical compounds that react with and deplete stratospheric ozone resulting in the widely publicized ozone holes are listed in the Montreal Protocol, together with target reduction and phaseout dates. Information is available at http://www.unep.org/ozone/montreal.shtml.

[20] A group of highly toxic chemicals, polychlorinated biphenyls are likely to be found in oil-filled electrical transformers, capacitors, and switchgear dating from 1950 to 1985.

[21] A list of hazardous chemicals is available at http://www.pic.int.

[22] A list is available at http://www.cites.org.

[23] As defined by the Basel Convention; see http://www.basel.int.

[24] This does not apply to subproject sponsors who are not substantially involved in these activities. Not substantially involved means that the activity concerned is ancillary to a subproject sponsor's primary operations.

[25] This does not apply to subproject sponsors who are not substantially involved in these activities. Not substantially involved means that the activity concerned is ancillary to a subproject sponsor's primary operations.

[26] This does not apply to the purchase and use of bonded asbestos cement sheeting where the asbestos content is less than 20%.

APPENDIX 5: SAFEGUARDS SCREENING FORMS

One consolidated set of screening forms is to be completed for each subproject, reflecting all components/activities included under it. The consolidated forms are to be submitted to ADB for clearance prior to the commencement of any construction works associated with the components/activities covered by them. Since some subprojects may be implemented by the DISCOMs/contractors on a rolling basis not all components/activities may be confirmed upfront. In the case additional subproject components/activities are identified following initial submission, the consolidated forms can be updated and resubmitted to ADB for clearance.

Part A. General information – provide for all subprojects

Part B. Project description

- Conversion to ABC subprojects, complete Form 1
- Feeder separation subprojects, complete Form 2

Part C. Baseline

- Conversion to ABC following existing alignment with no diversion, complete bold items of form only
- Conversion to ABC with minor diversion, complete one form for each component/activity
- 11 kV feeder separation, complete one form for each component/activity plus an environment audit form for each substation to which the feeders will connect

Part D. Screening checklists

- Environment – one checklist per subproject
- Involuntary resettlement – one checklist per subproject
- Indigenous peoples – one checklist per subproject

Provide requested maps and photographs as separate files using clear naming protocol to identify them.

A. GENERAL INFORMATION

Subproject Name: _____
Contract Package: _____
Contractor: _____
Construction timeline: _____

- Spreadsheet of all components/activities included in the subproject to be attached.
- For ABC conversions list by division and district the names of the villages included with latitude/longitude grid coordinates for each, flagging any that will involve a minor diversion.
- For feeder separation list by division and district the feeder name together with the substation and names of villages connected to it with latitude/longitude grid coordinates for each.

B. PROJECT DESCRIPTION

Form 1. If the subproject involves conversion to ABC complete this checklist on a division wise basis, reflecting all components/activities included under that division.

Items	Details
Division wise description:	
Length of cables to be replaced with ABC	km: Number of habitations supplied: Number of households supplied:
Map of line alignments (map to be provided for each village)	Provide as a separate file a map for each village showing the line alignment, including details of any minor diversion, at a readable scale
Confirm all ABC works within village boundaries	yes/no
Existing 11kV/400 V transformers utilised (details to be provided for all transformers used, photo(s) of transformers provided as a separate file)	Type: ground mounted/pole mounted Model and date of manufacture: Date of last oil change or maintenance, if known: Evidence of oil leak: none/minor/major Existing safety features: fence/warning sign/climb deterrent Pollution prevention features for ground mounted transformers: none/concrete platform/bund Photo of the transformer (if available)
New poles on existing alignments	Number of poles:
New poles on diverted routes, required in order to meet conductor clearances (maps to show details of any diversions)	Number of poles:
Construction camp location/size, if any (may be used for multiple components)	
Temporary workers camp location/size (may be used for multiple components)	

Form 2. If the subproject involves 11 kV separation complete this checklist for each component/activity included in the subproject.

Items	**Details**
Subproject component description:	
Length of 11kV feeder line required	km above ground line: km underground line: Number of railway crossings: Number of habitations supplied: Number of households supplied:
Map of feeder line route (map(s) to be provided for entire route)	Insert or provide as a separate file map showing the line alignment at readable scale
Existing substation connection (details provided for all substations; photo(s) of substations provided as a separate file)	Name: New feeder required: no/control panel/outdoor cabling and circuit breaker Photo of the substation (if available)
Existing 11kV/400 V transformer used (details provided for all transformers; photo(s) of transformers provided as a separate file)	Type: ground mounted/pole mounted Model and date of manufacture: Date of last oil change or maintenance, if known: Evidence of oil leak: none/minor/major Existing safety features: fence/warning sign/climb deterrent Pollution prevention features for ground mounted transformers: none/concrete platform/bund Photo of the transformer (if available)
New 11kV/440 V transformer (details to be provided for all transformers)	New transformer required: yes/no Type: ground mounted/pole mounted
Construction camp location/size, if any (may be used for multiple components)	
Temporary workers camp location/size (may be used for multiple components)	

C. BASELINE

For each minor division related to conservation to ABC and 11 kV feeder separation component/activity included in the subproject complete all questions in the following form.

For conversion to ABC following existing alignment with no diversion, complete only the questions in **bold**.

Land Use and Sensitive Receptors	**Details**
Existing road reserve inside habitation	km of line:
Existing road reserve outside habitation	km of line:
Existing field boundaries	km of line:
Agricultural land traversed	km of line: number of poles:
Community or private forest land traversed	km of line: number of poles: tree cutting required: yes/no
Other land type traversed: (detail land types)	km of line:
Crossing of waterbodies e.g. rivers, streams, canals, drains, ponds etc.	Number of waterbody crossings: Insert of provide as a separate file a clear photo of each waterbody to cross
Presence of critically endangered or endangered flora and fauna in the district, confirmed by forest officials etc.	yes/no
Presence of precious ecosystems or ecologically sensitive areas, and associated buffer zones and corridors, including the following: • **legally protected areas such as National Parks, Wildlife Sanctuaries etc.,**[27] • **natural World Heritage Sites,** • **Ramsar sites,** • **important bird areas,** • **key biodiversity areas,**	List any internationally and nationally ecologically sensitive areas including buffer zones and corridors within 1 km, together with minimum distance to line alignment[30]

[27] This does not apply to the purchase and use of bonded asbestos cement sheeting where the asbestos content is less than 20%.

[30] IBAT to be run for a wider study area of 10km around village latitude/longitude grid coordinates using its multiple sites function to identify the presence of legally protected areas, important bird areas etc. IBAT report to be attached to confirm search undertaken.

• **elephant or tiger reserves,**[28] • **defined elephant and tiger corridors,**[29] • **reserve/protected forest areas,** • **biodiversity heritage sites,** • **wetlands etc.**	
Internationally and nationally important physical cultural resources	List any Cultural World Heritage Sites and ASI monuments including buffer zones within 1 km, together with the minimum distance to line alignment
Locally important physical cultural resources in the line alignment e.g. shrines, trees etc.	yes/no If yes, provide details of these physical cultural resources including photos as separate files
Private/public trees located within the safety clearance and requiring to be cut	Number: Confirm species cut do not include CR, EN, endemic, restricted range species: yes/no
School compounds and/or buildings located within the safety clearances	yes/no If yes, provide photos clearly showing baseline situation (attach as separate files) with a map clearly showing details of the line alignment, and how safety clearances will be achieved by project
School compounds and/or buildings situated within 5m of the line alignment	yes/no If yes, provide photos clearly showing baseline situation (attach as separate files) with maps clearly showing details of the line alignment, and how safety clearances will be achieved by project
Other public/private buildings that are situated within 5m of the line alignment	yes/no If yes, provide photos clearly showing baseline situation (attach as separate files) with maps clearly showing details of the line alignment, and how safety clearances will be achieved by project

[28] This does not apply to the purchase and use of bonded asbestos cement sheeting where the asbestos content is less than 20%.

[29] Details of defined elephant corridors available from https://wti.org.in/project_docs/WTI_101_corridors_map.jpg with details of defined tiger corridors available from https://www.conservationindia.org/wp-content/files_mf/Tiger-corridors-2.pdf

For each 11 kV feeder separation component/activity involving an existing substation complete the following form, provide the requested maps and photographs as separate files using clear naming protocol to identify them.

Substation Name:					
Year of establishment:					
Grid Reference:					
Aerial map of substation, if available					
Photo of substation compound:					
Photo of control building and details of wall/roof materials:					
No. transformers and dates of manufacture with photo of rating plate:					
Area of substation and layout map:					
Nearest residence and habitation (name and distance in m):					
Total staff at substation (technical and non-technical):					
Audit Checks:	**Yes**	**No**	**Don't Know**	**N/A**	**Remarks, including the need for short-term or long-term corrective actions from the project-level EMP** (attach photos to support findings)
Housekeeping / Waste Management					
					Corrective action: short term/long term/none
Is the substation kept neat and tidy?					
Are there any trip hazards on the ground e.g. open channels, materials, equipment, trash laying around?					
Is there any general waste storage and/or disposal on-site?					Provide details of general waste storage and how it is disposed of:
Is there any waste burning on site?					
Is there any hazardous wastes (solid/liquid/gas) being stored and/or disposed of?					How are any hazardous wastes (solid/liquid/gas) being stored and disposed of?
Is end of life or unused equipment being stored on site?					
Is there a dedicated, labelled storage area for this equipment?					
Are fuel, oil or chemicals being stored on site?					
Are there empty drums or old transformers on site?					

Is there a dedicated, labelled storage area for fuel, oil, and chemicals, empty drums, and/or old transformers?					
Does the storage area have an impermeable floor?					
Is the storage area uncover?					
Is the storage area locked?					
Does the storage area have a spill containment bund of 110% capacity?					
Are material data sheets for the fuels, oil or chemicals displayed?					Provide copies transformer oil material data sheets:
Has there been any pest problem on site?					
Are any pest control measures undertaken on site?					Provide details of control measures and how often undertaken:
Transformer Oil Leakage					
					Corrective action: short term/long term/none
Do the transformers have a label indicating it contains PCB or is PCB free?					
Is any other evidence available to confirm transformers are PCB free?					Provide copies of any documentary evidence:
Is it known when the transformer oil was last changed?					Confirm date:
Is a maintenance logbook kept on the premises?					Describe schedule of maintenance:
Are the transformers mounted on an impermeable platform?					
Does the transformer platform have a spill containment bund/sump of 110% capacity?					
Is there any evidence of oil leaking or having					

previously leaked from transformers					
Is there any spill equipment available on site (e.g. sand, cloths, or other absorbent materials)?					
Lighting and Ventilation					
					Corrective action: short term/long term/none
Is adequate ventilation provided in control building?					
Are all vents free of blockages?					
Is heating and/or air con available?					
Is adequate natural or artificial lighting provided in control building?					
Is adequate lighting provided in the substation compound at night?					
Are all lights in working order?					
First Aid Equipment					
					Corrective action: short term/long term/none
Is a first aid kit available on site?					Elaborate on contents:
Is it clearly labelled where the first aid kit is stored?					
Is the first aid equipment within its expiry date?					
Do any staff on site have first aid training?					Confirm how many and the extent of training received:
Is one staff with first aid training present on site at all times?					
Are there any posters showing first aid procedures especially for electrocution?					
Fire Safety Equipment					
					Corrective action: short term/long term/none
Does the control building have fire detectors and alarm?					
Is the alarm system operational?					
Is fire fighting equipment present?					Elaborate on equipment provided, No. fire extinguishers

					No. of fire buckets filled with sand
Do fire extinguishers have an in-date service record?					
Is a record of fire alarm testing and fire drills available on site?					
Do any staff on site have fire training?					
Are there any notices or posters describing procedures to be followed in the event of a fire?					
Community Health and Safety					
					Corrective action: short term/long term/none
Is there a security fence and gates?					
Does the security fence have any gaps permitting entry?					
Are the gates kept locked?					
Is 24/7 security guard present?					
Is the door to the control room kept locked?					
Are there written or graphic “danger of electrocution” signs posted on the fence/gates?					
Are there written or graphic “danger of electrocution” signs posted on electrical equipment?					
Can any noise from transformer hum be heard?					
Is shielding equipment/materials installed to decrease electromagnetic field exposure?					
Handling Emergencies					
					Corrective action: short term/long term/none
Is an emergency plan available?					Provide copies of any documentary evidence:
Are emergency exits signed and clear of blockages?					

Is the location and phone number of doctor and hospital posted in a clear location?					Distance to nearest doctor / clinic: Distance to nearest hospital able to treat electrocution accidents and other serious conditions:
Is there an emergency eye wash or shower?					
Is an accident book available on site?					Elaborate on incidents recorded:
Health and Safety of Staff					
					Corrective action: short term/long term/none
Does the control building look to be structurally sound?					
Is there any evidence of asbestos on site?					
Did auditor receive an OHS site induction?					
Have staff on site received OHS training?					Clarify division of labour between on-site workers and other in-coming specialised DISCOM maintenance workers:
Are staff on site wearing PPE?					
Is there a store of PPE available on site?					
Do staff avail of personal exposure monitoring equipment to warn of exceeding exposure levels to electromagnetic fields?					
Drainage					
					Corrective action: short term/long term/none
Is there any standing water visible on site?					
Is a drainage system provided?					
Sanitation and Welfare Facilities					
					Corrective action: short term/long term/none
Is a toilet available on site?					Are there facilities for male and female?
Is the toilet inside staff building or outside it?					
Does the toilet connect to septic tank with soakaway or sewerage system?					
Are handwashing facilities available?					
Is hot and cold water available?					
Is soap provided?					

Does the toilet have lock or vacant indicator?					
Is potable water available on site?					Elaborate on the source:
Is there any evidence of potable water meeting Drinking Water Standards?					Provide copies of any documentary evidence:
Are staff stationed at substation during on shift hours and how many, including security guards?					If so, how many? How long are staffs' shifts? How long are security guards' shifts?
Is a food preparation and clean eating area available?					Is the area free from any contamination from work processes?
Is cooking fuel used at site?					Describe fuel(s) used:
Are staff staying at the substation overnight (out of hours) and how many?					
Is there dedicated workers accommodation and/or shelters?					Describe worker accommodation and facilities provided including for security guards e.g. does it protect from rain and sun; does it have a bed; heating; air conditioning etc.

D. SCREENING CHECKLISTS

D-1. Screening of Subprojects for Environment

One environmental screening checklist is to be completed for each subproject, informed by the project description and baseline forms completed in respect of all components/activities included under it.

Potential environmental impacts for both conversion to ABC and feeder lines have already been identified at the Project level and mitigation for these impacts has been identified in the project-level EMP so only locations issues need further consideration. If the answer to any of the screening questions below is a yes or not known, then as part of updating the IEE a site-specific assessment might be required for any components/activities of concern to determine the significance of potential impacts and any site-specific mitigation measures required.

Subprojects may only be categorized C for environment without further consultation with the ADB environment safeguards specialist if the response to all screening questions is no.

Subproject Specific Screening	**Yes**	**No**	**Not Known**	**Remarks**
A. Subproject Siting Does any subproject component/activity extend beyond boundaries of one village?				

Does any subproject component/activity extend beyond the built-up area of existing habitations?				
Is any subproject component/activity adjacent to or within 1 km of any of the following Environmentally Sensitive Areas or associated buffer zones or corridors? Informed by Environment Baseline Form/IBAT Check				
▪ National Park				
▪ Wildlife Sanctuary				
▪ World Heritage Site (natural or cultural)				
▪ ASI monument				
▪ Other National Protected Area (state type)				
▪ Buffer Zone of Protected Area (state which)				
▪ Ramsar Site				
▪ Important Bird Area				
▪ Key Biodiversity Area				
▪ Elephant Reserve				
▪ Tiger Reserve				
▪ Defined elephant corridor				
▪ Defined tiger corridor				
▪ Reserve/protected forest area				
▪ Biodiversity heritage site				
▪ Wetland				
B. Potential Environmental Impacts Will any of the subproject components/activities…				
▪ involve the construction of a new line i.e. 11 kV separation?				
▪ result in the conversion or degradation of natural habitat?				
▪ encroach on any precious ecosystems or ecologically sensitive areas per Section A?				
▪ encroach on any buffer zones or connecting corridors of ecologically sensitive areas per Section A?				
▪ encroach on community or private forest?				
▪ result in damage to physical cultural resources or require their removal?				
▪ encroach on any historical/cultural areas per Section A?				

▪ encroach on or within the safety clearances for school compounds or buildings?				
C. Subproject Components/Activities Will any of the subproject components/activities cause additional site-specific impacts to those detailed in the IEE and covered by the project-level EMP…				
▪ *Component A [insert details]*				
▪ *Component B [insert details]*				
▪ *Component C [insert details]*				
▪ *….*				

D-2 Screening of Subprojects for Involuntary Resettlement

One involuntary resettlement screening checklist is to be completed for each subproject, informed by the project description and baseline forms completed in respect of all components/activities included under it.

Probable Involuntary Resettlement Effects	Yes	No	Not Known	Remarks
Involuntary Resettlement Impacts				
1. Does the subproject component have any impact on private land (i.e. installation of poles on and lines over the land)?				If no, then C as only government or public land affected, and the record of land ownership should be collected and kept. If yes, then B as there is impacts on private land, then social due diligence required as per Appendix 7.
2. If there is an impact on private land. Was alternative route by utilizing within an existing public Right of Way (ROW) explored?				
3. Is the site for the impact known?				
4. Is the ownership status and current usage of land to be acquired known?				
5. Will there be loss of shelter and residential land due to land acquisition?				
6. Will there be loss of agricultural and other productive assets due to land acquisition?				
7. Will there be losses of crops, trees, and fixed assets due to land acquisition?				
8. Will there be loss of businesses or enterprises due to land acquisition?				
9. Will there be loss of income sources and means of livelihoods due to land acquisition?				
Involuntary restrictions on land use or on access to legally designated parks and protected areas				
10. Will people lose access to natural resources, communal facilities and services?				
11. If land use is changed, will it have an adverse impact on social and economic activities?				
12. Will access to land and resources owned communally or by the state be restricted?				

Information on Displaced Persons:
Any estimate of the likely number of persons that will be displaced by the Subproject? [ ] No [ ] Yes If yes, approximately how many?
Are any of them poor, female-heads of households, or vulnerable to poverty risks? [ ] No [ ] Yes
Are any displaced persons from indigenous or ethnic minority groups? [ ] No [ ] Yes

D-3. Screening of Subprojects for Indigenous Peoples Resettlement as per ADB

One indigenous peoples screening checklist is to be completed for each subproject, informed by the project description and baseline forms completed in respect of all components/activities included under it.

KEY CONCERNS (Please provide elaborations on the Remarks column)	**YES**	**NO**	**NOT KNOWN**	**Remarks**
A. Indigenous Peoples Identification				
1. Are there socio-cultural groups present in or use the subproject area who may be considered as scheduled tribes (hill tribes, schedules tribes, tribal peoples, and indigenous people or communities) in the subproject area?				
2. Are there national or local laws or policies as well as anthropological researches/studies that consider these groups present in or using the subproject area as belonging scheduled tribes, tribal peoples, or cultural communities?				
3. Do such groups self-identify as being part of a distinct social and cultural group?				
4. Do such groups maintain collective attachments to distinct habitats or ancestral territories and/or to the natural resources in these habitats and territories?				
5. Do such groups maintain cultural, economic, social, and political institutions distinct from the dominant society and culture?				
6. Do such groups speak a distinct language or dialect?				
7. Has such groups been historically, socially and economically marginalized, disempowered, excluded, and/or discriminated against?				
8. Will the project target any of the groups and communities identified?				
9. Will the subproject directly or indirectly impact on their livelihood?				

SUBPROJECTS MAY ONLY PROCEED IF 'NO' WAS SELECTED FOR ALL THE ABOVE INDIGENOUS PEOPLES SCREENING QUESTIONS.

APPENDIX 6: IEE UPDATE OUTLINE

Unless a site-specific assessment is required the consolidated screening forms, together with any consultation proformas, will comprise the basis for the IEE update for each subproject. The IEE update for each subproject will be attached to the IEE in the form of an annex.

If a site-specific assessment is required for any components/activities, then a detailed assessment of the potential impacts and risks is to be included in the update annex, together with a site-specific EMP to accompany the project-level EMP for implementation by the contractor.

- **Description of the Project,** attach project description section based on completed project description forms for the subproject.
- **Description of the Environment,** attach baseline section based on completed baseline forms for all subproject components/activities together with a short elaboration of the locational aspects of the baseline environment supported by the zone/division which the subproject covers with being attention paid to land use, population and vulnerabilities, presence of protected areas, KBAs, reserved forest areas, elephant and tiger corridors, physical cultural resources etc.
- **Existing Facilities Audit**, in relation to 11kV feeder lines attach completed environment audit form for all existing substations in subproject, identifying applicable corrective actions.
- **Site-Specific Environmental Impacts and Mitigation Measures**, required only when screening identifies a site-specific assessment is required due to the presence of any sensitive receptors.
- **Information Disclosure, Consultation, and Participation**, for all subproject components/activities provide summary per below table and attach copies of completed consultation proformas.

Consultation Activities	**Yes**	**No**	
Meaningful consultations with community were conducted before finalizing the alignment			Details of consultations undertaken, Table 1 and 2
Suggestions received in finalizing the alignment			Suggestions provided, Table 3
If suggestions received, are they incorporated into design			

- **Site-Specific EMP,** not required unless site-specific EMP is required based on site-specific assessment.

APPENDIX 7: SOCIAL DUE DILIGENCE REPORT OUTLINE

Due Diligence for Construction of Feeders (11kV Lines)

#	Particulars	Description/Details/Status
1	Length of feeders and numbers of poles	
2	Name of villages	
3	Name of circle/block	
4	Name of district	
5	Is it a tribal area? The answer must be No.	
6	Type of area (road/agricultural/ plantation/residential /commercial and etc.) in the corridor?	
7	Ownership of land (private/Government)	
8	If private land, how many poles are erected and how much private land occupied by the poles?	
9	Land use pattern for the locations of pole erection.	
10	Have the owner(s) provided consent to support[31] on erecting the poles?	
11	If consent not given, then has compensation been provided to how many households and how much per each household?	
12	Is the feeder passing over houses or buildings?	
13	If yes, how many structures affected approximately?	
14	What type of the structures (residential/commercial/Others)?	
15	What are the impacts on the structures (i.e. number of structures affected, number of households affected and size of damages)?	
16	If damaged, has compensation been provided to how many households and how much per each household? Or damages repaired?	
17	Is the feeder passing over religious or cultural properties?	
18	What are the impacts on these properties (i.e. numbers of structures and size of damages)?	
19	If damaged, has it properly repaired or has compensation for repair been given to how many households and how much per household?	
20	Does the feeder require tree cutting?	
21	If yes, approximate number of trees to be cut	
22	Types and names of trees to be cut	
23	Has compensation been provided to how many households and how much per each household?	
24	Does the feeder require tree trimming?	
25	If yes, approximate number of trees to be trimmed	
26	Have the owner(s) agreed the tree trimming?	
27	If not, then has compensation been provided to how many households and how much per each household?	
28	Does the feeder have any impact on crops?	

[31] The format for consent to support is included in section C of Appendix 8.

29	If yes, how much of the crop area affected?	
30	What are the types of crops?	
31	Have the owner(s) agreed to bear the crop losses?	
32	If not, then has compensation been provided to how many households and how much per each household?	
33	Any other impacts? Please specify.	
34	Have consultations undertaken how may times and with how many participants (men and women)?	
35	Remarks	

Submitted by:
(DISCOM or its consultant)
Name and signature:
Position:
Date:

Reviewed by:
(DISCOM HQ)
Name and signature:
Position:
Date:

Note from the Reviewer, if any:

APPENDIX 8: CONSULTATION PROFORMA RECORD

Instructions to Conduct Public Consultations: The public consultation during the IEE update and Social Due Diligence will be carried out by the DISCOM with support of TRTA Consultant. Follow up consultations will be carried out by DISCOMs and Contractors. The consultation material will use text but also photographs and pictures so illiterate can understand. It will also include findings of sample subproject assessments, to disseminate information on the potential impacts and their management, as well as informing of the works.

An orientation program is proposed for UPPCL, DISCOM, their Consultants and Contractors on how to conduct meaningful public consultations.

A Guidance note is provided in Annex 1 to this Appendix.

Meaningful environmental and social consultations must be conducted for all subprojects involving conversion to ABC and feeder lines; where further one-on-one consultations or meetings are required, one consultation proforma record is to be completed for each component/activity of a subproject prior to the commencement of any construction works.

A. Environment Consultations

For environment the following government or civil society representatives should be met for all sample components/activities as part of the IEE update, the DISCOM and contractor are then responsible for completing all other consultations during subproject implementation in accordance with the SARF and project-level EMP.

- DISCOM Officers
- SPCB Officers
- Divisional Forest Officer of the District
- Conservator of Forest from Divisional Forest Officer for any environmentally sensitive areas within 2km
- Village Headman/Sarpanch from village for all components/activities
- Temple/mosque head for all the components/activities adjacent physical cultural resources
- School headteacher for all components/activities adjacent to school compounds

Table 1: Summary Record of Subproject Environment Meetings and Discussions with Government and Civil Society Representatives*

Date	Location	Name of the Person	Position or Title, Agency	Topics Discussed	Suggestions for Alignment and Mitigation	Contact Number	Signature

* Provide photograph of the meeting in progress

For environment a public consultation is to be completed for all sample components/activities as part of updating the IEE, the DISCOM and contractor should be responsible for completing all other consultations during subproject implementation in accordance with the SARF and project-level EMP. Public meetings are to be attended by at least 10% of the village population and have at least 20% representation of women excluding DISCOM and Contractor representatives. If it is not possible at the public consultation a separate gender focus group must be held to ensure the concerns of women and vulnerable groups are heard.

Table 2: Summary Record of Public Consultations and Focus Groups*

Subproject Component/Activity		
Gram Panchayat		
Zone		
DISCOM		
Date, Time and Local		
Total Population of Village		
Total Number of Participants	Male:	Female:
Names and Designations of Key participants		
DISCOM		
Contractor (TKC)		
District administration/village		
Topics Discussed and Findings		
Presence of environmentally sensitive areas		
Presence of elephants, tigers, threatened species in the area		
Presence of trees along alignment and if require cutting		
Presence of physical cultural resources along alignment		
Presence of schools or other community facilities along alignment and if conductor clearances are met		
Existing community H&S incidents and/or concerns with existing distribution lines		
Existing community H&S incidents or pollution (oil leak) and/or concerns with existing transformers		
Concerns of community related to H&S of new distribution lines		
Concerns of community related to pollution and waste management during the works		
Concerns of community related to noise, vibration, dust, air pollution during the construction		
Concerns of community related to disturbance to agricultural activities during works		

Concerns of community related to disturbance to ongoing access and traffic management issues during works	
Concerns of community related to incoming skilled workers and their accommodation during the works	
Concerns of community related to local employment (jobs created for unskilled workers by construction are very minimal if any)	
GRM and types of grievances related to environment, health and safety that could be raised	
Suggestions for Alignment and Mitigation	

* Provide photographs of the public meeting and/or focus groups in progress and copy of sign in sheet

B. Social Consultations

Major Issues to be discussed during the consultation:

1. The project information including implementation schedule
2. Project impacts on land, trees, structures, crops and other assets if any
3. Concerns raised by the participants
4. Support to the project
   i. Yes (Number of participants disaggregating men and women), why?
   ii. No (Number of participants disaggregating men and women), why?
2. Mechanism of grievance redressal with contact of focal persons.

Summary of Discussion:

……...……
……
……
……
…….

Villagers		**Program officials**	
Name of the Participants	Signature	Name and designation of the official	Signature

C. Format of consent to support (this is only applied for affected persons whose private land and assets affected by poles and lines)

Details of the Affected Household

- Name of the affected household head:

- Name of the village:
- Location:
- DISCOM:
- Name of the Sarpanch and contact number
- Description of impacts

The interference to the private land is justified only if the following have been followed:

- All design alternatives have been reviewed to prevent impacts on the household;
- Impacts are marginal (based on percentage of loss and minimum size of remaining assets);
- Impacts do not result in displacement of households from their residential homes or cause loss of household's incomes and livelihood;
- Consultation discussions with the affected households have been conducted in a free and transparent manner and consent to support on erecting pole(s) has been expressed and given considering impacts on the land and other assets; and
- Proper documentation of consultation meetings, grievances and actions taken to address such grievances, if any.

Summary Record of Meetings and Discussions with Affected Household

Date	Location	Name of the Person	Position or title	Topics discussed with list of affected assets	Outcome of meeting	Contact Number	Signature
3rd Party acknowledgement: I have observed the process as a [Village Headman or Counsel or Etc] and confirmed my presence as a 3rd party. ---------- Signature							

Submitted by:
(DISCOM or its consultant)
Name and signature:
Position:
Date:

Reviewed by:
(DISCOM HQ)
Name and signature:
Position:
Date:

Note from the Reviewer, if any:

Annex 1

India: Uttar Pradesh Power Distribution Network Rehabilitation Project

Guidelines for the Preparation of Public Consultation Meeting
(prepared as part of SARF)

1. Introduction

Meaningful consultation is an essential process required under ADB's Safeguard Policy Statement (2009). These guidelines explain the necessary steps typically required for the preparation of a public consultation meeting.

2. Procedures

- **Step 1: Identification of stakeholders**
  A wide range of stakeholders should be invited considering the subproject's location, scale, impacts, and so on. Stakeholders typically consist among others of the following:
  - Project affected people (e.g. local residents, farmers, fishermen)
  - Local commercial and industrial enterprises (e.g. hotels, restaurants)
  - Local government authorities
  - Representative of local council
  - NGOs
  - Media

- **Step 2: Selection of meeting venue**
  Once the stakeholders are identified select a suitable meeting venue (generally town hall or village meeting place), which should be located in area convenient for the stakeholders. Also consider whether the venue has sufficient space and facilities (e.g. chairs, table, power source). If the presentation is by Power Point, make sure that the hall can be darkened for clear view of the presentation material.

- **Step 3: Setting of date and time of the meeting**
  The date and time of the meeting should be set by considering the most suitable time for the stakeholders so as to enable maximum participation.

- **Step 4: Announcement to the public**
  Once the location and date are determined, announce to the public about the meeting through a combination of methods so that the information is disseminated thoroughly to them, by for example through letters, posters, media, temple/mosque service, notice board, local council and so on. Announcement should be made at least 1-2 weeks prior to the meeting and should include the following information. Sample of public notice is provided as attachment 1.
  - Objective of the meeting
  - Agenda of the meeting
  - Location, date and time of the meeting

- **Step 5: Staff assignment**
  Assign the staff for the following roles typically required for public consultation meeting.
  - Master of ceremony
  - Opening and closing remarks
  - Presenter of the Project

- Note taker
- Assistant (at least 1-2 people)

- **Step 6: Preparation of presentation materials**
  Presentation materials should be prepared in a manner that is understandable for the general public by using graphics as much as possible. The consultation material will use text but also photographs and pictures so illiterate can understand. It will also include findings of sample subproject assessments so as to disseminate information on impacts and their management, as well as informing of works

- **Step 7: Preparation of equipment and materials**
  Following are equipment and materials typically required for the meeting:
  [Equipment]
  - Projector and projection screen
  - Extension cable
  - PC
  - Pointer
  - Microphone and speaker
  - Camera

  [Material]
  - Copy of meeting agenda and presentation material (should be distributed to the participants during registration)
  - Registration sheet
  - Opinion sheet

3. Timeframe

Typically, at least 4 weeks' time is required for the preparation of a public consultation meeting.

Attachment 1: Sample Public Consultation Notice

PASHCHIMANCHAL VIDYUT VITRAN NIGAM Ltd.

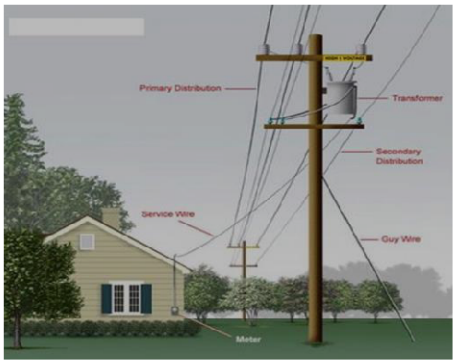
PUBLIC CONSULTATION NOTICE

The Pashchimanchal Vidyut Vitran Nigam Ltd. (PVVNL) is hosting a meeting to discuss Conversion of Existing Feeders to Aerial Bundled Cable and Separation of Feeders work proposed under Uttar Pradesh Power Distribution Network Rehabilitation MFF Sector Project. The details of meeting are given below.

Date: _____
Venue: _____
Time: _____

Discussion Point:

- Address by PVVNL/DISCOM officials
- Information about project and proposed work in the area/village
- Information on key impacts, mitigation measures and recommendations from safeguards assessments
- An opportunity to present your views and concerns on the proposed work



The meeting is open to the Public and will provide a chance for the community to come together and receive up to date information regarding the proposed work to be carried out under this Project and raise their issues, if any.

For Further information or queries, please contact DVVNL at below place and number.
Office Address: .....
Phone Contact No: .....

APPENDIX 9: OUTLINE OF A SEMI-ANNUAL SAFEGUARDS MONITORING REPORT

UPPCL is required to prepare and submit to ADB a combined environment and social safeguards semiannual monitoring reports that describes compliance with safeguard loan covenants, PAM, contract, progress with implementation of the SARF, EMPs, RP, quantitative monitoring results, environment, health and safety and social incidents and responses, grievances and responses, potential or actual non-compliance issues, and corrective actions. A sample Table of Contents that can be adapted as necessary is provided below.

TABLE OF CONTENTS

Part I – Introduction

- Project and subprojects description, including organogram of relationships with Contractors, owner, lender, etc.
- Design, pre-construction, construction, and operational activities and Project progress during previous 6 months
- Confirm if any changes in design and construction (e.g. alignment, construction methods) during previous 6 months
- Confirm if any changes in Project organization and Environmental, Health and Safety management team during previous 6 months

Part II – Loan Covenants

- Status of compliance with environment and social safeguard loan covenants and further action to ensure ongoing compliance; if there is partial or no compliance recommendations for corrective action are required.

Clause	Covenant	Status of compliance to date (full, partial, none, ongoing)	Comment/further action required including timeline

Part III – PAM and SARF

- Status of compliance with environment and social safeguard/monitoring section of PAM and further action to ensure ongoing compliance; if there is partial or no compliance recommendations for corrective action are required.

Para	Details	Status of compliance to date (full, partial, none, ongoing)	Comment/further action required including timeline

Part IV – Contract

- Status of compliance with environment and social safeguard section of Contracts and further action to ensure ongoing compliance; if there is partial or no compliance recommendations for corrective action are required.

Contract Package	Details	Status of compliance to date (full, partial, none, ongoing)	Comment/further action required including timeline

Part V – EMPs and RP

- Site inspections and audits completed–summarize the number and type of site visits, persons involved, and checklists/reporting format used (sample of checklists and reports to be included as an appendix)
- Status of compliance with EMPs and RP measures and further action to ensure ongoing compliance; if there is partial or no compliance recommendations for corrective action are required.
- Copies of clearances, CEMPs, construction method statements, and other documentation produced in accordance with EMPs and RP during the previous 6 months should be included as an appendix.
- Copies of training records related to EMPs and RP during the previous 6 months should be included as an appendix.

Item	Measure	Status of compliance to date (full, partial, none, ongoing)	Comment/further action required including timeline

Part VI - Environmental Monitoring

- Environmental monitoring results – summarize the previous six months quantitative monitoring activities and data obtained in accordance with the EMoP and provide explanations of any instances where performance standards were exceeded along with details of responses taken to rectify the exceedance once identified. Typically, this section will include the results of:
  - Noise and vibration surveys
  - Water quality surveys
  - Air quality surveys
  - Flora and fauna surveys
  - Health and safety incident records

- Corrective actions are required to ensure any exceedances will be prevented in the future.
- Graphs can be used in this section to show trends; however, large tables of data or multiple graphs should be attached as an appendix. Calibration and QA certifications of monitoring equipment and laboratories analyzing samples should be included as an appendix.

Part VII – Social Monitoring

- The following key indicators will be included:
  - Number of affected households (AHs) who are affected by 11kV poles on their private land and number of AHs gave consent for land use or received compensation (during reporting period and total);
  - Number of affected households who lose their private assets (i.e. trees and crops) by 11kV poles and lines and number of AHs received compensation or gave consent for the losses (during reporting period and total);
  - Amount of the budget disbursed with breakdowns;
  - Number of the vulnerable households identified and linked with existing government programs and schemes (during reporting period and total), if any.

Part VIII – Consultation and Grievances

- Consultation – report on any ongoing consultation undertaken, and main issues raised by consultees; detailed consultation records should be included as an appendix.

Date	Format/Venue	Participants (Occupation, M/F, Vulnerability)	Main Issues Raised

- Grievances - list any complaints received, however minor, and responses taken to them; detailed grievance records and response reports should be included as an appendix including total number of new grievances received, and closed in that period

Part VIII - Environmental and Social Management

- Report on any unanticipated impacts and updates to IEE, EMPs and RP that were required during the previous 6 months, status of delivery of documents, required amendments, consultation and disclosure undertaken etc.
- Environment, health and safety incidents – summarize details of the responses taken to incidents that arose; detailed response reports should be included as an appendix.
- Non-compliance notices – summarize details on the number of notices given out, the issues covered, and status of compliance with them.
- Corrective action plans – summarize non-compliances identified and if non-compliance, report on timeliness for the preparation and completion of corrective action plan if not already included in above.

Annexes

- Sample checklists and reports
- Clearances and documentation
- Training records
- Photographs
- Detailed monitoring data
- Calibration and QA certificates
- Consultation records
- Consent to support given
- Grievance records
- Environment, health and safety reports

APPENDIX 10: UPPCL POLICY ON ENVIORNMENTAL AND SOCIAL SUSTAINABILITY

उत्तर प्रदेश पावर कारपोरेशन लिमिटेड
(उत्तर प्रदेश सरकार का उपक्रम)
U.P. POWER CORPORATION LIMITED
(Govt. of Uttar Pradesh Undertaking)
CIN:U32201UP1999SGC024928

संख्या–1003–कार्य/चौदह–पाकालि/2020–21–के/2020 दिनांकः 23 जुलाई, 2020

कार्यालय ज्ञाप

उ0प्र0 पावर कारपोरेशन लि0 एवं इसके सहयोगी वितरण निगमों हेतु " Environmental and Social Sustainability" नीति को एतद्द्वारा संलग्न विवरण के अनुसार निर्धारित किया जाता है।

संलग्नकः–यथोक्त।

निदेशक मण्डल

संख्या : 1003–(1)–कार्य/चौदह–पाकालि/2020 तद्दिनांक।

प्रतिलिपि निम्नलिखित को सूचनार्थ एवं आवश्यक कार्यवाही हेतु प्रेषित :–

1. प्रमख सचिव, ऊर्जा, उ0 प्र0 शासन, लखनऊ।
2. अध्यक्ष के निजी सचिव, उ0प्र0 पावर कारपोरेशन लि0, शक्ति भवन, लखनऊ।
3. प्रबन्ध निदेशक के निजी सचिव, उ0प्र0 पावर कारपोरेशन लि0, शक्ति भवन, लखनऊ।
4. निदेशक (का0प्र0 एवं प्रशा0/वित्त/वितरण/वाणिज्य/कारपोरेट प्लानिंग), उ0प्र0 पावर कार्पोरेशन लि0, शक्ति भवन, लखनऊ।
5. प्रबन्ध निदेशक, मध्यांचल/पूर्वान्चल/पश्चिमांचल/दक्षिणान्चल, विद्युत वितरण निगम लि0, लखनऊ /वाराणसी/मेरठ/आगरा/केस्को–कानपुर।
6. समस्त निदेशकगण (का0प्र0 एवं प्रशा0/वित्त/वितरण/वाणिज्य), समस्त डिस्काम।
7. मुख्य अभियन्ता, नियोजन/वाणिज्य/रेस्पो/पीपीए/आर0ए0यू0/सी0एम0यू0डी0, उ0प्र0 पावर कारपोरेशन लि0, शक्ति भवन विस्तार/शक्ति भवन, लखनऊ।
8. अपर सचिव–I,II, III उ0प्र0 पावर कार्पोरेशन लि0, शक्ति भवन, लखनऊ।
9. समस्त मुख्य अभियन्ता (वितरण), समस्त डिस्काम एवं केस्को, कानपुर।
10. अधिशासी अभियन्ता (वेब), कक्ष संख्या–407, उ0प्र0 पावर कारपोरेशन लि0, शक्ति भवन विस्तार, लखनऊ को वेबसाइट–**www.uppcl.org** पर अपलोड करने हेतु।
11. कट फाइल।

आज्ञा से,

(आर0के0 श्रीवास्तव)
उप सचिव (कार्य)

अधीक्षण अभि0-I/...
अधिशासी अभि0-I/...

मुख्य अभियन्ता
सी0एम0यू0(जोन)

h Dilip, EE
h Iyer, EE, ADB

25/7/22

कार्यालय ज्ञाप संख्या–1003–कार्य/चौदह–पाकालि/2020–21–के/2020 दिनांक: 23 जुलाई, 2020 का संलग्नक

POLICY ON ENVIRONMENTAL AND SOCIAL SUSTAINABILITY

1. Introduction

Uttar Pradesh Power Corporation Ltd. (UPPCL) has been a pioneer in promoting innovative ideas and setting new standards in service delivery. The organization is continuously working towards sustainability of environment and safety. The Corporation is making every effort to ensure that the power requirements of the State are met, and the consumers are provided with reliable, quality and cost-effective electricity along with cleaner, safer and healthier environment with minimum/no social disturbances.

2. Social and Environmental Aspects and Policy Formulation

The distribution system includes and incorporates the distribution line, transformers, cables, switchyards and sub-stations etc. To cater to the power requirement of state, UPPCL is continuously engaged in developing new infrastructure of sub-stations and distribution lines for giving power to every household. UPPCL recognizes that the implementation of distribution schemes may have some unavoidable environmental and social implications in miniscule. The construction of sub-stations and laying of distribution lines would result in acquisition of land and some minor temporary damages to crop and trimming/lofting of tree branches. It is with this objective that UPPCL has formulated the Social Policy and Procedures (SP&P) to address all adverse impacts arising out of its distribution projects systematically.

UPPCL also has concerns for clean environment and sustainable development in all its activities. To achieve this objective, UPPCL has formulated environmental framework and safeguard mechanisms for distribution project and an Environmental Management Plan (EMP) to mitigate the ill effects of the developmental activities.

The Environmental Social Policy and Procedures (ESP&P) being implemented by UPPCL and its associated Discoms, are consistent with relevant national and state policies and regulations, inter-alia the Indian Electricity (Supply) Act 1948, Indian Electricity Rules, 1956 and Indian Electricity Act 2003.

3. Environment and Social Performance Parameters/Standards

UPPCL is developing an E&S assessment framework broadly encompassing the following points:

i. Assessment and Management of Environmental and Social Impacts
ii. Labour and Working Conditions
iii. Community Health, Safety, and Security
iv. Land Acquisition
v. Biodiversity Conservation and Sustainable Management of Natural Resources
vi. Indigenous People
vii. Cultural Heritage

Central to these requirements is the application of a mitigation hierarchy to anticipate and avoid adverse impacts on workers, communities, and the environment.

Environment and Social Policy Statement of UPPCL

UPPCL is committed to identify, assess, and manage environmental and social concerns at both organization and project levels by consciously following the basic principles of avoidance, minimization and mitigation of environmental & social impacts with the improvement of Management System and introduction of State of the Art and proven technologies.

4. UPPCL and Associated Discoms' Commitments

i. Ensure transparency of the project to all stakeholders through dissemination of information and consultation at every stage of project implementation.
II. Maintain highest standards of social and environmental responsibility not only towards its employees but also to the consumers and the community as well.
III. To minimize ecological impacts on environment, land and flora/fauna through progressive policies like consciously economizing on the requirement of land.

5. Principles of Environment and Social Policy / Safeguards

The key principles and safeguards of UPPCL environmental and social policy are:

i. As far as possible avoid operations in environmentally sensitive areas with special respect for fragile ecosystems and their inherent biodiversity.
ii. As far as possible avoid areas like high mountains, hilly terrain prone to landslides, large lakes, reservoirs and marshy places.
iii. Care is taken to route the lines through a minimum disturbance path.
iv. Avoid protected areas to the extent possible.
v. ROW (Right of way) is selected duly considering the location of different utilities such as telecommunication lines, railway circuits, and gas pipelines to avoid interference.
vi. Adoption of best technology/latest equipment to avoid pollution and to ensure electrical safety.
vii. Minimizing energy losses and promote energy efficiency in all its activities.

UPPCL weighs due consideration to address the associated environmental & social issues in line with above principles to create a suitable organizational structure to implement mitigation measures systematically. The policy and procedures will be subject to periodical review in accordance with the guiding principles of avoidance, minimum disturbance and suitable remedial measures.

6. Environmental and Social impacts of distribution projects

UPPCL has a vast network of Distribution lines and substations spread across Uttar Pradesh. Operational activities and construction of new substations, lines, etc. may have some distinct environmental and social impacts. UPPCL has identified certain environmental and social issues typically associated with its projects.

Loss of Land

UPPCL normally receives land for their sub-stations provided by Gram-Sabha at free of cost/on lease for long period or at a very nominal token amount in rural areas; whereas in urban areas it is provided by Municipal Corporation/statutory body. However, if the land belongs to private owner, it is acquired at the rate prescribed by prevailing government policy. Normally no land is lost in erecting a distribution line. The line is preferably erected on the roadsides, canal sides, boundaries of the fields and on barren land. Similarly, the underground cable is also laid in such a way that it is not likely to be damaged during soil-tilling/ploughing. No compensation is admissible regarding pole erection, conductor stringing or cable laying.

Loss of Crop/Trees/Vegetation

Normally flexibility is adopted in choosing routes to avoid trees but in case, it is unavoidable then minimum trimming/pruning of tree branches is done. In case of complete loss of a tree/fruit bearing tree, adequate compensation is granted as per the prevailing rules as decided by the competent authority.

Every effort is made that erection is done during off-crop-season to avoid any damage to crop. If there is any significant damage to standing crop and/or trees or loss of crop due to electrical fire, the value of damaged crop is assessed by district authorities and is compensated accordingly.

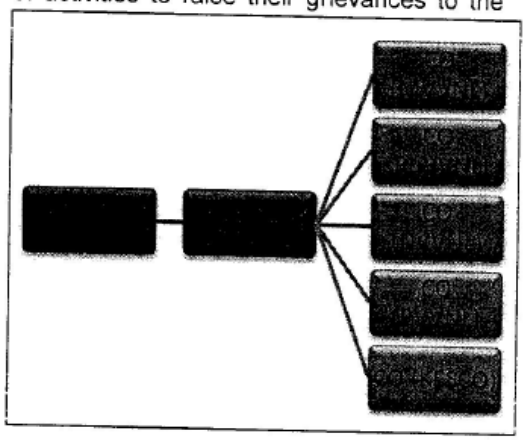
Disposal of used transformer oil, batteries and capacitor bank

The used transformer oil, battery and capacitor banks are to be disposed - off with utmost care as per prescribed norms to minimize any ill-effect on environment.

UPPCL shall ensure a fair, efficient and transparent process relating to land acquisition, including loss of assets and other negative impacts on Affected Persons (APs) resulting from its development program, irrespective of sources of financing.

7. Institutional Arrangements and Grievance Redressal Mechanism

Considering the importance of accountability, the concerns and complaints of Affected Persons and Communities should be addressed in a manner that is fair, objective, and constructive. A mechanism shall be established through the Compliance Officer (CO) at Discom Level to enable individuals and communities affected by any operational activities to raise their grievances to the authority concerned. At UPPCL Head Quarter, an officer shall also be designated to coordinate across Discoms. The CO shall be an officer not below the rank of Chief Engineer (CE). At Discom level CO will act through Divisional Engineer and respective Zonal Chief Engineer as part of grievance redressal mechanism.



The CO shall respond to the complaints from those affected by any operational activities by UPPCL/Discoms with the goal of enhancing environmental and social outcomes on the ground and fostering greater public accountability. The Discom CO shall update the UPPCL CO on regular basis. The E&S Grievance Redressal Cell is to be headed by Director (P&A), UPPCL