

Resettlement Plan

Project Number: 51306-008

Document Stage: Final

September 2023

India: Uttarakhand Climate Resilient Power System Development Project

Prepared by Energy Department, Government of India through Power Transmission Corporation of Uttarakhand Ltd. (PTCLU) and Uttarakhand Power Corporation Limited (UPCL) for the Asian Development Bank.

This resettlement plan is a document of the borrower. The views expressed herein do not necessarily represent those of ADB's Board of Directors, Management, or staff, and may be preliminary in nature. Your attention is directed to the "terms of use" section of this website.

In preparing any country program or strategy, financing any project, or by making any designation of or reference to a particular territory or geographic area in this document, the Asian Development Bank does not intend to make any judgments as to the legal or other status of any territory or area.

CURRENCY EQUIVALENTS
As of September 2023
Currency Unit: Indian Rupee (INR)
INR 1.00= \$0.012
\$1.00= INR 82.84

ABBREVIATIONS

ADB	Asian Development Bank
ckm	circuit kilometer
CSS	compact substation
EDD	Electricity Distribution Directorate
EHV	Electricity High Voltage
EMP	Environment Management Plan
EPC	Engineering, procurement, and construction
GRM	grievance redress mechanism
ha	hectare
HDD	horizontal directional drilling
HVDC	High Voltage Direct Current
km	kilometer
kV	kilovolt
LLO	Line In Line Out
LT	Low Tension
m	square meter
MOP	Ministry of Power
PIU	Project Implementation Unit
PMU	Project Management Unit
PTCUL	Power Transmission Corporation of Uttarakhand Limited
RMU	Ring Main Unit
ROW	right of way
UPCL	Uttarakhand Power Corporation Limited
UREDA	Uttarakhand Renewable Energy Development Agency

NOTE
 unless noted, all values are in Indian Rupees

Contents

I. INTRODUCTION AND PROJECT DESCRIPTION	1
A. Project Overview	1
B. Preparation this Draft Resettlement Plan	2
C. Description of Project Components	3
A. Grid Improvement Components (PTCUL)	4
B. Distribution Network (UPCL)	6
II. SCOPE OF LAND ACQUISITION AND INVOLUNTARY RESETTLEMENT	11
A. IMPACT UNDER PTCUL COMPONENTS AND SUBCOMPONENTS	11
A.1 New Substations	11
A.2 Impacts due to New Overhead High-Voltage Power Lines	12
A.3 Underground High-Voltage LILO Power Line	16
A.4 Impact on Crops and Trees	16
A.5 Temporary Land Requirement for Construction	17
A.6 Summary of Impacts of PTCUL Components	18
B. IMPACT UNDER UPCL COMPONENTS AND SUBCOMPONENTS	20
B.1 Sub-Stations by UPCL	20
B.2 Capacity Enhancement of existing Substations	20
B.3 Underground Distribution Cables	23
B.4 Associated Low-voltage Overhead Distribution Lines	24
B.5 Summary of Impacts under UPCL Components	24
C. Impact on Indigenous Peoples and other vulnerable groups	25
D. Overall Summary Impacts (PTCUL and UPCL)	26
Impacts due to New Overhead High-Voltage Power Lines (PTCUL)	27
Underground LILO cabling	27
New 33/11 kV Substation	27
E. Mitigation of impacts	28
III. SOCIO-ECONOMIC INFORMATION AND PROFILE	29
A. Overview	29
B. Demography	29
C. Ethnic groups	29
D. Health and Education	30
E. Economy	30
F. Transportation	30

G.	Rural Drinking water supply	31
H.	Electricity	31
I.	Districts at a Glance	32
J.	Project Area (District wise)	33
K.	Summary Socio-Economic Condition and project impacts	42
IV.	INFORMATION DISCLOSURE, CONSULTATION, AND PARTICIPATION	44
A.	General	44
B.	Information Dissemination prior/during consultation	46
C.	Consultation	47
	C.1 Consultation for Overhead High-voltage Power Lines and Substations- PTCUL	47
	C.2 Consultation Process for Overhead Low-voltage Distribution Power Lines	49
	C.3 Consultation Process for Underground Distribution Cables	49
	C.4 Multi-Stakeholder Consultation at Dehradun City Level	55
	C.5 Gender Consultation	58
	C.6 Summary list of total participants	61
D.	Continued Consultation and Participation	64
E.	Communication and Consultation Plan	64
F.	Disclosure	66
V.	GRIEVANCE REDRESS MECHANISM	67
A.	Background	67
B.	Need for a Project Grievance Redress Mechanism	67
C.	Objectives	68
D.	Structure of the Grievance Redress Mechanism	68
E.	GRM Process and ORC in the Project	68
F.	Registering a Complaint	70
G.	Disclosure and Budget of the Grievance Redress Mechanism	71
VI.	LEGAL FRAMEWORK AND ENTITLEMENTS	72
A.	General	72
B.	Applicable National Legal and Policy Framework	72
	1. Electricity Act 2003	72
	2. The Indian Telegraph Act, 1885, Part-III, Section 10	73
	3. Ministry of Power, Government of India Guidelines for payment of compensation towards right of way for transmission lines	74
	4. MOP Guidelines for payment of compensation regarding ROW for transmission lines in Urban Areas, July 2020	74
C.	ADB's Involuntary Resettlement Safeguard Requirements	75

D.	Key Gaps: Legal Framework vis-à-vis ADB Safeguard Requirement	76
E.	Core Policy Principles	81
F.	Standard Practice to be followed for the Project	82
G.	Cut-off Date	83
VII.	ENTITLEMENTS, ASSISTANCE AND BENEFITS	84
A.	General	84
B.	Eligibility	84
C.	Entitlement Matrix for PTCUL components	84
D.	Entitlement Matrix for UPCL components	86
VIII.	RESETTLEMENT BUDGET AND FINANCING	87
A.	Background	88
B.	Budget for Project Components Implemented by UPCL	88
C.	Budget for Project Components Implemented by PTCUL	89
1.	Compensation for Land under Tower	89
2.	Compensation for Private Land within ROW Corridor	89
3.	Compensation for Damage to Crops	90
4.	Administrative cost for Implementation and Monitoring of Resettlement Plan	94
5.	Summary of Budget for PTCUL	94
D.	Summary of Budget Estimate (PTCUL and UPCL)	95
IX.	INSTITUTIONAL ARRANGEMENTS FOR IMPLEMENTATION	96
A.	General	96
B.	Implementation Arrangements including Safeguards	98
B-1	Project Management Unit (PMU)	98
C.	ADB's Responsibilities	101
D.	Capacity Assessment	102
E.	Overall Roles and Responsibilities relating to Resettlement Plan Implementation	102
X.	IMPLEMENTATION SCHEDULE	104
A.	Updating the Resettlement Plan	104
B.	Implementation of the Resettlement Plan	104
XI.	MONITORING AND REPORTING	107
A.	Monitoring	107
B.	Reporting	108

APPENDIX I

1.	Appendix 1: Detailed Project Description	109
2.	Appendix 2: Project and Subproject Footprints	139

3. Appendix 3: Land Possession Status and Records for PTCUL Substations.....	153
4. Appendix 4: Geo Spatial Assessment on High Voltage Power Lines - PTCUL.....	270
5. Appendix 5: Land Possession Status and Records for UPCL Substations.....	353
6. Appendix 6: Records of Consultations for PTCUL Components.....	401
7. Appendix 7: Records of Consultations for UPCL Components.....	501
8. Appendix 8: Records of Gender Consultations.....	567
9. Appendix 9: Social Safeguards Monitoring Template.....	631

List of Tables

Table 1: Administrative units of sub-projects	4
Table 2: New overhead high voltage power lines	5
Table 3: New Substations by PTCUL	5
Table 4: Underground LLO Electricity Cables	6
Table 5: Underground Distribution Cables and above ground CSSc and RMUs	7
Table 6: List of Wards and Gram Panchayats for Underground Cabling	7
Table 7: Substations to be Upgraded by UPCL	9
Table 8: New Distribution Component Substations by UPCL	10
Table 9: Associated 33/11 kV Overhead Lines	10
Table 10: Type and Mode of Procurement of Land for Substations	11
Table 11: Land area under the high-voltage Power Line towers	13
Table 12: Impact due to Tower Bases of Power Lines	14
Table 13: Impact within the ROW of the Power Lines	14
Table 14: Estimated number of affected private landowners within ROW corridor per indicative power line	15
Table 15: Estimate of impact on crops for construction of towers	16
Table 16: Estimate of affected crop area due to stringing in construction stage	17
Table 17: Summary Impacts of Power Lines under PTCUL Components	19
Table 18: Land area required for establishing new substations	20
Table 19: Land details and status of the land procurement process	20
Table 20: IT Impacts on Capacity Enhancement of 33/11 kV Existing Substation	21
Table 21: Number of lines and total length of underground work zone wise	24
Table 22: Summary of Impacts	26
Table 23: Household electrification in Uttarakhand across districts	31
Table 24: Villages, gram panchayats, towns and household across project districts	34
Table 25: Distribution of population by rural and urban	34
Table 26: Distribution of population by gender in the project villages	34
Table 27: Distribution of SC and ST Population in the Project Districts	35
Table 28: Literacy rate by gender in the project districts	35
Table 29: Distribution of land ownership in the project villages	36
Table 30: Workers and non-worker in the project villages	36
Table 31: Major source of household income in the project districts	36
Table 32: Employment characteristics in the project districts	37
Table 33: Distribution of electricity consumption across project districts	37
Table 34: Number of industries by type in the project districts	38
Table 35: Demography of the project villages	38
Table 36: Demography and social groups in the project villages	38
Table 37: Literacy rate in the project villages	39
Table 38: Total working population (in %age) in the project villages	39
Table 39: Gender wise distribution workers in the project villages	40
Table 40: Status of schools in the project villages	41
Table 41: Health services in the project villages	41
Table 42: Water facilities in the project villages	41
Table 43: Telecom services in the project villages	42

Table 44: Power supply in the project villages	42
Table 45: Broad Methodology Adopted for Consultation	45
Table 46: Coverage of Consultation along High Voltage Power Lines by PTCUL	47
Table 47: Feedback from consultations along overhead high voltage power lines	48
Table 48: Coverage of Consultation along Low Voltage Lines	49
Table 49: Consultation at ward level for UG cabling work by UPCL	50
Table 50: Consultations Conducted at Sensitive Spots	51
Table 51: Consultations Done in Areas to be Affected by the Underground Cabling	53
Table 52: Feedback from consultations on Potential Impacts and Issues	54
Table 53: Key Issues and Response in multi-stakeholder workshop	55
Table 54: Stakeholders Feedback from Multi-Stakeholder Workshop	57
Table 55: Gender consultation participation and Location	58
Table 56: Key findings on gender consultations	58
Table 57: Summary Participant Lists	61
Table 58: Consultation and Participation Plan	65
Table 59: GRM Process and ORC Formation	68
Table 60: MOP Guidelines (Oct 2016 and Jul 2023) provisions for compensation for transmission tower and ROW corridor	74
Table 61: Gap in legal framework vis-à-vis ADB safeguard requirements	77
Table 62 : Land or ROW Procurement Methods and Legal Framework	82
Table 63: Entitlement Matrix for PTCUL Component	84
Table 64: Entitlement Matrix for UPCL Component	85
Table 65: Budget for Implementation of RP for UPCL Component	88
Table 66: Estimated compensation to private landowners for land under tower base	89
Table 67: Estimate of compensation for private land within ROW corridor for high voltage powerlines by PTCUL	90
Table 68: Estimate of compensation for damage of crop during construction of towers	92
Table 69: Estimate of compensation for damage to crop area within ROW corridor during stringing	92
Table 70: Budget for Implementation of RP for PTCUL Component	94
Table 71 Overview of the total budget estimated for implementation of this RP	95
Table 72: Project Management Roles and Responsibilities	96
Table 73: Institutional Roles and Responsibilities for Implementing the Resettlement Plan	102
Table 74: Tentative Implementation Schedule	105

List of Figures

Figure 1: Location of sub-projects	4
Figure 2 Steps and activities in a typical process of meaningful consultation	45
Figure 3: Steps in Consultation Process	50
Figure 4: An overview of the project implementation structure for resettlement plan	98
Figure 5: Overview of the internal monitoring mechanism	108

Executive Summary

i. This draft Resettlement Plan has been prepared for the Uttarakhand Climate Resilient Power System Development Project (Project) proposed to be financed by the Asian Development Bank (ADB) through a project loan. This document aims to guide the project executing and implementing agencies in overall planning and implementation of the Project particularly in identifying, avoiding, and mitigating temporary or permanent, physical or economic displacement of affected persons within the project area. The Energy Department of the Government of Uttarakhand will be the executing agency responsible for the overall coordination of the Project with (i) the Power Transmission Corporation of Uttarakhand Limited (PTCUL); (ii) the Uttarakhand Power Corporation Limited (UPCL); and (iii) the Uttarakhand Renewable Energy Development Agency (UREDA) as implementing agencies. **The Project is categorized as 'B' for involuntary resettlement (IR) and category 'C' for indigenous peoples (IP) impact based on ADB's Safeguards Policy Statement (SPS), 2009.** Outputs 2 and 3 do not trigger IR and IP impacts. The UREDA components under output 3 is unlikely to trigger any IR and IP issues, therefore, the resettlement plan covers PTCUL and UPCL components. However, during implementation of UREDA components, any IR or IP impacts trigger then the same will be assessed and will remain part of the updated resettlement plan.

ii. This draft resettlement plan covers output-1 of the project that consists of (i) grid and improvement to be implemented by PTCUL and (ii) distribution network improvement to be implemented by UPCL. Grid improvements components include various subcomponents such as: New overhead high voltage power lines (132kV, 220kV and 400kV line in – line out [LLO]) connecting substations to existing power lines; Construction of new substations (3 Nos); and Second circuit stringing of an existing power line and Underground LLO cabling. Distribution network improvement components include various subcomponents such as New / Conversion of 33kV overhead line (OHL) to underground cable, Conversion of 11kV OHL to underground cable, Conversion of Low-Tension line to underground cable, Capacity enhancement of existing 33/11kV Substations (25 Nos), Construction of new 33/11kV Substations (3 Nos), Construction of new 33/11kV OHL and Construction of new 33/11kV underground cable.

iii. This draft Resettlement Plan is based on feasibility-level technical details provided by PTCUL and UPCL. Before implementing the Project, this draft resettlement plan will be updated based on the final design of substations and alignment/route of power line; result of socio-economic survey of all the affected households; and finalized assets inventory of losses. Further, this RP should be updated as needed should there be a change in the location of substations initially identified in the draft Resettlement Plan or when any new involuntary resettlement impacts are identified. The updating of this Resettlement Plan will be undertaken in parallel with the detailed design survey. The final resettlement plan, including updates to it, should be reviewed by ADB and disclosed to affected persons and other stakeholders prior to project implementation or start of civil works.

iv. The power network strengthening, modernization, and climate proofing will entail the construction of eight (8) new substations by PTCUL, of which sites for seven (7) substations have been finalized and the site for the remaining one is yet to be finalized. Five (5) substations are proposed on government owned land and two (2) substations are proposed on privately owned land. Total land required for 7 substations is 10.85 hectares (ha), of which 5.14 ha is privately owned and 5.71 ha is government owned land. Out of the two privately owned substations, land for one substation (Manglore) has been obtained from one owner through direct purchase based

on negotiation. Regarding the power lines the assessment has been done based on the estimate. The total number of towers is estimated to be 216 of which 213 towers will be placed on privately owned land impacting an estimated 213 households/landowners and 3 towers will be placed on government-owned land without affecting any household. The total area required for tower base/footings is estimated to be 8.1 hectare which will be restricted, and an additional 12.55 ha of crop area is estimated to be affected during the construction of tower base/footing. Total area affected under the right of way (RoW) is estimated to be 168.87 ha of which an estimated 82.51 hectare of land is crop land which will affect 1,305 number of landowners/households. Underground LJO will be constructed along the margins of the public road, therefore, will involve neither acquisition of land nor imposition of ROW. No physical displacement is foreseen as per the assessment. However, the exact numbers will be updated during final design.

iii. Under the distribution network improvement to be implemented by UPCL, three (3) new 33/11 kV substations, requiring 0.43 ha land, will be constructed on government-owned land which will be transferred to UPCL. The modernization and augmentation of 26 number of 33/11 kV substations will not require additional land as construction will be undertaken within the premises of existing substations. The underground cable work will be carried out within Dehradun city and its suburbs which is serviced by UPCL through five (03) electricity distribution divisions (EDD). The total estimated length of cables to be laid underground is 321 circuit kilometers (cokms) under these distribution divisions. The vacant space at the margin of public roads will be used for laying these cables. These cables do not impose any RoW restrictions on adjacent landowners or users. The underground cable distribution network will also install 99 CSS and 354, 11kV RMUs and 9, 33 kV RMU which will be above ground. These will also be placed on public land and will be mostly on the locations where transformers exist. Hence, no permanent impact on private property or livelihood is envisaged. However, temporary loss of income of roadside vendors may occur during construction if not avoided or mitigated. UPCL will also construct three (03) 11kV overhead distribution lines with total length of 28 kms which will have no impacts except minor intervention in terms of loss of crop/fields during construction.

iv. Consultations with a wide range of stakeholders have been carried out at various locations within the project area. For the high voltage power lines and substations components, consultations were carried out at 39 locations having a total of 85 participants. Consultations were also carried out at 6 locations covered under the low voltage distribution lines where 7 people were consulted. For the underground cabling, various consultations/key informant interviews were carried out at 30 wards that include 41 persons including 36 elected representatives. A formal multi stakeholder consultation cum workshop was also organized at Dehradun for the UPCL project components where a total of 42 participants attended. Additionally, focused group discussions were conducted with women, where a total of 126 women participated. In sum, a total of 560 people were consulted, of which 257 are male and 303 are females. The consultation process will be continued throughout project implementation. The RP summary will be made available in the local language (Hindi) to the local people. This draft RP will be disclosed in ADB, PTCUL, and UPCL websites. Subsequently, this draft RP will be updated as per final design following a detailed assessment of social impacts, baseline (pre-project) survey of socio-economic conditions of affected households, and meaningful consultation with affected persons. The updated RP will be reviewed by ADB (prior to finalization), disclosed in ADB, PTCUL, and UPCL websites, and be made available to affected persons in summarized and full form in offices of implementing agencies and project sites.

vi. A 4-6er grievance redress mechanism shall be established to address concerns and grievances of affected persons and workers involved in this Project. Considering that the three

(3) implementing agencies will implement different project sub-components and will likely receive complaints that may differ in nature and complexity, the Project will have GRM established separately at each implementing agency for their respective components. It will however, follow the same four tier structure with (i) Tier-1 at EPC Contractor/Division level, (ii) Tier-2 at PIU level, (iii) Tier-3 at PMU level (supported by PISC); and (iv) Tier-4 at the Energy Department of the Government of Uttarakhand (the executing agency) at the highest level. Information about the GRM shall be communicated to the affected people across the project area as part of overall consultation and disclosure process of the Project. All costs involved in resolving the complaints/grievances (meetings, consultations, communication, and reporting/information dissemination) will be borne by the respective project implementing agencies. Any complaints resolution pertaining to the performance of EPC contractors will be borne by the EPC contractors. Further, ADB also has its Accountability Mechanism which is a forum of last resort where people adversely affected by ADB-financed projects can express their grievances, seek solutions, and report alleged violations of ADB's operational policies and procedures. Notwithstanding the presence of these complaints mechanisms, any affected person can always freely access and seek remedies from courts or other judicial or quasi-judicial venues available in India.

vii. This draft resettlement plan has been prepared following ADB's Safeguard Policy Statement (2009) and related core national policies, notably, (i) The Electricity Act, 2003 read with Section 10 and 16 of Indian Telegraph Act, 1885 and (ii) Ministry of Power (MOP) Guidelines for payment of compensation towards damages in regard to Right of Way for Transmission Lines, 2010. The eligible affected persons include (i) persons with formal legal rights to land lost in its entirety or in part, (ii) persons who lost the land they occupy in its entirety or in part who have no formal legal rights to such land, but who have claims to such lands that are recognized or recognizable under national laws, and (iii) persons who lost the land they occupy in its entirety or in part who have neither formal legal rights nor recognized or recognizable claims to such land. Entitlements have been defined based on the type of impacts and as per the policy principles laid out in the resettlement plan. Detailed entitlement matrix has been provided in chapter-VI.

ix. The entitlement mechanism is developed based on the type of impacts such as impacts related to tower base and impacts in the right of way. Loss related to tower base area (between four legs) impacted severely due to installation of tower/pylon structure will be compensated at 80% of land value as determined by District Magistrate or any other authority based on Circle rate/ Guideline value/ Stamp Act. Diminution of land value in the width of Right of Way (RoW) Corridor due to laying of transmission line and imposing certain restriction would be compensated at 15 percent of land value as determined by District Magistrate or any other competent authority based on Circle rate/ Guideline value/ Stamp Act rates. Loss of crops and trees will be compensated at replacement value to be determined by the concerned department which is primarily revenue department with assistance from agriculture, forest and horticulture department. Although no physical displacement is foreseen, however provision for compensation for loss of structures during construction has been made in the entitlement matrix where loss of structures will be compensated at replacement value. Provision for additional assistance for vulnerable households has been made where vulnerable affected persons will be given preference in temporary employment under the project during construction and implementation where feasible by the EPC contractor. For the UPCL components, the anticipated losses are minimal and limited to loss of crops and trees for the overhead lines which will be compensated based on the valuation to be done by the concerned department. Additionally, temporary loss of income due to loss of access (complete closure more than 24 hours) will be provided with assistance. Similarly, any damage to structures will be compensated as per the replacement value. Any unanticipated

impacts in the future will be assessed and compensated as per the policy principles set out in the RP and as per the resettlement plan.

xi. The indicative budget is INR 22,11,83,455 (INR 221.18 million equivalent to USD 2.67 million) as estimated for implementation of the project as per the provisions under this RP. This includes a contingency amount of 25% of the estimated cost for each PTCUL and UPCL to accommodate any cost related to unanticipated impacts. The budget is divided in two parts. Part-A of the budget (INR 14.40 million) is required for UPCL components and Part-B (INR 206.78 million) is required for PTCUL components. PTCUL and UPCL will ensure budgetary provision as part of the counterpart funds. The cost is indicative and will be updated during the final design and updating of the draft Resettlement Plan.

xii. Compensation for any permanent impacts such as land compensation for privately owned substation, land compensation for tower base (85% land value per MoP guidelines) shall be made prior to start of the construction. Compensation related to RoW, trees and crops etc will be paid within three (3) months from the valuation/construction. For the construction of high voltage power lines and 33/11 kV distribution line, a phase wise approach can be adopted for payment of compensation. PTCUL and UPCL will ensure that compensation is being paid simultaneously during the construction of line which shall be within three (3) months from construction for the stretch which is ready for construction.

xiii. The Energy Department, Government of Uttarakhand is the executing agency for the project and Power Transmission Corporation of Uttarakhand Ltd (PTCUL) and Uttarakhand Power Corporation Limited (UPCL) will be the implementing agencies for their respective components. A Project Management Unit (PMU) will be established at executing agency level for this project for overall coordination and implementation of the Project which will be supported by various individual consultants including social safeguards which will be a senior social safeguard officer (SSO). PTCUL and UPCL will have their own respective project implementation unit (PIU) for implementation of projects including safeguards. Respective PIUs will assume primary responsibility for the planning, preparation and implementation of RPs. PTCUL and UPCL will designate one expert responsible for social safeguards activities. Respective PIU at PTCUL and UPCL will be supported by respective Project Implementation and Supervision Consultant (PISC) which will be a firm consultant and will have social safeguards specialist in the team.

xiv. Monitoring will be the responsibility of PTCUL and UPCL through PMU with input from the respective PIUs. The internal monitoring of the implementation of the RP will be at two levels; (i) by the respective PIUs (UPCL and PTCUL), and (ii) by the PMU/PISC level. Additionally, external monitoring will be undertaken if required by an independent social safeguard expert annually during the implementation period. Internal monitoring reports will be submitted semi-annually by the UPCL and PTCUL through its respective PIUs and the PMU will finally submit officially to ADB semi-annually. The approved semi-annual report will be disclosed on the website of ADB, UPCL and PTCUL.

I. INTRODUCTION AND PROJECT DESCRIPTION

A. Project Overview

1. This draft Resettlement Plan has been prepared for the 'IND: Uttarakhand Climate Resilient Power System Development Project' (Project) proposed to be financed by the Asian Development Bank (ADB) through a project loan. This document aims to guide the project executing and implementing agencies in the overall planning and implementation of the Project particularly in identifying, avoiding and mitigating temporary and permanent, physical or economic displacement of affected persons within the project area. The Energy Department of the Government of Uttarakhand will be the executing agency responsible for the overall coordination of the Project with (i) the Power Transmission Corporation of Uttarakhand Limited (PTCUL), (ii) the Uttarakhand Power Corporation Limited (UPCL), and (iii) the Uttarakhand Renewable Energy Development Agency (URED) as implementing agencies.

2. The Project will support the Government of Uttarakhand in strengthening its power system network to meet future electricity demand growth and to improve quality and reliability of power supply to its consumers, while facilitating efficient utilization of its hydropower and renewable energy resources. The Project, which primarily focuses on climate resilience of the Uttarakhand power system, will apply a range of integrated and resilient solutions: (i) to install underground distribution system in Dehradun; (ii) reinforce existing power networks via upstream substations and its associated lines; (iii) design and implement measures to improve climate resilience of power system, and (iv) undertake gender and socially inclusive renewable energy-based income generating activities in rural areas. The Project will also strengthen the institutional capacity and knowledge of project implementing agencies on integrated and climate-resilient power system development in Uttarakhand. The Project, which has outputs as below, will be the first major step towards introducing climate and disaster resilient power system network in Uttarakhand and will have a transformational impact in the future power system development of the state.

3. **Output 1: Power network strengthened, modernized and climate proofed.** The project will finance: (i) climate and disaster resilient underground cable network in Dehradun. This includes 321 circuit kilometers (circuit km) of underground cables, 354 ring main units, 99 compact substations and its associated low voltage lines; (ii) distribution investments in urban and suburban areas of Dehradun to improve distribution system reliability, including 3 distribution substations and about 30 km of distribution lines (including underground cables); (iii) grid investments to reduce network congestion and support the increasing electricity demand from industrial, commercial, and domestic consumers. To facilitate this, the Project will construct 8 grid stations, its associated power lines of about 70 km and stringing of second conductor of 35 km in existing power line; and (iv) renovation of distribution network in rural areas to enable grid connection of community energy projects and support gender inclusive income generating activities.

4. **Output 2: Institutional capacity of implementing agencies enhanced.** The Project will support the long-term sustainability of distribution sector through (i) preparation of financial roadmap and its implementation to improve its financial sustainability; (ii) establishment of testing

team and test facilities to improve the operational capacity of utilities; (ii) implementation support to effectively monitor the project and ensure its technical, procurement, and safeguard compliances; (iv) establishing a gender equality and social inclusion (GESI) strategy that will include a leadership program for female staff, and internship in UPCL and PTCUL for female students in Science, Technology, Engineering, and Math (STEM) to advance gender equality in the power sector.

5. Output 1: GESI awareness-raising and energy-based livelihood activities promoted.

The Project will engage at least 2,500 local community members (50% women) from 250 selected women self-help groups (SHGs) groups in hill districts gaining access to renewable energy and energy efficient equipment to enhance their income. The envisaged activities include (i) training for 400 local community members (at least 50% women) in renewable energy technology, energy conservation, management, business skills, marketing, and leadership; (ii) conducting awareness campaign and providing learning opportunities covering at least 500 university and higher secondary school students (at least 30% girls) in STEM streams on the energy sector career path, and (iii) implementation and monitoring support for the intervention to SHGs by engaging local NGOs. UREDA will mainly implement the activities for this Output which are to be financed by a grant from the Japan Fund for Prosperous and Resilient Asia and the Pacific.

6. The Project is categorized as 'B' for involuntary resettlement and category 'C' for impact on indigenous peoples per Asian Development Bank (ADB)'s Safeguards Policy Statement (SPS), 2009. It is anticipated that activities under Outputs 2 and 3 will not have any impact relating to involuntary resettlement or to indigenous peoples. As such, this draft resettlement plan covers only the components to be implemented by PTCUL and UPCL under Output 1.

B. Preparation this Draft Resettlement Plan

7. This draft Resettlement Plan has been prepared in compliance with ADB's requirements relating to the project loan to guide project implementation and ensure that the Project adheres to the objectives and policy principles of ADB's SPS on Involuntary Resettlement Safeguards.¹

8. The preparation of this document was based on feasibility-level technical details provided by PTCUL and UPCL. The sites for the proposed new substations are finalized except for one substation by PTCUL. However, the alignment for the power lines and distribution networks are still preliminary, and will be finalized by the engineering, procurement, and construction (EPC) contractor after preparing the substation design and determining the final alignment of power lines. The capacity enhancement and modernization of 25 existing 33/11kV substations of UPCL will be undertaken within the boundaries of the existing substations and as such will not have any involuntary resettlement impact.

9. This draft Resettlement Plan was prepared based on primary and secondary data; visits to proposed locations of the substations; meetings/interviews/consultations with PTCUL, UPCL, and UREDA officials and staff, review of pertinent documents, and key informant interviews, focused group discussions, and consultations with persons likely to be affected by the Project and

¹ ADB, Safeguard Policy Statement, p. 17 at <http://www.adb.org/sites/default/files/institutional-document/32056/safeguard-policy-statement-june2009.pdf>.

other stakeholders. Walkover surveys to understand the impacts along the indicative alignment of the power lines and tower base locations were undertaken to assess probable social impacts of the project activities. Due diligence was conducted for existing substations to confirm no additional social impacts will likely occur due to capacity enhancement and modernization of 33/11kV existing 25 substations by UPCL.

10. Feasibility level technical details provided by PTCUL and UPCL. This draft Resettlement Plan was based on a. The sites for the proposed new substations are finalized except for one substation by PTCUL. However, the alignment for the power lines and distribution networks are still preliminary, and will be finalized by the engineering, procurement, and construction (EPC) contractor after preparing the substation design and determining the final alignment of power lines. The capacity enhancement and modernization of 25 existing 33/11kV substations of UPCL will be undertaken within the boundaries of the existing substations and as such will not have any involuntary resettlement impact.

C. Description of Project Components

11. This draft resettlement plan covers the project components under Output 1 below.

A. Grid improvement (to be implemented by PTCUL):

- New overhead high voltage power lines (132kV, 220kV and 400kV Line in Line Out [LILO]) connecting substations to existing power lines
- Construction of eight (8) new substations
- Second circuit stringing of an existing power line
- Underground LILO cabling

B. Distribution network improvement (to be implemented by UPCL):

- New/Conversion of 33kV overhead line (OHL) to underground cable
- Conversion of 11kV OHL to underground cable
- Conversion of Low-Tension line to underground cable
- Capacity enhancement of existing 33/11kV Substations (25 Nos)
- Construction of new 33/11kV three (3) distribution substations
- Construction of new 33/11kV OHL
- Construction of new 33/11kV underground cable

12. As shown in Figure 1, the sub-projects cover the seven (7) districts of Uttarakhand, namely, (i) Dehradun, (ii) Pithoragarh, (iii) Nainital, (iv) Udham Singh (US) Nagar, (v) Haridwar, (vi) Champawat, and (vii) Almora.

Figure 1: Location of sub-projects



Source: Power Transmission Corporation of Uttarakhand Ltd. (PTCUL) and Census of India

13. Due to their linear nature, the network of power lines crosses multiple administrative boundaries (i.e., Gram Panchayats, Municipalities, Villages and Wards). **Table 1** provides the names of these relevant administrative units which constitute the study area for social assessment. Details of project description is provided in **Appendix-1** and details of the project footprint are provided in **Appendix 2**.

Table 1: Administrative units of sub-projects

Project sub-component	Name of District(s)	Number of Villages/Wards
Underground cable distribution network	Dehradun	48
Overhead low voltage power lines	Nainital, US Nagar	13
Overhead high voltage power lines	Haridwar, Nainital, US Nagar, Pithoragarh, Champawat	77
Sub-stations (New and Existing)	Nainital, US Nagar, Champawat, Haridwar, Dehradun, Almora	36

A. Grid Improvement Components (PTCUL)

14. There will be two subcomponents under the PTCUL's scope as part of grid improvement, namely, the (i) installation of high voltage power lines consisting of both overhead and underground lines, and (ii) and construction of new substations.

15. **New Overhead High-voltage Power Lines:** Eight (8) LILO overhead power lines will be constructed and connected to existing or proposed substations. **Table 2** lists these LILO lines which comprise approximately 84.6 km and about 216 towers.

Table 2: New overhead high voltage power lines

District	Power Line Name	From	To	Approx. Length (km)	No. of Towers
Haridwar	1. 400 kV Kashipur-Purana	Landhora SS	Kashipur-Purana Line	3	12
	2. 220 kV Mongour-Nara	Landhora SS	Mongour-Nara Line	25	80
	3. 220 kV Roorkhee-Nara	Mongour SS	Roorkhee-Nara Line	1	6
	4. 132 kV Mongour-Asahi	Mongour SS	Mongour-Asahi Line	1	6
U.S. Nagar	5. 132 kV Khatima-Starganj	Khatima substation (to be determined)	Khatima-Starganj Line	2*	8*
	6. 132 kV Kashipur-Mehaulkheragarj	Sarvenhara SS	Kashipur-Mehaulkheragarj Line	6.7	16
	7. 132 kV Mehaulkheragarj-Jaspur	Mehaulkheragarj SS	Jaspur SS	23.3	86
Nainital	8. 132 kV Kathgodam-RudRpur	Dheulikhara SS (Haridwar)	Kathgodam-RudRpur Line	0.6	4
Total				84.6*	216*

Source: PTCUL

*The length and number of towers are tentative as location of Khatima substation is yet to be determined.

16. **New Substations:** PTCUL will construct eight (8) new substations with details shown in 3 below and land acquisition status in **Appendix-3**. Including the eighth, these new substations will require about a total of 12 ha of land. This estimate includes the land required for the eighth substation for the 132 kV Khatima-Starganj LILO overhead power line.

Table 3: New Substations by PTCUL

#	Project Details	Location details	District	Land (Ha)	Area
1	132/33 kV, (2x40 MVA), GIS Substation, Dheulikhara	At 33 kV premises, Dheulikhara, Approx. 80 meter inside Bareilly-Haridwar Highway.	U.S. Nagar	0.2728	

#	Project Details	Location details	District	Land (Ha)	Area
		Near IOC Plant, Haridwar			
2	132 KV, (2X40 MVA), AIS Substation, Sonwarhara	Located at 7 km stone road at Village Haridwar Tehsil Jyoti	U.S. Nagar	2.4400	
3	Construction of 220 KV, (2X50 MVA), GIS Substation, Sasequi, Dehradun	At 33 KV Substation premises, Industrial Area, Sasequi	Dehradun	0.2955	
4	Construction of 132/33 KV, (2X20 MVA), GIS Substation, Lohaghat	Village Desali, Near Lohaghat Degree College, Champawat	Champawat	0.802	
5	Construction of 132/33 KV, (2X40 MVA), GIS Substation, Anaghar	At 33 KV Substation premises, Anaghar, Dehradun	Dehradun	0.4835	
6	400/220 KV GIS Substation Landhara	At Main Haridwar - Mujafarnagar NH-58, opposite underpass of village Khafra, Roorkee	Haridwar	1.845	
7	220/132/33 KV, Manglora Substation	Village Kurli, at Manglora - Jhehara road, Manglora	Haridwar	2.696	
8	To be decided			approximately 1.15	
Total				12	

17. **Underground LILO cabling:** Two high voltage underground LILOs will be constructed. Table 3: 4 Error! Reference source not found. provides details pertaining to these LILO lines which have a total approximate length of 4.3 km.

Table 4: Underground LILO Electricity Cables

No.	LILO Line Name	Connecting Substation	Length
1	Khodh-Jhehara Line Cable	At proposed Sasequi substation Dehradun	0.7 km
2	Majra-Lalpur Line Cable	At proposed Anaghar substation Dehradun	3.6 km
Total			4.3 km

LILO = line to line out
Source: P11323

B. Distribution Network (UPCL)

18. Distribution network improvement components include the following:

- New/Conversion of 33kV OH lines to underground cable
- Conversion of 11kV OH line to UG Cable
- Conversion of Low Tension (LT) OHL to underground cable
- Capacity enhancement of existing 33/11kV Substations (25 Nos)
- Construction of new 33/11kV Substations (3 Nos)
- Construction of new 33kV and 11kV OHL
- Construction of new 33kV and 11kV UG

19. **Construction of New Underground Cables:** This sub-component will be undertaken in its entirety within Dehradun. 11kV and 33kV cables will be placed below ground replacing the existing above ground distribution network in Dehradun and its suburbs. The cables will connect to above ground Compact Substations (CSS) and Ring Main Units (RMU). Table 6 provides details of the length of cables to be laid and number of associated electrical equipment above ground.

Table 6: Underground Distribution Cables and above ground CSSs and RMUs

EDD Zone	Type of Distribution Line	Cable Length to be Constructed	OHL Length to be dismantled	Number of CSS	Number of 11 kV RMUs	Number of 33 kV RMUs
North & Central	11kV	73 km	28 km	40	100	
	33kV	57 km	-	-	-	
South	11kV	108 km	62 km	20	117	
	33kV	32 km	-	-	-	
Rural	11kV	52 km	31 km	33	71	
	33kV	81 km	-	-	-	
Total		321 km	121 km	93	354	0

CSS = compact substation, EDD = Electricity Distribution Directorate, OHL = overhead line, RMU = ring main unit.
Source: UPCL.

20. The proposed underground cabling work of 321 km is spread out in 40 Wards of Dehradun Municipality and 3 other administrative units in its suburbs as shown in Error! Reference source not found. below.

Table 8: List of Wards and Gram Panchayats for Underground Cabling

#	Ward No/ GP Name	Ward Municipality/Village Name	No. of 33 kV Lines (UG)	No. of 11 kV Lines (UG)
1	1	Marsh	1	0
2	6	Doon Vihar	0	1
3	7	Jakhni	0	2
4	8	Saradai	1	1
5	9	Arya Nagar	1	2

#	Ward No. GP Name	Ward Municipality/Village Name	(Dehradun) No. of 33 KV Lines (UG)	No. of 11 KV Lines (UG)
6	11	Vijay Colony	1	0
7	12	Kishan Nagar	0	1
8	15	Karanpur	1	0
9	16	Bakrawala	1	0
10	17	Chukhawa	0	1
11	19	Sharda Ghar Kalika Mandir Marg	0	1
12	21	MUKP	3	2
13	22	Tick Road	0	1
14	25	Indran Nagar	0	3
15	26	Dharmawa	0	2
16	28	Dolanwala (North)	0	1
17	30	Dolanwala (South)	0	2
18	34	Gavind Ghar	0	1
19	35	Shri Dev Suman	0	1
20	36	Vijay Park	0	1
21	37	Basant Vihar	0	2
22	38	Panditwala	0	2
23	41	Indrapuram	0	1
24	42	Kawal	0	1
25	43	Dwaroun/Dwarapuri	0	1
26	44	Patel Nagar (West)	1	2
27	46	Achawa	0	3
28	56	Dharmpur	1	10
29	57	Nandu Colony	1	10
30	71	Patel Nagar (East)	1	1
31	73	Vijaya Vihar	1	1
32	74	Shrampuri	0	1
33	77	Maja	1	3
34	79	Bhanuwala Grant	0	3
35	87	Pihuwa	0	2
36	90	Mondrawala	0	1
The list of EDO Raipur Rural				
37	5	Dhovan	0	1
38	47	Chander Road MDA colony	0	1
39	50	Rajiv Nagar	0	1
40	58	Defence colony	0	1
41	59	Gujara Mansingh	0	2
42	60	Danda Lakhsund	0	2
43	61	Aasmala Tarta	0	1
44	62	Munshi Khari	0	1

#	Ward No/ GP Name	Ward Municipality/Village Name	(Dehradun No. of 33 KV Lines (UG)	No. of 11 KV Lines (UG)
45	63	Ladpur ECO Mohanpur Rural	0	1
46	Rampur GP	Rampur, Solau	1	0
47	Shankarpur GP	Shankarpur, Solau	1	0
48	SIDCUL	SIDCUL Area	3	0

UGO = Electricity Distribution Directorate, GP = Gram Panchayat, UG = underground
Source: UPCL

21. **Capacity enhancement of existing 33/11 kV substations:** Table 7 below lists the 25 existing 33/11 kV substations that will be rehabilitated and modernized.

Table 7: Substations to be Upgraded by UPCL

#	District	Substation Name	Division/Sub-Division	Substation Type
1	Dehradun	Sahodraethara	Sahodraethara, Dehradun (N)	33/11 kV GIS
2		Hathibarsola	Hathibarsola, Dehradun (N)	33/11 kV GIS
3		Sohiya	Sohiya, Vikasnagar, Dehradun Rural	33/11 AIS
4		Sawra	Sawra, Vikasnagar, Dehradun Rural	33/11 AIS
5		Rudrapur	Rudrapur, Vikasnagar, Dehradun Rural	33/11 GIS
6		Ramnagar Danda	Ramnagar Danda, Dohwa, Dehradun Rural	33/11 AIS
7		Lal Tapper	Lal Tapper, Dohwa, Dehradun Rural	33/11 AIS
8	Almora	Tarkhet	Tarkhet, Rankhet, Almora	33/11 AIS
9		Bajol	Bajol, Rankhet, Almora	33/11 AIS
10		Lamgarh	Lamgarh, Almora, Rankhet	33/11 GIS
11		Saraghat	Saraghat, Almora, Rankhet	33/11 GIS
12	Nainital	Kamawaganja	Kamawaganja, Haldwani Rural	33/11 AIS
13		Transport Nagar	Transport Nagar, Haldwani Rural	33/11 AIS
14		Phoolchaur	Phoolchaur, Haldwani Rural	33/11 AIS
15		Garampani	Garampani, Nainital, Haldwani	33/11 AIS
16		Tala Ramgarh	Tala Ramgarh, Nainital, Haldwani	33/11 GIS
17		Sorghahat	Sorghahat, Mukteswar, Nainital, Haldwani	33/11 AIS

#	District	Substation Name	Division/Sub-Division	Substation Type
18	US Nagar	Pines	Pines, Nainital, Haldwani	33/11 GIS
19		Makots	Makots, Rudraur-I	33/11 AIS
20		Bhadespur	Bhadespur, Rudraur-I	33/11 AIS
21		Labur	Labur, Rudraur-I	33/11 AIS
22		Starganj	Starganj, Rudraur	33/11 AIS
23		Jharkul	Jharkul, Khathma, RudRPLur	33/11 AIS
24		Kashipur	Kashipur,	33/11 AIS
25		Doraha	Doraha, Baspur	33/11 AIS

AIS = air insulator substation, GIS = gas insulator

Source: UPCL

22. Construction of new 33/11 kV Substations: Three (3) new substations, which will require a total of 0.4354ha of land, will be constructed as part of the distribution component to be implemented by UPCL. **Table 8** provides a summary of their types and locations.

Table 8: New Distribution Component Substations by UPCL

#	District	SS Name	Division/Sub-Division	Area (hectares)
1	US Nagar	Rudrapur Collectorate	Rudrapur	0.096
2		Bharsuni	Starganj	0.1824
3	Nainital	Kaniya	Ramnagar	0.2
Total				0.4354

Source: UPCL

23. Associated Low-voltage Overhead and Underground Distribution Lines: Two additional overhead and one underground distribution lines are planned under the distribution component. The details are provided in **Table 9**. The 33/11 kV overhead lines are typically pole structures. The UG line will be constructed per the UG distribution works in Dehradun. The implementation agency has identified a tentative route of these lines based on preliminary walk-over survey. The final alignment of each line will be determined by the EPC Contractor.

Table 9: Associated 33/11 kV Overhead Lines

#	Line Connecting Substation	District	Length (km)
1	Rudrapur substation Collectorate	U.S. Nagar	4
2	Bharsuni substation	U.S. Nagar	16
3	Kaniya substation	Nainital	10
Total			34 km

Source: UPCL

II. SCOPE OF LAND ACQUISITION AND INVOLUNTARY RESETTLEMENT

24. Based on the findings of social due diligence, the Project will not entail permanent and compulsory land acquisition. Although, permanent diminution of land value of agricultural lands under the lower base and some restrictions relating to economic activities on lands under the ROW are anticipated, these are not expected to result in significantly impact the livelihood of affected landowners as they can continue to use those lands for farming.

25. The Project will avoid constructing the lower base and facing the alignment of power lines in areas that will have any involuntary resettlement impacts as defined in ADB's SPG (2009). In selecting the eighth substation for the grid improvement, PTCUL will procure land that does not have involuntary resettlement issues. The succeeding paragraphs describe in detail the social safeguard impacts of the Project.

A. IMPACT UNDER PTCUL COMPONENTS AND SUBCOMPONENTS

A.1 New Substations

26. PTCUL requires about 12 ha of land for these eight (8) new substations. The sites for seven (7) substations have been finalized and the location of the remaining one is yet to be determined. Of the seven (7) sites, five (5) were government lands that are in the process of or have been transferred to PTCUL. Three (3) sites will come from private landowners. The purchase of private land in U.S. Nagar for the Saravahera substation is yet to be completed. This land is located within an industrial area which belongs to an industry, Diamond Enterprises. Price negotiation is ongoing and PTCUL anticipates signing the Sale Deed. For Manglora substation, PTCUL purchased the land from a private individual in December 2019. Should negotiation for the purchase of private lands fail, PTCUL shall look for another suitable land whose owner is willing to sell the land. Details are given in Table 10.

Table 10: Type and Mode of Procurement of Land for Substations

#	Substation Name	Revenue Record (Khasra/ Gata/Plot No.)	Land Ownership	Legal Instrument Denoting Nature of Land Procurement	Status
1	Dharachera SS	Khaton: 9, 10 & 11, Khat No.: 93, 94, 95 and 96	UPCL	MOU for land transfer between UPCL and PTCUL	Land transfer is under process
2	Saravahera SS	Khasra No. 00054, Khasra No. 281min (0.1450 Ha), Khasra No. 282min (0.4010 Ha), Khasra No. 283 (0.0800 Ha), Khasra No. 284min (1.8190 Ha)	Diamond Enterprises (Sole proprietor Singh)	Land purchase not yet completed	Price negotiation is ongoing and PTCUL is in process to sign the Sale Deed

#	Substation Name	Revenue Record (Khata/ Gata/Plot No.)	Land Ownership	Legal Instrument Denoting Nature of Land Procurement	Status
3	Deasap SS, Dabradun	Plot No C/2	SIDCUL	Transfer letter issued by SIDCUL to PTCUL	Land in possession
4	Lohaghat SS	Khata, Khaliyan No: 184, Khel No.: 6015, 6017, 6019	Revenue Department, GoUK	Lease Deed	Land in possession
5	Asarghar SS	Khata: 75 Khata: 244/2, 245, 246, 247/2, 286, 287, 288. Khata: 57, Khata: 243 & 285	UPCL	UPCL board resolution to transfer land to PTCUL	Land transfer is under process
6	Lardhera SS	Khata No. 252 & 253, Khata: 1, 7 vs. 7 in 92	Revenue Department, GoUK	Lease Deed	Land in Possession
7	Manglore SS	Khata No 25, Khata No. 101, 103, Khata No 26, Khata No. 95, 96, Khata No. 86, Khata No. 102.	Private Land	Sale deed for land purchase completed in December 2013	Land in Possession
8	To be determined				

GoUK= Government of Uttarakhand, SIDCUL= State Industrial Development Corporation of Uttarakhand Limited, SS = Substation, PTCUL= Power Transmission Corporation of Uttarakhand Limited, UPCL= Uttarakhand Power Corporation Limited
Source: PTCUL

A.2 Impacts due to New Overhead High-Voltage Power Lines

27. The impacts due to overhead power lines will be of two types such impacts due to tower base and impacts due to line corridor or right of way. The overhead high voltage power lines cause restriction to the land use for the area under the tower base (i.e., the area between the four legs of the tower). The land area under the tower base may be restricted where people may not be able to cultivate or do any other activities post the construction of tower. Although the land ownership remains with the owners, they are economically affected in terms of loss of access to cultivate or grow trees within the tower base. Therefore, 85% of land value compensation is paid to the affected owners for the restrictions in addition to the compensation for other asset (trees/crops) to be covered by the tower base. However, for high voltage towers (400kV, 220kV and 132 kV), people can still cultivate manually and as a general practice, people continue cultivating the land and they are allowed.

28. For the line corridor especially the right of way between the two towers causes temporary land use restrictions during construction, especially during stringing, in addition to loss of crops and trees. The high voltage power lines maintain adequate vertical and horizontal clearances with

a defined right of way as stated in the Electricity Act. This allows the affected households to continue regular cultivation within the RoW. However, some restrictions in terms of growing big trees or building houses below the line may occur and is being considered as diminution of land value in the width of RoW corridor due to laying of transmission line and imposing certain restriction. A detailed methodology adopted for the geospatial assessment done to calculate the indicative magnitude of impact to private landowners is in **Appendix-4**.

29. Land under the tower base and its impact: The assessment for the draft resettlement plan is done based on google-earth surveys of areas that might be traversed by indicative power line alignment and the results were based on estimation. As a standard practice, the maximum tower base area required per tower is 450m² for a 400 kV line, 400m² for 220 kV line, and 350m² for 132 kV line. **Table 11** provides the break-up of the total number of towers for each of the proposed new high voltage power lines and calculates the total area to be covered under tower bases. In total, there will be 216 towers spread across a total of 8.1ha of land, mostly agricultural, within the project area.

Table 11: Land area under the high-voltage Power Line towers

District	Power Line Name	Number of Towers	Area per Tower Base (m ²)	Area Within Tower Base (m ²)	Area Within Tower Base (Ha)
Haridwar	1. 400 kV Kastipur-Putana	12	400	5,400	0.5
	2. 220 kV Manglaur-Nara	80	400	32,000	3.2
	3. 220 kV Moohkee-Nara	6	400	2,400	0.2
	4. 132 kV Manglaur-Naahi	6	300	2,100	0.2
US Nagar	5. 132 kV Khatima-Sitarganj	6*	350	2,100*	0.2*
	6. 132 kV Kastipur-Mahuakhersaganj	88	350	5,600	0.6
	7. 132 kV Mahuakhersaganj-Jaspur	88	350	30,800	3.0
Nainital	8. 132 kV Kathgodam-Rudrapur	4	350	1,400	0.1
Total		216*		81,900*	8.1*

Source: Estimation based on Google map study

*Figures may change depending on finalization of location of Bh substation.

30. Out of the 216 towers, only 3 towers are located on public land. The towers are mostly located on cultivated farmland or fallow private land. Hence, the total number of affected landowners whose land will come under the tower base is estimated to be 253. Out of this 102 are in Haridwar District and 107 are in Udham Singh Nagar District. Details are provided in **Table 12**.

Table 12: Impact due to Tower Bases of Power Lines

District	Power Line Name	Total No. of Towers	No. of Towers on Cultivated Land	No. of Towers on Fallow Land	No. of Towers on Public Land	Estimated Affected Landowners
Hardwar	1. 400 kV Kashpur-Punana	12	12	0	0	12
	2. 220 kV Manglaur-Nara	80	75	3	2	78
	3. 220 kV Raikwas-Nara	8	8	0	0	8
	4. 132 kV Manglaur-Aashi	6	6	0	0	6
US Nagar	5. 132 kV Whatma-Bitragan	6*	6*	0	0	6*
	6. 132 kV Kashpur-Mahukheragar	16	16	0	0	16
	7. 132 kV Mahukheragar-Jasur	88	82	3	1	88
Nainital	8. 132 kV Kathgodam-Rudrapur	4	0	4	0	4
Total		216	203	10	3	213

Source: Estimation based on Google map study

*Figures may change depending on finalization of location of Rtn substation.

31. Land under the Right of way and its impacts: The ROW width is 45m for 400 kV, 35m for 220 kV, and 27m for 132 kV power line. The total area which will come under the power line corridor is estimated to be 176.98ha. Out of this 8.11ha of land will be covered under tower bases. The remaining 168.87ha of land will come under the ROW as temporary. Impacts in terms of loss of crops. There may be chances that there will be loss of trees which will be considered as permanent impacts. Usually, the alignment avoids structures and buildings within the ROW and in case such things occur during construction, the same will be compensated at replacement value. The land restriction under the ROW is considered temporary as people are allowed to cultivate the land below the line and sufficient vertical and horizontal clearances are there. To address the Compensation at 15% of land value is provided to affected households towards diminution of land value in the width of Right of Way (ROW) Corridor due to laying of transmission line and imposing certain restriction. This will be in addition to the compensation for trees, crops or any other asset being affected due to the stringing of lines. **Table 13** provides the break-up of the land area for each of the power lines which will come under ROW impacts. The affected landowners will receive compensation as per MOP Guidelines of 2015.

Table 13: Impact within the ROW of the Power Lines

District	Power Line Name	Number of Towers	Cumulative Span Length (m)	Area within ROW Excluding Tower base area (m ²)	Area within ROW Excluding Tower base area (Ha)
Hardwar	1. 400 kV Kashpur-Punana	12	2,475.0	108,448.6	10.84
	2. 220 kV Manglaur-Nara	80	22,481.0	7,941,38.3	75.41

District	Power Line Name	Number of Towers	Cumulative Span Length (m)	Area within ROW Excluding Tower base area (m ²)	Area within ROW Excluding Tower base area (ha)
US Nagar	3. 220 kV Roorkhee-Nara	8	8,45.0	27,175.0	2.72
	4. 132 kV Monglora-Roshi	8	1,25.0	1,302.0	0.13
	5. 132 kV Khairia-Sitarganj	6	8,27.0	26,229.0	2.62
	6. 132 kV Kashipur-Mahusiharanj	16	97,80.5	258,472.2	25.85
	7. 132 kV Mahusiharanj-Jampur	86	20,117.5	513,072.4	51.31
Nainita	8. 132 kV Kathgodam-Rudrapur	4	399.0	5,862.0	0.59
Total		216	68901.0	1,802,899.6	180.27

Source: Estimation based on Google map study

32. Land use within the ROW corridor was initially done using Google map images and verified through visits and observations and consultations in selected project sites. It was possible to observe area covered under trees with dense foliage, fallow-land, road, water bodies, built-up or structures and agricultural land. The area covered under these categories was calculated. The dominant land use within the ROW corridor is for agriculture, which comprises 95.64% of the total area. Only 1.68% of the total area of the ROW corridor has trees with dense foliage. Hence, the requirement of pruning in the operation phase will be minimal.

33. The demarcations visible in the Google map images were used to count the plots used for agriculture and other purposes. It is assumed that most of the area within Power line corridor which is visibly used for agriculture is privately owned and each demarcated area is under separate ownership. The estimated affected landowners based on the assessment of the Google image for these power lines is 1,305. **Table 144** provides the break-up of the estimated affected private landowners within the ROW per line.

Table 14: Estimated number of affected private landowners within ROW corridor per indicative power line

District	Power Line Name	Number of Agricultural Plots	No. of Fallow Plots	Estimated Affected Land Owners
Haridwar	1. 400 kV Kashipur-Purana	68	0	68
	2. 220 kV Monglora-Nara	542	9	551
	3. 220 kV Roorkhee-Nara	19		19
	4. 132 kV Monglora-Roshi	4		4
US Nagar	5. 132 kV Khairia-Sitarganj	19	0	19
	6. 132 kV Kashipur-Mahusiharanj	211	2	213
	7. 132 kV Mahusiharanj-Jampur	417	12	429

Nainital	8. 132 kv Kathgodam-Rudrapur	0	6	6
Total		1280	28	1308

Source: Estimation based on google map study

A.3 Underground High-Voltage L/LO Power Line

34. Two high voltage underground L/LOs, with a length of 4.3kms will be constructed along the margins of the public road. Hence, these will involve neither acquisition of land nor imposition of ROW. The temporary construction stage impacts will be assessed during the construction and if any impacts related to involuntary resettlement is triggered then the same will be compensated as per the entitlement matrix in case it is not avoidable. However, the impacts are unlikely to occur.

A.4 Impact on Crops and Trees

35. The impact on the agricultural land and damage to the crops will be at two stages. The first stage impacts will be associated with construction of towers. The impact of the tower construction will not be restricted to the tower base area only. Hence, an additional area of 225 sqm per tower is considered for estimating the total area for anticipated crop damage. The estimated damage to crop area for construction of towers is 12.55 ha. An estimate has been provided in Table 16.

Table 16: Estimate of impact on crops for construction of towers

District	High voltage Power Line Name	Estimated Affected Land Owners	Area of Pvt Land/ Crop Area within Tower Base	Additional Area for Crop Damage in sqm (225 per tower)	Crop Area to be compensated for tower construction in Ha
Haridwar	1. Kashipur-Pithana	12	5400	2700	0.81
	2. Mangaur-Nara	78	31200	17550	4.875
	3. Poonkoo-Nara	8	2400	1350	0.375
	4. Mangaur-Nara	8	2100	1350	0.345
UD Nagar	5. Khatima-Sitarganj	8	2100	1350	0.345
	6. Kashipur-Maheshwari	18	5800	3600	0.92
	7. Mithulakherganj-Jampur	85	29750	19125	4.8875
Nainital	8. Kathgodam-Rudrapur	0	0	0	0
Total		209	78850	47025	12.6575

Source: Estimation based on Google map study

36. The impact on agricultural land and damage to crops is anticipated to be caused during stringing of conductors between towers. The damage to crops due to stringing is not expected to be caused for the whole width of the ROW. It is presumed that the maximum affected crop area

will not be more than 52% of the total estimated agricultural land within ROW. However, any loss beyond the ROW due to, for instance, vehicle movements, equipment storage will be assessed during construction and will be compensated accordingly. Thus, the estimated maximum affected crop area due to stringing will be 82.5 ha. Details are provided in **Table 18**.

Table 18: Estimate of affected crop area due to stringing in construction stage

District	Power Line Name	Private Land within ROW corridor (Ha)	Total number of affected landowners	Affected Area (50% of Private land within during stringing (Ha)	Crop Area (50% of Land within ROW during stringing)
Hardwar	1. Kashiur-Puhara	16.229	68	5.114	
	2. Mangaur-Nara	73.758	351	36.879	
	3. Roorkee-Nara	2.678	19	1.339	
	4. Mangore-Aash	8.386	4	0.100	
UD Nager	5. Khadma-Sargani	2.083	19	1.046	
	6. Kashiur-Almushkeraganj	25.261	213	12.631	
	7. Almushkeraganj-Jaspur	50.778	425	25.389	
Nainital	8. Kathgodam-Rudrapur	0.030		0.015	
Total		186.036	1380	82.617	

Source: Estimate based on Google map study

37. After the stringing of the conductors, PTCUL will enumerate all trees coming within the clearance belt under the conductors. The check-survey will include a census of the affected trees which records type, girth (1m above the ground), approximate height. The trees belonging to Government, Department of Forest, Highways, other local bodies and private owners will be separately noted down. PTCUL shall obtain tree cutting permit from the revenue and forest department prior to removal or damage to the standing tree/crop. Valuation for tree compensation will be done by the revenue department with assistance from agriculture, horticulture and forest department. After payment of compensation, the timber is usually kept by the owners.

A.6 Temporary Land Requirement for Construction

38. The EPC contractor will require additional land for the construction period to set up construction camps, store materials, and establish worker camps for temporary periods. The shorter lines with 10-15 towers may not require setting up separate construction camps. For longer lines with more towers, EPC contractor will obtain the required land on lease from private owners on a mutually acceptable lease rate. The construction of power lines is done by a crew of 5-10 persons who set up fly-by small camps to carry out construction works at these tower locations which does not last longer than 2-4 weeks. These camps are set up in vacant lands, often after consultation with the owner and the local community members. This will not be part of the resettlement plan as the responsibilities will be with the contractors. However, any temporary

damage such as crop damage due to vehicular movement related to construction activities will be compensated as per the Resettlement Plan.

A.6 Summary of Impacts of PTCUL Components

39. The total land required for the eight (8) sub-stations to be constructed by PTCUL is approximately 12 ha (including estimate for the 8th substation). Out of this, 5.142ha is private land and the remaining 5.17 ha belongs to Government. Land for the eighth (8th) substation will be determined later. The private land is obtained through sale deeds after a process of negotiation. It is not anticipated that there will be any involuntary resettlement impact for obtaining the lands for these grid substations. Two high-voltage underground UIDs, with a length of 4.3kms which will be constructed along the margins of the public road will involve neither acquisition of land nor imposition of ROW. However, temporary construction stage impacts are anticipated.

40. The total area which will come under the high voltage power line corridor is 185 ha. Out of this 8 ha of land will be covered under tower bases. The remaining 177 ha of land will come under ROW impacts. Out of the total land within the power line corridor, 180.72 ha (98%) is private land and the remaining 4.19 ha (2%) is government land. The high voltage power line corridor will impact 1,522 landowners, which includes 213 affected landowners for tower base area and 1,309 affected landowners for area under ROW corridor. The impacted landowners will be paid one-time compensation as per the provisions of MOP Guidelines 2015 and 2026. The construction stage impact on agricultural land and damage to the crops will be at two stages, i.e. (i) during construction of towers; and (ii) during stringing of conductors between towers. In the first stage, during construction of towers it is estimated to 12.97ha of agriculture land and standing crops in it. In the second stage, during stringing of conductors, the total estimated crop area to be impacted is 84.65ha. The summary of impacts of the power lines under the PTCUL component is provided in **Table 17**.

Table 17: Summary Impacts of Project Areas under PDCSL Components

DMTCL	Name of the Powerline	Total Land Required (ha)	Govt Land under Power Lines (ha)	Govt Land under PDCSL Component (ha)	Total Govt Land (ha)	Private Land under Power Lines (ha)	Private Land under PDCSL Component (ha)	Total Private Land (ha)	Estimated number of affected private landowners	Estimated Number of Project Affected Persons (20 family)
Kathgodam	1. Kathgodam-Putabadi	11.383	0	0.016	0.016	0.24	10.219	10.235	66	340
	2. Mangapur-Bada	76.014	0.06	1.000	1.060	0.70	75.254	76.314	331	2100
	3. Kuchikar-Bada	2.803	0	0	0.000	0.38	2.423	2.433	18	90
	4. Mangapur-Bada	0.303	0	0	0.000	0.14	0.163	0.163	4	20
UD-Range	5. Mithakoti-Solepur	3.233	0	0	0.000	0.14	2.993	3.233	19	95
	6. Kathgodam-Mithakoti	26.407	0	0.066	0.066	0.36	26.041	26.107	213	1065
	7. Mithakoti-Badgaon-Jagpur	54.317	0.000	0.324	0.324	2.495	51.798	52.122	434	2140
Varanasi	8. Kathgodam-Rudrapur	0.133	0.170	0.016	0.186	0	0.036	0.222	8	40
Total		176.860	0.236	2.406	2.642	7.755	165.005	172.747	1,261	6,210

Source: PDCSL

B. IMPACT UNDER UPCL COMPONENTS AND SUBCOMPONENTS

C.1 Sub-Stations by UPCL

41. The sub-stations used for distribution require smaller area. UPCL has proposed to establish three new sub-stations and rehabilitate 25 existing sub-stations. UPCL will require 0.4384 ha land for establishing these three new sub-stations. The break-up of the land area for each of these sub-stations is provided in **Table 18**.

Table 18: Land area required for establishing new sub-stations

#	Substation	Area for New Sub-Station (ha)
1	Rudrapur Collectorate SS	0.056
2	Bharsun SS	0.1824
3	Kariya SS	0.2
	Total	0.4384

Source: UPCL.

42. UPCL gave preference to available government land while selecting the sites for these three new sub-stations. Out of these three sub-stations on government land, UPCL has already obtained lease deeds on its name for two sites and these sites are in UPCL's possession now (Refer to **Appendix-6** for copy of land details). For the third site, UPCL is still discussing the location of the substation within the Rudrapur Collectorate (the premises where the key district administration offices are located) and the process for finalization of the lease deed is awaited. Social due diligence confirmed that only the government uses the site. **Table 19** provides the land details and status of land procurement.

Table 19: Land details and status of the land procurement process

#	Substation Project details	Revenue Record (Khata/Gata/Plot No.)	Name of Earlier Owner of Land	Nature of Land Procurement	Status
1	33/11 KV, (2 X 10 MVA), Near Collectorate, Rudrapur	Khata No: 07, Khata No: 125/2 (Old)	Government of Uttarakhand	Lease Deed	Lease deed under process
2	33/11 KV, (2 X 5 MVA), Bharsun, Stergar, Rudrapur	Khata No: 105, Khata No: 130/2	Government of Uttarakhand	Lease Deed	In UPCL possession
3	33/11 KV, (2 X 5 MVA), Kariya, Ramnagar, Hathori	Khata No: 06, Khata No: 72/3	Government of Uttarakhand	Lease Deed	In UPCL possession

Source: UPCL.

C.2 Capacity Enhancement of existing Substations

43. The rehabilitation of the existing substations will take place within the premises of the substations and will not require additional land. The existing substations are well-fenced and has no informal users. For this project activity, due diligence confirmed that there are no impacts

relating to involuntary resettlement. Findings of due diligence on land acquisition and involuntary resettlement for the 25 existing 33/11 kV substation under rehabilitation is provided in

44. **Table 1820.**

Table 20: IR Impacts on Capacity Enhancement of 33/11 kV Existing Substation

#	District	Sub-station Name	Division/Sub-Division	Type of SS	Impact on LA and IR
1	Dehradun	Sahasrachars	Sahasrachars, Dehradun (N)	33/11 kV GIS	No Impact (Within the fenced boundary of existing substation)
2		Hahibansola	Hahibansola, Dehradun (N)	33/11 kV GIS	No Impact (Within the fenced boundary of existing substation)
3		Sahiya	Sahiya, Vikasnagar, Dehradun Rural	33/11 AIS	No Impact (Within the fenced boundary of existing substation)
4		Sawa	Sawa, Vikasnagar, Dehradun Rural	33/11 AIS	No Impact (Within the fenced boundary of existing substation)
5		RutRPur	Rutnagur, Vikasnagar, Dehradun Rural	33/11 GIS	No Impact (Within the fenced boundary of existing substation)
6		Ramnagar Danda	Ramnagar Danda, Dolewa, Dehradun Rural	33/11 AIS	No Impact (Within the fenced boundary of existing substation)
7		Lal Tapper	Lal Tapper, Dolewa, Dehradun Rural	33/11 AIS	No Impact (Within the fenced boundary of existing substation)
8	Almora	Tarkhet	Tarkhet, Almora	33/11 AIS	No Impact (Within the fenced boundary of existing substation)
9		Bajni	Bajni, Rankhet, Almora	33/11 AIS	No Impact

#	District	Sub-station Name	Division/ Sub-Division	Type of IS	Impact on LA and IR	
					(Within the fenced boundary of existing substation)	
10		Lingesh	Lingesh, Ranikhet	Almora	33/11 GIS	No Impact (Within the fenced boundary of existing substation)
11		Soraghat	Soraghat, Ranikhet	Almora	33/11 GIS	No Impact (Within the fenced boundary of existing substation)
12	Nainital	Kandwaganja	Kandwaganja, Rural	Haldwani	33/11 AIS	No Impact (Within the fenced boundary of existing substation)
13		Transport Nagar	Transport, Haldwani Rural	Nagar	33/11 AIS	No Impact (Within the fenced boundary of existing substation)
14		Phoolchaur	Phoolchaur, Rural	Haldwani	33/11 AIS	No Impact (Within the fenced boundary of existing substation)
15		Garampani	Garampani, Haldwani	Nainital	33/11 AIS	No Impact (Within the fenced boundary of existing substation)
16		Tala Ramgadh	Tala Ramgadh, Nainital	Haldwani	33/11 GIS	No Impact (Within the fenced boundary of existing substation)
17		Barghachet	Barghachet, Mukteshwar, Nainital, Haldwani		33/11 AIS	No Impact (Within the fenced boundary of existing substation)
18		Pines	Pines, Nainital, Haldwani		33/11 GIS	No Impact (Within the fenced boundary of existing substation)

#	District	Sub-station Name	Division/ Sub-Division	Type of IS	Impact on LA and IR
19	US Nagar	Malkota	Malkota, Rudraur-I	33/11 AIS	No Impact (Within the fenced boundary of existing substation)
20		Bhadapura	Bhadapura, Rudraur-I	33/11 AIS	No Impact (Within the fenced boundary of existing substation)
21		Latour	Latour, Rudraur-I	33/11 AIS	No Impact (Within the fenced boundary of existing substation)
22		Slarganj	Slarganj, Rudraur	33/11 AIS	No Impact (Within the fenced boundary of existing substation)
23		Jhankal	Jhankal, Rudraur	33/11 AIS	No Impact (Within the fenced boundary of existing substation)
24		Kashipur	Kashipur,	33/11 AIS	No Impact (Within the fenced boundary of existing substation)
25		Dorsha	Dorsha, Bapoor	33/11 AIS	No Impact (Within the fenced boundary of existing substation)

Source: UPCL

C-4 Underground Distribution Cables

45. The underground cable work will be carried out within Dehradun city and its suburb which is serviced by UPCL through five electricity distribution divisions (EDD). UPCL will put 22 lines of 33 kV and 68 lines of 11 kV underground. The total estimated length of cables to be laid underground is 321 km. The laying of these cables does not impose any ROW restrictions on adjacent landowners or users. The underground cable distribution network will also install 99 CSS and 354 RMUs which will be above ground. These will also be placed on public land and will be mostly on the locations where transformers currently exist. Hence, no permanent impact on private property or livelihood is envisaged. Underground cabling will use a combination of horizontal directional drilling (HDD) and open trench excavation. The HDD method minimizes the

impacts and can avoid inconvenience to road users and adjacent areas. As the use of HDD method is dependent on site-specific conditions, it is estimated that approximately 70% of underground works will be open trench. The break-up of the lines and length of under-groundwork and summary impacts is provided in **Table 21**.

Table 21: Number of lines and total length of underground work zone wise

EDO Zone	Type of Distribution Line	Cable Length to be installed	OHL Length to be dismantled	Number of CSS	Number of RMUs	Impacts relating to involuntary safeguards
North & Central	11kV	73km	25km	46	166	- UG cable does not require land acquisition - No permanent impact relating to involuntary economic displacement is foreseen - Temporary impacts may be in the form of loss of access to nearby businesses/shops or construction related (e.g. minor damage to properties)
	33kV	57km	-	-	-	
South	11kV	106km	62km	20	117	
	33kV	32km	-	-	-	
Rural	11kV	62km	35km	33	71	
	33kV	65km	-	-	-	
Total		329km	125km	99	354	

CSS= CSSG = Compact Substation, EDO= electricity distribution division, OHL= Overhead Line, RMC= Ring Main Unit, UG= Under Ground

Source: UPCL

C-4 Associated Low-voltage Overhead Distribution Lines

46. UPCL will construct three (3) low-voltage overhead distribution power lines with total length of 28 kms which will use the edge of the public roads. These lines will be on monopoles (with some double poles) hence do not cause any major inconvenience or loss during their construction process. The ROW restrictions are not imposed in case of these lines. Hence, private lands are unlikely to be acquired for the pole installation. However, there are chances of damage to crop, trees or other assets during the construction. Such unintentional damages will be compensated as per the affidavit matrix.

C-5 Summary of Impacts under UPCL Components

47. The construction of the three new sub-stations will require only 0.4384 ha of government land. The rehabilitation of 25 existing substations will not require any additional land. The construction of the three over-head low voltage power lines of 28kms will be on mono or double poles using the edge of the public road, and the impact will be restricted to unintentional damage to crop, trees and other properties during the construction phase. The UG cable laying work for 321km and installation of 99 CSSs and 354, 11kV RMUs and 9, 33 kV RMC above ground is spread across 45 Wards of Dehraun Municipality and 3 villages in its suburbs. In addition to the advance payment to civic authorities for reinstating the damaged civic properties, the unintentional damage to the private properties during construction process will be compensated by the EPC contractor. The open trench construction method in sensitive spots used by street vendors and small business owners has potential to cause temporary impacts. However, such

temporary livelihood and income loss can be avoided by use of HDD machines or by adjusting the construction schedule and carrying out an effective stakeholder consultation and grievance mechanism. The field visit and consultation with elected representatives has identified at least 85 sensitive spots. Prolonged construction work and delay in reinstating the site to pre-project condition in these sensitive spots will cause disturbance to the street vendors and small business owners. As the proposed UG cable laying work is wide-spread and the areas where construction through HDD method is not feasible and the open trench method will be followed is not known, it is not possible to provide an estimate of unintended temporary livelihood and income loss to street vendors and small business owners.

C. Impact on Indigenous Peoples and other vulnerable groups

48. The Project is not expected to impact any indigenous peoples as defined in ADB's OP3. It will also avoid affecting vulnerable groups in finalizing the alignment of the power lines.

D. Overall Summary Impacts (PTCUL and UPCL)

49. As detailed above, the project subcomponents to be implemented by PTCUL and UPCL are not anticipated to permanently displace people physically or economically. For rough assessment of impact based on probable power line alignments, permanent economic impacts, to approximately 213 privately-owned agricultural lands that will be under tower bases are anticipated to be minor. Minor permanent economic impact is similarly expected for private land to be covered by the imposition of ROW restrictions. Both for PTCUL and UPCL subcomponents, although damage to crops and/or trees are anticipated, impacts are not foreseen to be significant. As the location of the distribution poles will be in public places, it is also expected that temporary impact to livelihood of informal users of these public spaces as mitigation measures such as providing alternative places of business/livelihood activities will be undertaken aside from the avoiding impact to these informal users. Overall, PTCUL and UPCL will seek to avoid and then minimize impacts in choosing locations of its project activities. For details refer Table 22.

Table 22: Summary of Impacts

Project Components	Unit	Qty.	Impact on Land Acquisition and Involuntary Resettlement	Impact on Indigenous Peoples
PTCUL Components				
New Substations	Nos	8	- Substations proposed on government owned land = 6 - Substations proposed on non-private-owned land = 2 - Total land required is 16.85 hectare - Private land required for substation= 5.14 ha - Government land required for substation= 5.71 ha - Land for eight substation is yet to be finalized - No compulsory land acquisitions - Land to be acquired either through by direct purchase through negotiation - No physical displacement - Number of affected household=1 and one private company	No Impact on IP

Project Components	Unit	Qty.	Impact on Land Acquisition and Involuntary Resettlement	Impact on Indigenous Peoples
Impacts due to New Overhead High-Voltage Power Lines (PTCL)	Nos/Km	8 Numbers/ 64.6 km	- Total number of towers= 216 - Tower proposed to be placed on privately owned land= 213 - Tower proposed to be placed on government owned land= 3 - Total area required for tower footings= 9.1 ha - Estimated affected land owner due to tower footings= 213 - Crop area affected due to tower tower= 12.55 ha - Area impacted under the right of way= 106.87 ha - Crops area affected under the ROW= 82.51 ha - Affected land owners under the ROW= 1309 - No permanent additional land acquisition required under the prevailing policy guidelines - No physical displacement - Number of trees to be known during final alignment	No Impact on IP
Underground cabling	LLD Nos/Km	2 Numbers/ 4.3 km	- No Impact - will be constructed along the margins of the public road, therefore, will involve rather acquisition of land for imposition of ROW	No Impact on IP
UPCL components				
New 33/11 kV Substation	Nos	3	- Substations proposed on government-owned land = 3 - Substations proposed on non-government-owned land = 0 - Total land required is 0.43 hectares - Private land required for substation= 0 - Government land required for substation= 0.43 ha - No presence of informal settlers - No Physical displacement	No Impact on IP
Augmentation / Upgrading of 33/11 kV Existing Substations "	Nos	25	- No additional land required since construction will be done within the existing substations - No physical displacement	No Impact on IP
33/11 kV Underground cable line	Om.	321km	The vacant space at the margin of public roads will be used for laying these cables	No Impact on IP (Please check)

Project Components	Unit	Qty.	Impact on Land Acquisition and Involuntary Resettlement	Impact on Indigenous Peoples
			- No land acquisition is required - No physical displacement - Impacts are related to construction in terms of temporary restrictions to nearby shops and road side vendors which will be managed by UPCL through proper planning and mitigation measures by the contractors and as per the environment management plan (EMP) and will be restored within 24 hours and if more than 24 hours then it will be compensated 33 number of CSD which will be placed on public land and adjacent to existing transformers, hence no additional land required 354 11kV RMUs & number of 33 kV RMU will be placed on public land and adjacent to existing transformers, hence no additional land required - No physical displacement and involuntary resettlement	
33/11 kV overhead New Lines	New/kms	3/ 28 km	- No land acquisition is required for the poles and line - No structures or buildings under the line - Temporary impacts on loss of crops during construction which will mostly be avoided and mitigated and if not will be compensated - Some trimming of trees and very minimum tree felling are required	No impact on IP (Please check)

E. Mitigation of Impacts

50. To ensure that impacts relating to involuntary resettlement, as defined in ADB's 8PF (2009), are kept to a minimum, the following measures will be undertaken by PTOU, and UPCL:

- providing 30-day notice to affected persons and relevant communities about the schedule of construction activities
- conducting awareness campaigns through all available media to inform the public in general about the project and proposed activities with their respective schedule of implementation
- maintaining access by providing planks or alternative access points/routes to ensure people's access to businesses or to allow people to conduct their daily livelihood activities despite project activities/civil works

- (iv) shifting of road side vendors from one side to another side of the road and bringing them back to their original place of work;
- (v) managing traffic flows as per the traffic management plan in coordination with local authorities and communities to maintain access to public facilities or businesses;
- (vi) early coordination and follow up with the Department of Public works to ensure restoration of roads disturbed by laying of underground power lines;
- (vii) limiting the amount of time of open trenches;
- (viii) constant monitoring and evaluation of performance of contractors;
- (ix) establishing good relations with affected communities so they can provide real-time reports on issues that might derail or delay project activities;
- (x) avoiding full street closure to the extent possible;
- (xi) providing employment opportunity to affected persons, wherever possible
- (xii) putting telephone hotlines on signs in visible areas in the project sites which affected persons can use to provide PTCUL and UPCL feedback;
- (xiii) making the affected community fully aware of the grievance redress mechanism through the various media available at project sites.

III. SOCIO-ECONOMIC INFORMATION AND PROFILE

A. Overview

51. This section briefly describes the demographic and socio-economic profile of the state and district which generally represent the project area. The socio-economic profile is not necessarily of the affected households. This is based on secondary source of information to present the broader perspective of the project area in terms of its socio-economic profile.

B. Demography

52. Uttarakhand has a total area of 51,483 km², of which 65% is covered by forest and 86% is mountainous region. Uttarakhand borders the Tibet autonomous region of China to the north; the Sudur-pashchim Province of Nepal to the east; the Indian states of Uttar Pradesh to the south and Himachal Pradesh to the west and north-west. The state is divided into two divisions, Garhwal and Kumaon, with a total of 13 districts.

The total area of Uttarakhand is 53483 sq.km with population density of 165 per sq.km. As per the Census India 2011, Uttarakhand has 2056975 households, population of 10086292 of which 5137773 are males and 4948519 are females. The population of children between age 0-6 is 1255814 which is 12.44% of total population. The sex-ratio of Uttarakhand state is around 953 compared to 943 which is national average of India. The literacy rate of Uttarakhand state is 68.22% out of which 75.2% males are literate and 60.97% females are literate. Out of total population, 60.77% of population lives in urban area and 39.23% lives in rural area.

C. Ethnic groups

53. Uttarakhand has a multi-ethnic population spread across two geo-cultural regions: Garhwal and Kumaon. Around 60.05% of the population belongs to General Category, 18.7% of the population is classified as Other Backward Classes (OBCs), 18.78% of the population belongs

to the scheduled castes (SC) and 2.89% belongs to scheduled tribes (ST)⁴. Scheduled Tribe groups consist of Jainsari, Bhotiya, Tharu, Buxa, Raji, Jad and Bannawat. Religion wise, 82.97% of the population belongs to Hindu, 13.95% Islam, 2.34% Sikhism and rest 0.74% belongs to Christianity, Buddhism, Jains and others.

D. Health and Education

54. Uttarakhand has a good network of hospitals and health centres. According to 2022-2023 Economic Survey report, the state has 13 District Hospitals, 21, Sub-District Hospitals, 25 others district hospitals, 79 Community Health Centres, 577 Primary health centers, and 1,896 Health Sub-centres. Majority of the population of Uttarakhand has access to health services provided by government and private players. As per 2022-2023 Economic Survey report, Uttarakhand has 14,226 government primary schools and 4,098 private schools, 2,852 middle schools, 119 government colleges, 21 private colleges, 72 government polytechnics, 69 private polytechnics, and 4 medical colleges. Additionally, the State government is opening 3 new medical colleges in Uttarakhand.

E. Economy

55. Uttarakhand derives its income from activities relating to agriculture, horticulture, animal husbandry, forest, mining, manufacturing, construction, tourism, hotel and restaurants. Uttarakhand has witnessed massive growth in capital investments due to a conducive industrial policy and generous tax benefits⁵. Therefore, Uttarakhand is one of the fastest growing states in India. The state's GDP (Gross State Domestic Product) increased at a CAGR (Compounded annual growth rate) of 7.8% between FY2016 and FY2022. As per the economic survey 2022-23, the estimated growth rate for the financial year 2020-2021 was 5.38%. In 2022-2023 GDP of the state is estimated to increase at a CAGR of 6.54%. At current prices, Uttarakhand's GDP is projected to be Rs.2.76 trillion (US\$ 39.81 billion) in FY2023.

56. The state's natural resources, policy incentives, and infrastructure favours investments in the tourism, hydroelectric power, manufacturing and agriculture sectors. The tourism sector contributed around 52%; service sector contributed 38%; and agriculture sector contributed 10% to the GDP of Uttarakhand in 2021-2022. As per 2022-2023 Economic Survey, there were 326 registered large factories in the state which provided employment to 111,452 persons. The state had 77,997 small scale industries which provided employment to 398,911 persons.

F. Transportation:

57. Transport in the state is largely based on road. Uttarakhand had a total road length of 31,586 km, as of March 2022. It has 5,765 km of state highways, 3,547 km district roads, 26,147 rural roads, and 79 km light vehicle roads. Out of 16,792 villages of Uttarakhand, 13,585 villages

⁴ The Scheduled Caste (SC) and Scheduled Indian Tribes (ST) are officially designated groups of people and among the most disadvantaged socio-economic groups in India. These terms are recognised in the Constitution of India and the groups are designated in various sections of the constitution. As per Article 330 (2) of the Constitution of India the Scheduled Tribe is defined as, "Such tribes or tribal communities or parts or groups within such tribes or tribal communities are deemed under Article 342 to be the Scheduled Tribes (ST) for the purposes of this [Indian] Constitution".

⁵ According to Department for Promotion of Industry and Internal Trade (DPIIT), the cumulative foreign direct investment (FDI) inflow stood at around US\$ 718 million from April 2000 to June 2020. Between October 2019 to June 2020, FDI inflow in Uttarakhand stood at US\$ 155.88 million (out of this, US\$ 1.11 million in foreign direct investment (FDI) under the 100% FDI route (US\$ 88.32 million) have been made in Uttarakhand (Source: Indian Brand Equity Foundation).

have been connected to the roads despite the tough Himalayan terrain (Source: 2022-23 Economic Survey). As of March 2022, Uttarakhand has national highways of around 3,448 km in length. The state is well connected to its neighboring states and other parts of India through several National Highways (NH), notably: NH-5, NH-58, NH-72, NH-72A, NH-72B, NH-73, NH-74, NH-87, NH-94, NH-107, NH-107A, NH-108, NH-109, NH-119, NH-121, NH-123, NH-125, NH-307, NH-309A, NH-309B, NH-334A, NH-707A.

58. Uttarakhand has poor train transport infrastructure, primarily due to the tough Himalayan terrain. Till 2022, Uttarakhand has only 344.91 km of rail line. The State government has requested central government to develop 125.2 km Rishikesh-Kamprayag (out of which 104 km will be underground rail line) rail project, 27.45 km Dehradun-Moorhwa rail line and connecting *chardham* (Ancient Hindu Religious place) to rail route.

G. Rural Drinking water supply

59. Out of 38,681 rural habitations, 36,678 (95%) habitations have been connected to drinking water supply system (19,548 partial and 19,129 full). Till December 2022, out of 14,94,414 identified rural households around 70% of the households have been connected to Function Household Tap Connection for drinking water supply.

H. Electricity

60. As of December 2022, Uttarakhand has installed capacity for power generation is 1,420.6 MW (megawatt). Overall, Uttarakhand is producing 4,637.73 MU (Million Unit) against the electricity demand of 11,801 MU. As per Saurbhagya.gov.in (A dashboard for Indian government project to provide electricity to each household), 100% households of Uttarakhand have been electrified under Saurbhagya Yojana (Scheme) to every home scheme. Details are provided in Table 23.

Table 23: Household electrification in Uttarakhand across districts

District	Total Households	Electrified Households (March 2019)	Household Electrification (%)
Dehradun	371135	374238	100%
Haridwar	300000	308930	100%
Udham Singh Nagar	351751	355034	100%
Nainital	235268	209844	100%
Garhwal	148997	150014	100%
Almora	135200	136374	100%
Tehri Garhwal	124821	125939	100%
Pithoragarh	101000	101633	100%
Chamoli	71485	73996	100%
Rudrapur	52921	53196	100%
Champur	51081	51561	100%
Uttarkashi	49000	49679	100%
Rudrapur	45629	46222	100%
Uttarakhand	20,74,815	20,85,058	100%

Source: Prime Minister electricity to every home scheme, <https://saurbhagya.gov.in/> dated 8th May 2023

61. As per PTCUL official web site dated 15th May 2023, State has 422.1 Ckt KM of 400 KV Power line, 795.3 Ckt KM of 220 KV Power line, 1873.272 Ckt KM of 132 KV Power line, and 107 Ckt KM of 66 KV line. PTCUL has 400 KV of 3 Substations, 220 KV of 18 Substations and 132

KV of 28 Substations. PTCUL has average 0.9716 of Power loss during the financial year 2022-23. (Source: <https://ptcul.org/panamason-lines>)

1. Districts at a Glance

62. Dehradun: As per census 2011, the district has a population of 16,96,894 out of which 8,92,199 are males and 8,04,695 are females. The district has a sex ratio of 902 (females for every 1000 males). During the year 2001-2011 the population growth rate in the district was 32.33% including 31.20% were males and 33.51% were females. As per 2011 census the major religion in the district is Hindu with 83.98% of the total population. The population density in the district is 549 persons per sq. km. According to 2011 census the principal language in the district is Hindi with 87.08%. In the year 2018 the number of live births in the district was 31,447 including 16,356 were males and 15,089 were females. In the same year the number of deaths in the district was 8,167 including 5,140 were males and 3,027 were females.

63. Haridwar: The Haridwar district is ringed by the districts Dehradun in the north and east, Pauri Garhwal in the east and the Uttar Pradesh districts of Muzaffarnagar and Bijnor in the south and Saharanpur in the west. As per 2011 census, Haridwar had population of 1,890,422 of which male and female were 1,005,295 and 885,127, respectively. With regards to sex ratio in Haridwar, it stood at 880 females per 1000 males. During the year 2001-2011, the population growth rate in the district was 35.63% out of which 29.54 were males and 31.88% were females. As per 2011 census the major religions in the district are Hindu and Muslim with 84.27% and 34.28% of the total population. The population density in the district is 801 persons per sq. km. According to 2011 census the principal languages in the district are Hindi and Urdu with 88.51% and 9.88%. In the year 2018 the number of live births in the district was 39,241 out of which 20,944 were males and 18,297 were females. In the same year the number of deaths in the district was 10,383 out of which 6,037 were males and 3,956 were females.

64. Udham Singh Nagar: Udham Singh Nagar is bounded on the north by Nainital District, on the northeast by Champawat District, on the east by Nepal, and on the south and west by Bareilly, Rampur, Moradabad, Pilibhit and Bijnor District of Uttar Pradesh state. According to the national census 2011, Udham Singh Nagar district has a total population of 1,648,902 with 790,119 are females and 858,783 are males. The urban population is 35.58% and 64.42 % of the population is rural. As per 2011 census the major religions in the district are Hindu and Muslim with 96.98% and 22.56% of the total population. During the year 2001-2011, the population growth rate in the district was 33.45% including 32.23% were males and 34.80% were females. The population density in the district is 640 persons per sq. km. According to 2011 census the principal languages in the district are Hindi and Punjabi with 72.18% and 10.09%. In the year 2018 the number of live births in the district was 42,873 including 21,118 were males and 21,756 were females. In the same year the number of deaths in the district was 7,431 including 4,812 were males and 2,619 were females.

65. Nainital: Nainital borders Almora and Champawat districts to the north, Udham Singh Nagar district to the south, and Bijnor district of Uttar Pradesh and Pauri Garhwal district to the west. According to the national census 2011, Nainital has a total population of 554,605 with 4,93,666 are males and 4,60,935 are females. The urban population is 38.94% of the total population while 61.06% of the population is rural. The district has a sex ratio of 934 (females per 1000 males). In the year 2001-2011 the population growth rate in the district was 25.13% including 23.34% were males and 27.10% were females. As per 2011 census the major religions in the district are Hindu and Muslim with 84.82% and 12.65% of the total population. The population density in the district is 226 persons per sq. km. According to 2011 census the principal language

in the district is Hindi with 89.74%. In the year 2018 the number of live births in the district was 18,927 out of which 8,904 were males and 9,923 were females. In the same year the number of deaths in the district was 6,014 out of which 3,348 were males and 2,666 were females.

66. Champawat: Champawat is bounded on the north by Pithoragarh district, on the east by Nepal, on the south by Udham Singh Nagar district, on the west by Nainital district, and on the northwest by Almora district. As per 2011 census, out of the total Champawat population, 14.77% lives in urban regions of the district and 85.23% population lives in rural areas of villages. In total 38,343 people lives in urban areas of which males are 20,289 and females are 18,050 and in rural areas is 221,305 of which males and females are 110,842 and 110,463, respectively. The sex ratio in urban region of Champawat district is 850 as per 2011 census data and in rural areas it is 997 females per 1000 males. Similarly, child sex ratio in Champawat district is 873 (females per 1000 males). During the year 2001-2011 the population growth rate in the district was 15.63% including 18.04% males and 13.28% females. The average literacy rate in Champawat district as per census 2011 is 79.83% (persons), 91.61% (males), 68.05% (females). The religion-wise data as per 2011 census in Champawat district are as follows: Hindu 249,563 (96.12%), Muslims 8,693 (3.35%), Christian 870 (0.34%), Sikh 336 (0.13%), Buddhist 24 (0.01%), Jain 26 (0.01%), and others 6 (0.00%). According to 2011 census, the principal language in the district is Hindi with 98.18%. In the year 2018 the number of live births in the district was 3,788 including 2,035 males and 1,753 females. In the same year, the number of deaths in the district was 917 including 580 were males and 337 were females.

67. Pithoragarh: Pithoragarh district is the easternmost district in the state of Uttarakhand. The Tibet plateau is situated to the north, Champawat in south, and Nepal is to the east. According to 2011 census the district has a population of 4,83,435 out of which 2,39,308 are males and 2,44,133 are females. The district has a sex ratio of 1020 (females for every 1000 males). During the year 2001-2011 the population growth rate in the district was 4.58% including 5.14% were males and 4.03% were females. As per 2011 census the major religion in the district is Hindu with 98.28% of the total population. The population density in the district is 88 (persons per sq. km.). According to 2011 census the principal language in the district is Hindi with 96.08%. In the year 2018 the number of live births in the district was 10,868 out of which 5,707 were males and 5,261 were females. In the same year the number of deaths in the district was 2,238 out of which 1,360 were males and 878 were females.

68. Almora: The Almora is edged by the Pithoragarh district to the east, Chamoli district to the west, Bageshwar district to the north and Nainital district to the south. According to 2011 census the district has a population of 6,22,806 out of which 2,91,381 are males and 3,31,425 are females. The district has a sex ratio of 1119 (females for every 1000 males). During the year 2001-2011 the population growth rate in the district was -1.28% including -0.94% were males and -1.57% were females. As per 2011 census the major religion in the district is Hindu with 98.19% of the total population. The population density in the district is 198 persons per sq. km. According to 2011 census the principal language in the district is Hindi with 98.74%. In the year 2018 the number of live births in the district was 15,506 including 7,755 were males and 7,747 were females. In the same year the number of deaths in the district was 3,885 including 2,059 were males and 1,826 were females.

J. Project Area (District wise)

69. Almora and Pithoragarh have more villages than Udham Singh Nagar and Haridwar despite of less household. Population density in the mountain villages is less comparing to the plain area villages of Udham Singh Nagar and Haridwar. Same situation persists with the gram

panchayats also. Around 68.5% of households are just in three districts (Dehradun, Udhari Singh Nagar and Haridwar) of the 7 project districts, while these three districts have only 25% of the total villages. Details are provided in **Table 24**.

Table 24: Villages, gram panchayats, towns and household across project districts.

Districts	Gram Panchayats	Revenue Villages	Town and urban groups	Number of households (Census 2011)
Dehradun	401	666	17	347031
Pithoragarh	688	1051	5	114730
Almora	1160	2270	8	140577
Champurawat	313	632	4	53553
Nainital	478	1103	9	121383
U. S. Nagar	379	653	17	208581
Haridwar	306	386	18	338104

Source: Census of India 2011

70. Dehradun has the highest urban population (55.5%), while Almora, Champawat and Pithoragarh have around one-fifth rural population. Details are provided in **Table 25**.

Table 25: Distribution of population by rural and urban

Population	Total	Rural (%)	Urban %
Uttarakhand	10096293	69.8	30.2
Dehradun	1086694	44.3	55.5
Pithoragarh	481439	85.6	14.4
Almora	622506	30.0	70.0
Champurawat	208648	85.2	14.8
Nainital	354605	81.1	18.9
U. S. Nagar	1648902	64.4	35.6
Haridwar	1890422	63.3	36.7

Source: Census of India 2011

71. Mountain districts Almora, Champawat and Pithoragarh have sex ratio around 1000 or more, while in the plain area sex ratio is around 910. Haridwar and Dehradun districts have lowest sex ratio. Details are provided in **Table 26**.

Table 26: Distribution of population by gender in the project villages

Population	Total	Male (%)	Female (%)	Sex Ratio
Uttarakhand	10086252	50.3	49.7	963
Dehradun	1086694	52.6	47.4	902
Pithoragarh	481439	49.5	50.5	1020
Almora	622506	46.8	53.2	1139
Champurawat	208648	50.5	49.5	980
Nainital	354605	51.7	48.3	934
U. S. Nagar	1648902	52.1	47.9	920

Haridwar	1990422	53.2	46.8	880
----------	---------	------	------	-----

Source: Census of India 2011

72. The tribal population in Uttarakhand is just 2.9% of the total population of the state. Dehradun (6.6%) and Udhm Singh Nagar (7.5%) have highest tribal population. Majority of the tribal population belongs to the Jaura, Bhotiya, Tharu, Baksa, Raji, Jad and Barwast. Tharu is the predominant tribal population in the Udhm Singh Nagar. Details are provided in **Table 27**.

Table 27: Distribution of SC and ST Population in the Project Districts

Population	Total	SC (%)	ST (%)
Uttarakhand	10066292	16.8	2.9
Dehradun	1006094	13.5	6.6
Pithoragarh	485439	24.9	4.0
Almora	622908	24.3	0.2
Champanat	259648	18.2	0.5
Nainital	604605	20.0	0.8
U. S. Nagar	1648902	14.4	7.5
Haridwar	1990422	21.8	0.3

Source: Census of India 2011

73. The total literacy rate of Uttarakhand is 78.82% which is higher than the average literacy rate of 72.98% in India. The male literacy rate is 87.4% and the female literacy rate is 70.01% in Uttarakhand. Dehradun (84.2%) and Nainital (83.9%) have the highest literacy rate, while Haridwar (73.4%) and Udhm Singh Nagar (73.1%) has the lowest literacy among the project districts. Gender gap in literacy rate is higher in Champanat, Almora and Pithoragarh and least in Nainital and Dehradun. Details are provided in **Table 28**.

Table 28: Literacy rate by gender in the project districts

District	Total Literacy	Male Literacy	Literacy Female
Uttarakhand	78.8	87.4	70.0
Dehradun	84.2	89.4	78.5
Pithoragarh	82.2	92.7	72.3
Almora	80.5	92.9	69.0
Champanat	79.8	91.6	68.0
Nainital	83.9	90.1	77.3
Udhm Singh Nagar	73.1	81.3	64.4
Haridwar	73.4	81.0	64.6

Source: Census of India 2011

74. In Uttarakhand, only 57% of the households have land in their possession. In Haridwar and Dehradun, around two-thirds of the households are landless. In the mountain districts of Uttarakhand (Pithoragarh, Almora and Champanat), the majority of the households have some land in their possession. Details are provided in **Table 29**.

Table 29: Distribution of land ownership in the project villages

District	Total Households	% of Households with Land	% of Households with No Land
Uttarakhand	1470742	55.7%	43.3%
Dehradun	195649	29%	71%
Pithoragarh	91006	88%	12%
Almora	125275	90%	20%
Chamoli	44150	78%	24%
Nainital	117469	52%	48%
Udham Singh Nagar	236204	36%	64%
Haridwar	231702	24.7%	75.3%

Source: Socio-Economic Caste Census 2011 ([Socio-Economic and Caste Census \(SECC\)](#))

75. As per Census 2011, 42.0% of the total workers were main workers, 13.7% were marginal workers. Details are provided in **Table 30**.

Table 30: Workers and non-worker in the project villages

Districts	Main workers			Marginal workers			Non-Worker		
	Person	Male	Female	Person	Male	Female	Person	Male	Female
Uttarakhand	42.5	51.2	23.5	13.7	13.0	14.4	43.8	25.8	62.0
Dehradun	41.2	54.7	33.8	7.4	8.0	6.7	51.4	26.4	78.7
Pithoragarh	45.5	52.5	39.0	20.7	20.0	21.3	33.8	27.4	36.7
Almora	46.5	54.7	43.4	20.7	18.0	22.4	30.9	26.7	34.2
Chamoli	38.0	52.4	23.7	21.2	19.6	22.9	40.8	28.0	53.4
Nainital	45.5	54.5	24.8	11.1	10.7	11.0	43.6	24.5	63.7
Udham Singh Nagar	40.8	55.2	14.5	12.8	11.7	12.4	47.2	23.1	73.1
Haridwar	30.9	67.1	9.3	6.4	6.4	6.1	53.7	24.4	86.0

Source: Census of India 2011

76. As per Socio-Economic Caste Census 2011, the main source of household income was cultivation (38%), manual casual labour (28%), part-time or full-time domestic service (5%) and others (30%). Cultivation as a major source of the household's income was in Almora, Chamoli, Pithoragarh and Nainital districts. While in Haridwar and Udham Singh Nagar the major source of income was manual casual labour. Details are provided in **Table 31**.

Table 31: Major source of household income in the project districts

District	Total Households	Cultivation	Manual Casual Labour	Part-time or Full-time Domestic Service	Non-agricultural Own Account Enterprise	Others
Uttarakhand	1470742	36%	28%	0%	2%	26%
Dehradun	195649	13%	28%	8%	2%	49%
Pithoragarh	91006	42%	16%	0%	2%	29%

Almora	125275	56%	13%	4%	2%	24%
Champurawat	44100	48%	21%	4%	0.8%	26%
Nainital	117469	42%	18%	0%	1%	32%
Udhm Singh Nagar	206204	23%	46%	7.0%	2%	21.3%
Hardwar	231792	19%	56%	0%	3%	17%

Source: Socio-Economic Caste Census 2011 ([Socio-Economic and Caste Census \(SECC\)](#))

77. Employment characteristics is provided in Table 32.

Table 32: Employment characteristics in the project districts

District Name	Total Households	% of Households with salaried Job	% Government sector	% Public sector	% Private sector	% of Households Income Tax or Professional Tax	% of Household Own/Operate an Enterprise registered with the Government
Uttarakhand	1470742	24%	12%	2%	2%	7%	5%
Dehradun	169649	38%	21%	2.6%	19%	17%	8%
Pithoragarh	31906	28.5%	20%	1%	7%	6%	5%
Almora	125275	22%	12%	2%	8.2%	6%	4%
Champurawat	44100	17%	11%	1%	5%	7%	5%
Nainital	117469	24%	12%	2%	0%	0%	0%
Udhm Singh Nagar	206204	18%	7%	2%	5%	6%	6%
Hardwar	231792	18%	5%	2%	5%	5%	5%

Source: Socio-Economic Caste Census 2011 ([Socio-Economic and Caste Census \(SECC\)](#))

78. Out of 10,758,985 thousand KV Hours units of electricity consumption in 7 districts during the financial year 2021, only Udhm Singh Nagar (4763992 thousand KV Hours) and Hardwar (3318733 thousand KV Hours) consumed around 75% of the electricity and in these two districts majority (more than 75%) in commercial and industrial activities. While electricity consumption in Champrawat (75%), Pithoragarh (55%) and Dehradun (42%) were household consumption. Details are provided in Table 33.

Table 33: Distribution of electricity consumption across project districts

District	Villages electrified	Households (%)	Commercial (%)	Industry (%)	Public Lights (%)	Agriculture (%)	Public Services (%)
Dehradun	635	52.4	26.1	8.7	5.8	1.1	5.8
Pithoragarh	1536	55.4	18.4	1.7	3.1	0.2	21.3
Almora	2137	45.2	21.3	2.1	0.8	0.0	30.7
Champurawat	632	75.3	16.7	4.7	1.2	1.9	0.5
Nainital	1014	48.7	16.1	22.6	0.6	1.8	13.4
U.S. Nagar	620	17.7	5.2	73.3	0.5	2.5	0.6

Haridwar	500	21.8	8.1	57.2	0.2	0.3	2.2
----------	-----	------	-----	------	-----	-----	-----

Source: District Statistics 2021

79. The majority of the small and large industries are in Udhm Singh Nagar, Haridwar and Dehradun districts. Whereas the majority of the khadi/village industries are in Pithoragarh, Almora and Champawat districts. Details are provided in **Table 54**.

Table 54: Number of Industries by type in the project districts

District	Khadi/Village Industries	Small Industries	Large Industry
Dehradun	3508	5565	535
Pithoragarh	2538	3054	3
Almora	1890	2628	10
Champawat	1218	1834	8
Nainital	531	4141	139
U. S. Nagar	22043		1375
Haridwar	2452	11415	1467

Source: District Statistics 2021

80. **Project Area Village Profile:** ADB project covers 103 villages/urban areas of 7 districts of Uttarakhand. The detailed information on socioeconomic profile of the project villages has been primarily taken from Census of India Survey 2011 and Village census 2011. As per Census 2011, the total households in these 103 villages and urban areas are 215,763 with total 1.5 million population. Details are provided in **Table 55**.

Table 55: Demography of the project villages

Districts	Number of Villages/Urban Area	Total Household	Total Population	Male Population	Female Population
Dehradun	7	106229	708114	405808	302306
Pithoragarh	13	1648	6301	3149	3152
Almora	7	507	2398	1103	1295
Champawat	7	108	2453	1203	1250
Nainital	14	52541	257005	134173	122832
Udhm Singh Nagar	28	86260	457758	240671	217087
Haridwar	27	8181	48745	25865	22880
Total	100	215783	1545778	812042	733736

Source: Census 2011

81. The average household size of 103 villages was 4.9 persons per household, with highest household size in Haridwar district and lowest in Pithoragarh. Out of 1.5 million population 47.4% were women, 13.3% were Scheduled Caste and 1% Scheduled Tribes (ST) - Indigenous people. Highest STs were in Udhm Singh Nagar (1.8%) district villages and 0.9% in Dehradun villages. Details are provided in **Table 56**.

Table 56: Demography and social groups in the project villages

Districts	Number of Villages/Urban Area	Household Size	Percentage of women	Percentage of SC	Percentage of ST
Dehradun	7	4.6	47.2%	12.1%	0.0%
Pithoragarh	13	4.4	50.0%	28.9%	0.0%
Almora	7	4.7	50.2%	36.7%	0.0%
Champawat	7	4.6	51.0%	28.6%	0.0%
Nainital	14	4.6	47.8%	12.8%	0.0%
Utham Singh Nagar	28	5.3	47.4%	13.3%	1.8%
Haridwar	27	6.0	49.5%	30.0%	0.0%
Total	103	4.6	47.4%	13.3%	1.0%

Source: Census 2011

82. As per Census 2011, the literacy rate in these 103 project villages was 83.0%, which is much higher than national and state average. Dehradun has highest literacy rate, while Haridwar has lowest. Details are provided in **Table 27**.

Table 27: Literacy rate in the project villages

Districts	Total Literacy	Male Literacy	Female Literacy
Dehradun	88.8%	92.4%	84.8%
Pithoragarh	83.0%	94.6%	71.7%
Almora	78.3%	92.3%	64.5%
Champawat	78.0%	94.2%	64.4%
Nainital	84.5%	88.0%	80.8%
Utham Singh Nagar	75.4%	81.9%	68.3%
Haridwar	67.0%	76.1%	57.8%
Total	83.0%	88.1%	78.4%

Source: Census 2011

83. Details on working population such as total working, main workers, marginal workers and non-workers are presented in **Table 28**.

Table 28: Total working population (in %age) in the project villages

Districts	Total working population	Total non-working population	%age of main work	%age of marginal work
Dehradun	34%	66%	88.7%	11.3%
Pithoragarh	47%	53%	69.3%	30.7%
Almora	47%	53%	38.0%	61.4%
Champawat	57%	43%	56.2%	43.8%
Nainital	32%	68%	89.8%	10.2%
Utham Singh Nagar	33%	67%	82.8%	17.2%
Haridwar	37%	63%	83.8%	16.2%
Total	33%	67%	86.7%	13.3%

Source: Census 2011

84. **Table 38** describes about the Gender wise distribution of total workers and main workers in the project villages

Table 38: Gender wise distribution workers in the project villages

Districts	Total workers		Main Workers	
	%age of male workers	%age female workers	%age of male main worker	%age female worker
Dehradun	81.2%	18.8%	83.3%	16.7%
Pithoragarh	51.3%	48.1%	47.8%	52.2%
Almora	53.8%	46.2%	67.1%	32.9%
Champurawat	48.0%	52.4%	51.2%	48.8%
Nainital	83.0%	16.1%	85.3%	14.7%
Uthman Singh Nagar	82.0%	18.0%	86.8%	13.4%
Haridwar	84.3%	15.7%	85.5%	14.5%
Total	81.8%	18.4%	84.4%	15.6%

Source: Census 2011

85. Availability of government primary and middle schools across the project villages are described in **Table 40**.

Table 40: Status of schools in the project villages

Districts	No. of villages	Govt Primary School	Govt Middle School
Dehradun	6	100.0%	0.0%
Pithoragarh	13	76.9%	69.2%
Almora	7	28.6%	42.9%
Chamoli	7	85.7%	28.6%
Nainital	13	61.5%	38.5%
Udhm Singh Nagar	25	92.0%	60.0%
Haridwar	19	84.2%	52.6%
Total	90	75.0%	48.0%

Source: Village Census 2011

86. Details on the availability of various health infrastructures especially various health centres at project villages are provided in **Table 41**.

Table 41: Health services in the project villages

Districts	No. of villages	Primary Health Centre	Health sub-center	Maternity And Child Welfare Centre	Hospital/ Alternative Medicine
Dehradun	6	33.3%	50.0%	16.7%	16.7%
Pithoragarh	13	0.0%	15.4%	7.7%	0.0%
Almora	7	0.0%	28.6%	0.0%	0.0%
Chamoli	7	0.0%	28.6%	0.0%	0.0%
Nainital	13	7.7%	23.1%	23.1%	0.0%
Udhm Singh Nagar	25	0.0%	16.0%	4.0%	0.0%
Haridwar	19	0.0%	31.6%	31.6%	0.0%
Total	90	3.3%	24.4%	13.3%	1.1%

Source: Village Census 2011

87. Status and condition of Water facilities such as treated water, tap water, tube well, borehole in the project villages is described in **Table 42**.

Table 42: Water facilities in the project villages

Districts	No. of villages	Tap Water Treated	Tap Water Treated Functioning all-round the year	Tube Wells / Borehole	No Drainage
Dehradun	6	100.0%	100.0%	33.3%	16.7%
Pithoragarh	13	100.0%	100.0%	30.8%	76.9%
Almora	7	100.0%	100.0%	0.0%	100.0%
Chamoli	7	85.7%	85.7%	0.0%	0.0%
Nainital	13	92.3%	92.3%	30.8%	0.0%
Udhm Singh Nagar	25	68.0%	68.0%	100.0%	8.0%
Haridwar	19	26.3%	26.3%	63.2%	10.5%
Total	90	73.3%	73.3%	52.2%	24.4%

Source: Village Census 2011

88. Availability of various modes of telecom services in the project villages is presented in **Table 43**.

Table 43: Telecom services in the project villages

Districts	No. of villages	Telephone (landline)	Mobile Phone Coverage	All Weather Road
Dehradun	6	100.0%	83.3%	66.7%
Pithoragarh	13	76.9%	100.0%	76.9%
Almora	7	57.1%	100.0%	0.0%
Champurawat	7	42.9%	85.7%	28.6%
Nainital	13	92.3%	100.0%	92.3%
Udhm Singh Nagar	25	80.0%	100.0%	56.0%
Haridwar	19	68.4%	100.0%	89.5%
Total	90	75.6%	97.8%	76.7%

Source: Village Census 2011

89. Availability and use of power supply in the project villages are presented in **Table 44**.

Table 44: Power supply in the project villages

Districts	No. of villages	Power supply for Domestic Use Summer (April-Sept.) per day (In Hours)	Power supply for Domestic Use Winter (Oct-March) per day (In Hours)
Dehradun	6	15.17	10.2
Pithoragarh	13	16.23	15.6
Almora	7	12.00	16.0
Champurawat	7	11.43	14.0
Nainital	13	16.15	16.0
Udhm Singh Nagar	25	13.00	16.4
Haridwar	19	14.26	16.2
Total	90	14.13	16.4

Source: Village Census 2011

K. Summary Socio-Economic Condition and project impacts

90. Uttarakhand has a total population of 10.09 million people. The state has huge potential for energy especially in the electricity sector where people are engaged in various economic activities using the electricity. Though all the households are electrified in the state, however, reliability of power supply still remains a concern especially in the rural areas which indirectly hampers the domestic and commercial activities. The Project will further stimulate the growth in both rural and urban areas through enhanced and reliable electricity system. The project beneficiaries of the project are the consumers of electricity in both rural and urban area. The United Nations identifies access to electricity as being particularly beneficial for women and vulnerable people. The Project will contribute towards the reliability of power supply among the existing consumers and will help in providing uninterrupted electricity supply to social

infrastructure such as schools, hospitals. Electricity supply in the urban areas especially the capital town is frequently disrupted by overhead lines. The proposed underground distribution system will further enhance the business hours and increase in enhance business economic. Strengthening the power network will enable a reliable and quality electricity supply, which will promote economic development and poverty reduction through new employment and enterprise opportunities. The project will also generate several temporary employment opportunities during construction for the local people of Ufferskhand. Output-1 of the project will contribute indirectly to several new economic opportunities and at the same time, Output-3 of the Project will contribute directly to livelihood enhancement activities in the local communities including women which will contribute to poverty reduction. The project, as a whole, will have general intervention in terms of poverty reduction.

IV. INFORMATION DISCLOSURE, CONSULTATION, AND PARTICIPATION

A. General

91. This section of the report provides an overview of the consultation process carried out during the process of preparation of this Resettlement Plan and how suggestions and feedback received were evaluated and incorporated. The purpose of the stakeholder consultation and public participation process is to ensure that stakeholders, interested and affected parties as well as the public are informed of the proposed project and its activities, inform about the impacts, and to solicit views relating to mitigation measures of these impacts. According to the ADB Safeguard Policy Statement (2009): **"The borrower and client will carry out meaningful consultation with affected people and other concerned stakeholders, including civil society, and facilitate their informed participation. Meaningful consultation is a process that:**

- Begins early in the project preparation stage and is carried out on an ongoing basis throughout the project cycle;
- Provides timely disclosure of relevant and adequate information that is understandable and readily accessible to affected people;
- Is undertaken in an atmosphere free of intimidation or coercion;
- Is gender inclusive and responsive, and tailored to the needs of disadvantaged and vulnerable groups; and
- Enables the incorporation of all relevant views of affected people and other stakeholders into decision making, such as project design, mitigation measures, the sharing of project benefits and opportunities, and implementation issues.

92. In keeping with ADB's SP8 (8R-2) requirements relating to involuntary resettlement impacts, a three-step process illustrated in **Figure 3** was followed during the preparation of this Resettlement Plan and the broad methodology adopted is described in **Table 4E**.

Figure 2 Steps and activities in a typical process of meaningful consultation



Table 46: Broad Methodology Adopted for Consultation

Stakeholders	Purpose	Method
Officials at PTCL and UPCL Office and the at site including women staff at PTCL corporate office	• To seek their participation in the safeguards planning activities • To discuss about ADB's broad policy principles, safeguards requirement • To discuss with women staff on gender issues and their expectations from the project on future training and capacity building training • To discuss about the proposed project of PTCL and UPCL and its benefits in general and to discuss about the potential environmental and social impacts along with proposed mitigation measures and seeking further cooperation	• Individual and group meetings • Virtual telephonic meetings and discussions
Village leaders and Villagers along the power lines and distribution substations and lines in the distribution components	• For information sharing about the project • Seeking their views on the project impact and risks, obtain suggestion on the possible mitigation (design inputs) of risks • Discuss plan of action such as project implementation and timeline • Discuss about Institutional setup and Grievance Redress Mechanism	• Consultation with Gram Pradhan (Elected Village representative) and elected ward members • Public consultations through PDD at various locations of project area under the grid components

Stakeholders	Purpose	Method
Affected People and Beneficiaries at PTCUL Power line and Substations	- Seeking their participation during the project implementation - To share about proposed project and discussion on potential benefit - Seeking their views on the project impact and risks, obtain suggestions on the possible mitigation (design inputs) of risks - Discuss plan of action such as project implementation and timeline. - Discuss about Institutional setup and Grievance Redress Mechanism - Seeking their participation during the project implementation	FGD
Affected People and Beneficiaries at UPCL Distribution Underground cabling	- For information sharing about the project - Seeking their views on the project impact and risks, obtain suggestions on the possible mitigation (design inputs) of risks - Discuss plan of action such as project implementation and timeline. - Discuss about Institutional setup and Grievance Redress Mechanism - Seeking their participation during the project implementation	- Consultation with elected ward members - Public consultation meeting/workshop of the elected representative and market associations.
Consultation with Women	- For information sharing about the project - Seeking women views on the project impact and risks, obtain suggestions on the possible mitigation (design inputs) of risks - Seeking their participation during the project implementation	FGD and consultation meetings

B. Information Dissemination prior/during consultation

93. The subcomponents of the Project can be categorized into two, i.e., (i) non-linear (sub-stations) and (ii) linear (includes high voltage overhead power lines, low voltage overhead L.L.Os, and underground distribution cable network). The impacts associated with these two categories are different in nature. Hence, information disclosure was planned and executed differently. The overhead high-voltage power lines mostly crossed rural areas. Hence, a short project information pamphlet was prepared in local language Hindi for easier understanding of the potential project affected persons. A copy of this was handed over to the Gram Panchayat head (*Sarpanch*) during the consultation process. The underground distribution cable networks are located within the capital city Dehradun and its suburbs. The literacy rate among the potential project affected persons is high and they are proficient in both English and local language Hindi. Hence, the short project information pamphlet prepared for this sub-component was made available both in English and Hindi. The project information pamphlets shared basic and relevant information with potential

project affected persons which included list of project sub-components, locations, and potential impacts and generic mitigation measures.

C. Consultation

94. Considering difference in nature of project sub-components, potential impacts and socio-economic background of the project affected persons, the study team adopted different approaches to facilitate maximum participation and inclusion of different social groups. The following section describes the consultations carried out at various places during the preparation of this draft Resettlement Plan.

C.1 Consultation for Overhead High-voltage Power Lines and Substations- PTCUL

95. The study team visited all 44 Gram Panchayats (GP) but could hold consultations at 39 GPs during their field visit between 8 and 19 December 2022. These consultations covered 85 participants in total. Table 46 below provides the coverage of villages along each of the powerlines line corridors.

Table 46: Coverage of Consultation along High Voltage Power Lines by PTCUL

#	TL Name	Number of Villages (Inhabitants)	Number of Gram Panchayats (GPs)	Number of GPs Consulted	Total Number of Participants
1	400 KV Keshpur-Pihora (~5km)	4	2	2	4
2	220 KV Monglajun-Nara (~25km)	24	16	14	31
3	220 KV Roorkee-Nara (~1km)	2	2	2	3
4	132 KV Mangora-Jasri (~5km)	2	2	2	3
5	132 KV Khatina-Sitarganj (~2km)	2	2	2	4
6	132 KV Keshpur-Manusherganj (~8.7km)	7	7	6	10
7	132 KV Manusherganj-Jasri (~23km)	15	12	10	20
8	132 KV Kathgodam-Rudrapur (~0.5km)	1	1	1	2
	Total	57	44	39	85

Source: PTCUL

96. The participants did not express any major objections or concerns on the power line alignment discussed with them. The feedback received from these consultations are summarized in Table 47. Details containing the records of consultations for PTCUL components are provided in Appendix-8.

Table 47: Feedback from consultations along overhead high voltage power lines

#	Issue or Impact	Feedback
1	Route alignment	- The high-voltage power lines should be sufficiently away from the village habitation and house clusters. - The future expansion of the habitation should be kept in mind while determining the route as it puts long term constraints for villagers to meet their future land requirement for habitation expansion. - The route alignment should use existing or available ROW for other linear infrastructure such as National Highways, which will minimize requirement of imposing fresh ROW restrictions. - The tower locations should avoid productive agriculture land wherever possible.
2	Information sharing and consultation with community	- The affected persons should receive notice or communication about the power line construction in advance. - The information sharing and consultations should be done on a continual basis.
3	Compensation for land	- The compensation determined based on circle rate by District Magistrate is less than the actual market rate. - The payment of compensation is not done in time. - The compensation determined for peri-urban areas is very less compared to their actual market price. The ROW restrictions puts a larger economic loss to the owner.
4	Compensation for crops and other damages	- The communities should be consulted to schedule the construction work that will prevent damage to crops. - The delay in compensation payment to be avoided. - The area of crop damaged determined by the government officials is often less than the actual damage caused.
5	Local benefit sharing	- The local people should get opportunity to work during the construction phase, which will generate employment and income for some households. - The villages along the power line corridor should receive benefits such as providing street lighting through CSR fund utilization.
6	Grievance mechanism	- There should be a grievance mechanism (preferably a help-line number) on which affected persons or other community members can register their concerns and complaints. - Such complaint numbers should be displayed at all work sites as well as communicated to Gram Panchayats.
7	Community Health and Safety	- The excavations for the towers during construction stage should be barricaded or protected so that domestic animals and community members do not fall into it accidentally. - The tower bases should have protection that prevents climbing up on the tower by any person.

C.2 Consultation Process for Overhead Low-voltage Distribution Power Lines

97. Considering the low potential impacts and non-requirement of ROW, the study team along with the field team of the implementation agency made a quick field visit and consulted the elected representatives of the concerned Gram Panchayats. The study team carried out 5 consultations during their field visit and covered 7 participants in total. **Table 43** below provides the coverage of villages along each of the Power line corridors. No major concerns or objections were received from the consultations along the proposed route of low-voltage power lines.

Table 43: Coverage of Consultation along Low Voltage Lines

#	Associate Line Name	Number of Gram Panchayats (GPs) / Town Municipality	Number of GPs Consulted	Total Number of Participants
1	Line connecting Karna SS	5	2	3
2	Line connecting Bharouni SS	3	2	4
3	Line connecting Rudrapur Collectorate	0	0	
	Total	8	6	7

Source: UPCL

C.3 Consultation Process for Underground Distribution Cables

98. The proposed work of laying underground cables is spread across the city of Dehradun. The planned work involves conversion of some of the existing overhead lines to underground lines and some of them will be freshly laid. As a usual practice, the distribution network will use public land (mostly along the road) and will not impose any ROW restrictions. The laying of underground cables during the construction phase will have a range of environment and social issues, particularly in an urban area with high structural and population density. The Study team prepared a consultation checklist including potential construction stage impacts. As the proposed construction work for underground cabling were scattered and comprised of 321 Ckms, the study team adopted a three-stage approach (Error! Reference source not found.3). Details containing various records of consultations for the distribution components are provided in **Appendix-7**.

Figure 2: Steps in Consultation Process



99. As a first step, the study team with the help from implementation agency identified 45 Wards (out of 102 Wards within Dehradun Municipality) where the proposed works under this project will be carried out. Subsequently as a second step, Information Disclosure and Consultation was carried out where the study team handed over a copy of the Project Information Summary during the consultation and briefed them on scope of the project and planned activities to be carried out within their Ward. The Implementation agency representative explained to them the key locations and the route alignment. The study team interviewed them and noted down their responses. The interview process included identification of sensitive spots where some of these potential impacts would occur and can cause inconvenience to public. Various wards consulted is provided in **Table 48**.

Table 48: Consultation at ward level for UG setting work by UPCL

#	Ward No.	Ward Name	Date of Visit
1	1	Malvi	30 th Sept. 2022
2	6	Doon Vihar	30 th Sept. 2022
3	7	Johari	30 th Sept. 2022
4	8	Solewadi	30 th Sept. 2022
5	9	Arya Nagar	1 st Oct. 2022
6	11	Vijay Colony	1 st Oct. 2022
7	22	Thak Road	1 st Oct. 2022
8	25	Indra Nagar	3 rd Oct. 2022
9	28	Dalnawasi (North)	3 rd Oct. 2022

#	Ward No.	Ward Name	Date of Visit
10	33	Dolanwala (South)	3 rd Oct. 2022
11	34	Govind Ghar	11 th Oct. 2022
12	35	Sri Devi Suman	11 th Oct. 2022
13	36	Vista Park	11 th Oct. 2022
14	37	Basant Vihar	12 th Oct. 2022
15	38	Panditwala	12 th Oct. 2022
16	44	Pokh Nagar (West)	12 th Oct. 2022
17	48	Achhiwala	12 th Oct. 2022
18	56	Dharmpur	11 th Oct. 2022
19	57	Nehru Colony	11 th Oct. 2022
20	59	Gujra Mansingh	11 March 2023
21	60	Danda Lakhaul	11 March 2023
22	61	Aamda Tara	11 March 2023
23	71	Pokh Nagar (East)	13 th Oct. 2022
24	73	Vijay Vihar	13 th Oct. 2022
25	77	Majra	06 th Oct. 2022
26	79	Bharuwa Grant	06 th Oct. 2022
27	87	Pithuwa	06 th Oct. 2022
28	90	Mishwakala	14 th Oct. 2022
29	Gram Panchayat	Rampur, Salaqui	15 th March 2023
30	Gram Panchayat	Shankarpur, Salaqui	15 th March 2023

Source: UPCL

106. A visit was held to important sensitive spots identified and on-site consultation was held with community members and stakeholders present there. The list of sensitive spots identified in each of the affected Ward is provided in **Table 60** below.

Table 60: Consultations Conducted at Sensitive Spots

Ward No	Name of Sensitive Spot	Nature of sensitivity
Ward No-1	1. Zoo entrance gate 2. Entrance gate of Max Hospital 3. Anya school and 4. Gyanendra Training Institute 5. Neopla Nala	Tourist place, hospital area and educational institute area
Ward No-6	1. Scholars School, 2. Pacific Mall, 3. Jashan Market (Heavy Traffic) 4. Physically Handicap School	Educational and business area

Ward No	Name of Sensitive Spot	Nature of sensitivity
Ward No-7,	1. NIEPVD, 2. The Presidency Body Guard 3. Jakhon Market	Heavy Traffic
Ward No-8	1. Daram Mandir, 2. Forest Office, 3. Mayur Auto	congestion, narrow road and school children commute.
Ward No-9	1. SKD Sharma street around 800 meters (Supply water) 2. Near HDFC Bank 3. Rajpura Road lane number 54 4. Kanya Gurukul Vidyalaya (School) 5. Near Dyan ICC Bank around 800 meters	Business and school area
Ward No-11	1. Baimli Mandir Chowk 2. Kalites Road 3. Kali Mandir	Congested area
Ward No-22	1. Mahaveen School, 2. Playdip School, 3. Harpreet School, 4. Idap Children School, 5. Silver Bell Schools, 6. Basl Vanita Ashram (Child) 7. Jain temple, 8. Tula Prithan Temple 9. Narrow road between Police Chowk to Nala (150 meters)	Schools and temple area Narrow road potential access hazard
Ward No-28	1. Brooklyn School, 2. Bright Line school, 3. Deon International School, 4. Deon Gokulam school	Educational and school area
Ward No-30	1. Drinking water supply on road and crossings	Public facility especially water supply area
Ward No-34	1. Shant Vihar Pullya crossing (Water supply) 2. All crossings (Water Supply)	Public facility especially water supply area
Ward No-35	1. Water supply and drainage (All crossings)	Public facility especially water supply and drainage area
Ward No-36	1. Near Sakpur Flyover and Nala (both narrow road and water supply) 2. Merry School 3. Temple 4. Wadia Institute 5. All crossings (Water Supply)	Multiple sensitive receptors such as school, water pipeline along the road, religious places and traffic area.
Ward No-37	1. Mahasini Ragh Nahar Canal 500 meters 2. Inlet one side Canal and other side Sewerage 3. Mini Tube well Ashwini Endave Lane 2. 4. Damage to drinking water supply system near Ashwini Endave	Canal area and water supply pipeline corridor
Ward No-38	1. Naniw Road near Gurudwara, (around 1 KM)	Congested area near the religious places

Ward No	Name of Sensitive Spot	Nature of sensitivity
	2. Houses built on the side of the Gurdwara road 3. Damage to drinking water supply system at Gurdwara road	
Ward No-44	1. Aadarsh Mandir (encroachment) near Sushila Store 2. Two sewage pipes cross near Bank of Baroda	Road side vendors along the temple area
Ward No-66	1. Hanuman Mandir (Temple) 2. Dharmpur Chowk Sabji Mandi (Traffic) 3. Saroten Mandir 4. Agrawal Bazar to Mustafa Wala Road (Traffic)	Temple and religious area
Ward No-57	1. Saroten Temple 2. Heavy traffic in Nehru Nagar Sabji Mandi (Vegetable Market) 3. Residential colony (Nehru Nagar)	Congested traffic area and residential area
Ward No-71	1. Mathewi bag	Institutional area
Ward No-77	1. Hand pumps on the sides of roads 2. Muskan Chowk ISBT 3. Girls School 4. Mains school 5. Narrow road Hamid colony and Muskan Chowk	Institutional and bus terminus area as considered to be congested area.
Ward No-79	1. Risk of Water pipeline damaged at all cross section and near roads 2. Gurnam Nagar Business Park	Public facility
Ward No-87	1. Temporary encroachers near Transport Nagar at day time. 2. Temporary encroachers near Muskan Chowk (ISBT) at day time. 3. Damage to drinking water supply system	Road side vendors and business areas and public facility.

101. The study team in participation from UPCL carried out 30 consultations in and around Dehradun city and consulted 41 persons including 30 elected representatives during this process. An overview of the consultation process in each EDO zone is provided in table 51 and detailed documentation of each of these consultations is provided in Annexure-3.

Table 51: Consultations Done in Areas to be Affected by the Underground Cabling

EDO Zone	Total number of Ward/Village	Number of Consultations Held	Total Number of Participants	Number of Male Participants	Total Number of Female Participants	Number of Sensitive Spots Identified
North	8	8	13	12	1	20
Central	12	8	7	5	2	20
South	16	11	9	7	2	28
Rural	12	5	12	7	5	12
Total	48	30	41	31 (76%)	10 (24%)	80

102. Although, participants from these consultations agreed that there are benefits from converting the overhead Power lines to underground lines, public faces a range of inconveniences during construction phase. Their feedback on managing a range of potential construction phase impacts and issues is summarized in Table 52/ Table 62.

Table 62. Feedback from consultations on Potential Impacts and Issues.

Potential Construction Phase Impacts and Issues	Feedback from Consultation
Location of temporary construction camps and store yards	The UPCL/EPC contractor to identify the construction camp location in consultation with local community and elected representatives.
Sanitation in small fly-by labour camps or tents	Small and temporary labour accommodation tents should provide basic minimum facility including toilets and waste bins.
Digging of roads and footpaths	- The trenches should not be kept open and unprotected for long time. - The conditions of the damaged pavements and footpaths should be reinstated quickly. - The removal of construction debris should be prompt and EPC contractor should clean up the construction area properly.
Disruption in commercial areas and vending zones	- The construction works in commercial areas to be carried out in off business hours or night time. - The EPC contractor to provide advance notice to business establishments and complete the work in stipulated time.
Damage to drinking water or sewerage pipeline during construction	- The EPC contractor and its workers should take extra care in preventing any damage to drinking water and sewerage pipelines. - If any unintentional damage takes place, the repair works should be carried out without undue delay.
Service Disruption of other utilities sharing the same infrastructure	- There are local cable services and CCTVs etc who now use the electric poles as shared infrastructure. Notices to these operators should be made in advance so that they can make alternate arrangements. - Some of these poles are also used for street lighting which is provided by Municipality. If these poles are to be removed, the Municipality needs to make alternate arrangements so that dark stretches are not created which may be unsafe for public.

C.4 Multi-Stakeholder Consultation at Dehradun City Level

163. After the round of consultations with elected representatives and identification of sensitive spots in each of the municipal wards within Dehradun Municipality, a city level multi-stakeholder consultation meeting was held on 20th Mar 2023. The stakeholders invited to this consultation meeting included three broad groups, viz., (i) Government departments, (ii) Elected representatives of the affected Wards of Dehradun Municipality, and (iii) civil society or citizen groups. The participants were sent formal invitation letters (sample letter is provided below) to attend this consultation meeting in advance. The consultation meeting was attended by 40 participants which included elected representatives in Dehradun Municipality, BSNL telecom department, and Forest Department. UPCL provided information about the scope of the project work proposed by them for ADB finance under different EOD zones and informed the participants about the intended project benefits for Dehradun residents. Key issues discussed as part of project information sharing are as below and responses are summarized in **Table 63**.

- Key project benefits as well as adverse environment and social impacts.
- Avoiding and minimizing the environmental and social impacts during project planning.
- Discussion on key environmental issues included: (i) reducing the impacts from construction noise, (ii) reducing impacts from fugitive dust during construction works, (iii) protecting the Rajaji National Park, (iv) protection of road side trees, and (v) timely reinstatement of damaged pavements and public spaces.
- Discussion on key social issues included (i) construction schedule and how to avoid business interruption, compensation for loss of crops and trees along the row, compensation for tower base, restoration of road and restoration of business activities after construction, protecting socio-cultural and religious structures.
- Key environmental and social mitigation measures including key features of environment management plan and resettlement plan.
- Seeking feedback on from the participants on various issues such as (i) how to improve advance notice and public awareness prior to and during construction, (ii) how to improve the grievance mechanism, (iii) how to improve coordination mechanism between EPC contractor, UPCL and Civil Authorities, (iv) How to improve traffic management, (v) how to avoid unintentional damage to civil properties including utilities, and (vi) how to maintain the aesthetic and cleanliness of the city.

Table 63: Keys Issues and Response in multi-stakeholder workshop

#	Question/Query	UPCL Response
1	For how many years this underground cabling project will benefit the people of Dehradun?	This project is planned keeping population projections for 20 years. The construction will take 2 years to complete.
2	As a ward member we never receive any information on when the construction will get start and when it will complete in the specific area. Contractors starts digging without informing local people and ward members.	UPCL will publish the construction schedule (start and end date) of each cable line with ward number atleast before 15 days of construction. UPCL will also inform Ward members/Nagar Nigam on the construction schedule. UPCL will create a WhatsApp Group of Ward member. Before construction community leaders/ward members will be informed through WhatsApp messages.

#	Question/Query	UPCL Response
3	Sari Mand in Ward number 12 is a crowded and narrow area. How UPCL will do construction in such kind of locations.	Construction in commercial area, crowded area, religious places and public area will be done at night and after prior consultation with stakeholder group.
4	Majority of the drinking water supply is underground on the road side, where UPCL is proposing the construction of underground cable. There is a high chance/risk of water pipe line damage due to construction work.	UPCL in coordination and consultation with Nagar Nigam, Jal Nigam, UPCL will prepare a construction plan for each underground cable line after GPR scanning.
5	What is the process of underground trenching? Dahanu already has lot of trenches. Why don't government is constructing a common permanent underground platform?	UPCL is preparing separate trench for underground cabling and it will allow other interested operators to use them where feasible.
6	In ward number 67, trenching may be tough due to narrow area (Flyover and canal).	Construction will be done using underground trenching using HDD machine.
7	Normally we found that digging and trenching done by other department and repair, filling and construction of road / pathway done by other departments. It creates lot of problem to people as usually repair work got delayed. Give entire construction and repair work to the same contractor, so that work may be finished within 24 hrs of construction.	Chief Minister has made a high-level committee to coordinate with other relevant departments. UPCL will pay for the entire repair amount to the relevant department before start of the work. We will coordinate with the relevant line department to complete the repair work within stipulated time.
8	ADB gave the Sewerage line construction directly to the contractor.	It was clarified that ADB works with its borrowers (e.g., OGU or a department of it) during project implementation. At the request of the government and based on pre-project due diligence results satisfactory to ADB, loan might be approved with implementation primarily resting on the government implementing agencies (in this case, UPCL and PTDUL). The implementing agencies select and manage the project contractor. The implementing agencies may also coordinate with other government agencies (e.g., Public Works Department) to ensure smooth project implementation and to attain project objectives.
9	In Shivajinagar road, Inter-State Bus Terminus (ISBT) area when UPCL is starting the construction work.	Yes we can't tell the exact time of construction, it will take some time. Tentatively we are planning to start construction work after rainy season around August/September 2023.
10	Whether electricity will be disrupted during underground cabling.	No disruption of electricity during construction.
11	What is the construction completion time in a specific area?	At a time, construction work (trenching and cabling) will be done for 150-200 meters, so same area will be disturbed for around 24-30 hours.
12	What type of trenching has been planned for underground cabling by UPCL?	It depends on the GPR scanning and survey. If no rocks, barriers we go for underground trenching, if it is rocky or with construction barriers we have to go for open trenching.
13	Majority of the streetlights in the single road where dividers are not available are on the	Streetlights do not come under UPCL, Nagar Nigam may be consulted. We can keep the poles

#	Question/Query	UPCL Response
	UPCL pole. How you are planning for street lights in the roads without dividers?	for some time say six months, respective department/agency may be requested for street lights arrangement.
14	33 KV line pole is in Bindal River and it becomes dangerous during rainy season. UPCL is requested to install that pole and provide safe alternative.	UPCL will look at this matter seriously.
15	What is your monitoring and quality assurance mechanism for construction and repair works?	Construction quality assurance has been planned. We are also considering to make video before construct, during construction and after construction, to assure the construction and repair work as per work schedule. Creation of Ward members WhatsApp group to collect information (text, photographs and videos). Setting up a Help-line Number (1912) and constitute a Grievance Committee.

104. The participants though appreciated UPCL's efforts to share information with them and seek their feedback, but they were apprehensive if the interdepartmental coordination mechanism, grievance system, and continuous stakeholder consultations will really work during the construction phase. The key suggestions for improvement in these areas are summarised in Table 64.

Table 64: Stakeholders Feedback from Multi-Stakeholder Workshop

#	Area of Improvement	Suggestions for Improvement
1	Inter-departmental coordination mechanism	In addition to the high level (Chief Secretary) coordination committee, a local (Ward level) coordination mechanism should be constituted. The Ward members should be part of these local committees to monitor compliance by EPC contractor. Where WhatsApp groups are formed with EPC contractor, line departments and UPCL, Ward Members too should be part of these groups.
2	Grievance Mechanism	The grievance mechanism to be simple and responsive. The complainants should enjoy protection from any retaliatory action from government departments.
3	Restatement of damaged pavements and civic infrastructure	The restatement of damaged pavements and civic infrastructure is delayed as the contract for this work is issued by Dehradun Municipality (Nagar Nigam) and there is no coordination between EPC contractor of UPCL and civil contractor of the Nagar Nigam. It may work better if the same EPC contractor damaging the pavement is also made responsible for reinstating the pavement condition to pre-project condition.
4	Continuous Stakeholder Consultation	These pre-project consultations should not be one-off events. The UPCL and EPC contractor to continue the stakeholder consultation and undertake public awareness initiatives throughout the construction period.

C.6 Gender Consultation

105. Consultations with women's groups have been conducted using focused group discussions (FGDs) in April 2023 at 11 locations (detailed in table below) having a total of 126 women participants. The objective of the consultation is to collect independent views of the women regarding the project and sharing the project information with women group. Women are considered as one of important key stakeholders and therefore, special attention was given to women during project planning and seeking their feedback. Various locations and number of women participants are described in **Table 66** and summary findings of the gender consultations are described in **Table 66**. Details containing the records of gender consultations are provided in **Appendix-8**.

Table 66: Gender consultation participation and Location

#	Location / Village	Male participants	Female Participants	Total Participants
1	Gorti Hussain	0	15	15
2	Barkhata Pandey	10	28	38
3	Haridwar	02	23	25
4	Harnu Sahu	09	08	17
5	Jagdpur Pathi	00	07	07
6	Gaura	00	03	03
7	Karmaga Danda	2	3	05
8	Mundel	02	06	08
9	Gopabaur	02	05	07
10	Jhatran	08	10	18
11	Gadar Judda	08	18	26
	Total	62	126	178

Table 66: Key findings on gender consultations

#	Discussion Issues	Women responses
1	Women's Occupation and Livelihood	Women's key occupation is household work, along with household work women are also engaged in family agriculture work on their own or shared agricultural land. During the agricultural season, few women are also engaged as agricultural labour in agricultural fields. Women are also engaged in MNREGA work, where the opportunity for factory work is not available. Haridwar, Udhm Singh Nagar, and Deraadun have various large and small shemas, food processing, paper mills, brick kilns, jaggery factory, and other industries. In various villages, women are also factory workers, particularly in packaging and other unskilled and semi-skilled jobs.
2	Household Assets	The majority of the households have informed that they have basic household electric appliances in their home, such as TV, fan, lights, air cooler, refrigerator, mixer-grinder, etc. Some households have washing machines and AC also. Some households also have agricultural water pumps (diesel and electric).
3	Landholding ownership	As reported by the women group, more than half of the households have no agricultural land, and even households with land have very less land holding sizes. The average land holding is around 5 to 8 bigha of land per household/family.

#	Discussion Issues	Women responses
		Traditionally in this area, women do not have the right to property inheritance. So, family-owned land is normally transferred to the male member of the family. Very few women reported that their family members (Husband and Son) have purchased any land (alone or joint) in their name.
4	Decision making	The majority of the women have their own bank accounts in their name due to various government schemes, and around half of the women have their own mobile phones. The majority of the women stated that they have a role in the household in decision-making. Working women have more power over the use of money, but in majority of the cases they take decisions after discussion with their family members.
5	Participation in any community-based organizations	Women are also organized in SRM-sponsored SHGs. On average each village has 4 to 5 SHGs, some of them are matured SHGs means older than 5 years, some of them are new, and a few villages have no SHG. As reported by women, the majority of these SHGs are engaged only in thrift and credit, with no major livelihood activities through SHGs. The majority of the women reported that have not received any specialized livelihood training through the SHG ecosystem, particularly in Haridwar and Utham Singh Nagar. As reported by the community, pharma industries, food processing industries, and paper mills are also supporting the community of nearby villages through their CSR fund. Various CSR foundations have initiated social and economic development activities through the CSR fund. The presence of any sound NGOs is not found in the visited area.
6	Water and drudgery	Plain areas of Uttarakhand, i.e., Haridwar, Utham Singh Nagar have plenty of underground water, river, and canal systems. As reported by women of visited villages, each village is connected with the tap water supply system, villages have hand pumps also. So, water drudgery is not a major issue for the majority of households.
7	Education, Health, and sanitation	In almost all the visited villages primary school facilities are available in the village or very near to the village. In some of the villages, there are high schools and good private schools nearby. Higher education facilities such as colleges, and Polytechnic centers are also within the reach of villages. Both public and private health facilities are available for the villages, and quality of public health is an issue with villages, every village has Angan Wadi Worker (AWW) and Aasha Didi as per state norms. Toilet facilities have improved in recent years, majority of the household have toilet facilities in their home. Few poor households who don't have Pucca (Concrete) houses are going for open defecation or community toilets. Few villages have common sanitation facilities.
8	Electricity conduction	Women discussion revealed that 100% of villages and households in the area are electrified. The average availability of power is around 18-20 hours per day. It slightly varies from village

#	Discussion Issues	Women responses
		to villages. In these villages where industries are more than availability of electricity is more in comparison to non-industry villages. Normally 4-5 hours of power cut happens during the evening and morning and some disruptions during the day time. Major power cut happens during summer.
9	Perception about the project	Women were not aware of the project details, safeguard measures, compensations, and entitlements. ACSE Consultants briefed women on the above issues. Women revealed that towers and distribution lines pass through a few villages, but villages are not getting continuous power supply. Women of one village also reported that three years back there was an incidence of crop burning in the field due to a fire in a 33 KV line tower (probably). No mishaps, accidents, or incidents due to high-tension lines (Power Lines) have been reported by women. Women complain about the unbearable high-tension line wires humming where 400 KV or more lines are passing. But no accidents were reported by the women groups. Women are happy that the project is strengthening the power infrastructure in their area, which will lead to an improvement in electricity supply and they will get continuous electricity, particularly during summer, at peak period (evening), and during agriculture season. The availability of sufficient power in the evening would be beneficial for the students for studying and undertaking other learning activities, especially in the evening time. Women are also of the view that the improved electricity supply will lead to the creation of industry activities, more economic activities, and livelihood opportunities around the area.
10	Apparent loss	Women and the community were of the view that these Power lines decrease the value and utility of land, they can't construct any infrastructure under the line and cultivation also suffers.
11	Women suggestions	Women suggested that lines should not pass through the habitations, structures, and agencies should minimize the impact on fertile agricultural land. The community/villages should be informed well before the start of the construction work. The compensations and entitlements should be more than the market price, the government should ensure timely payment of the compensations. Women also suggested that local villagers should be given work or jobs during the construction of lines and substations. Women wanted to provide village infrastructure such as streetlights, libraries, playgrounds, and livelihood activities through PTCU and UPCL funds (CSR).

#	Discussion Issues	Women responses
		Community members also suggested constructing underground Power lines instead of overhead lines to minimize the economic loss of households and communities.

C.6 Summary list of total participants

106. A summary list of total participants is provided in **Table 67**.

Table 67: Summary Participant Lists

Location / Village Name	Name of Project Component	Date of Consultation	Male participants	Female Participants	Total Participants
PTCL COMPONENTS					
Bachour	132 KV Kahmand-Mushaur line	08/12/2022	1	1	2
Jhan Kalay	132 KV Khatima-Sitgarj line	09/12/2022	2	0	2
Unch Mahawar	132 KV Khatima-Sitgarj line	09/12/2022	2	0	2
Or Dhyal	132 KV Kasipur-Mahuaikhergarj line and 132 KV Mahuaikhergarj-Jasour line	11/12/2022	1	0	1
Gulana	132 KV Kasipur-Mahuaikhergarj line and 132 KV Mahuaikhergarj-Jasour line	13/12/2022	0	2	2
Roda	132 KV Kasipur-Mahuaikhergarj line and 132 KV Mahuaikhergarj-Jasour line	11/12/2022	4	0	4
Jagbour Goinbar	132 KV Mahuaikhergarj-Jasour line	10/12/2022 & 22/04/2023	2	10	12
Narsipur	132 KV Mahuaikhergarj-Jasour line	13/12/2022	1	2	3
Garni Husan	132 KV Mahuaikhergarj-Jasour line	10/12/2022 & 21/04/2023	11	16	27

Location / Village Name	Name of Project Component	Date of Consultation	Male participants	Female Participants	Total Participants
Kotsiya	132 kV Kaskipur-Maharkegarj line and 132 kV Maharkegarj-Jaspur line	13/12/2022	1	0	1
Borhena Pandey	132 kV Kaskipur-Maharkegarj Line and 132 kV Maharkegarj-Jaspur line	13/12/2022 & 23/04/2023	15	18	33
Borhena	132 kV Kaskipur-Maharkegarj line and 132 kV Maharkegarj-Jaspur line	13/12/2022	1	0	1
Hanawal	132 kV Kaskipur-Maharkegarj line	21/04/2023	2	23	25
Habua Saru	132 kV Kaskipur-Maharkegarj line	22/04/2023	3	8	17
Gaura	132 kV Maharkegarj-Jaspur line	22/04/2023	0	3	3
Jhalion	220 kV Manglaur-Nara Line (25 KM), 220 kV Manglaur-Nara Line (1 Km) and 132 kV Manglaur-Nara line	14/12/2022 18/04/2023	9	11	20
Naga Arnet	220 kV Manglaur-Nara Line (25 KM)	14/12/2022	3	1	4
Thasaka	220 kV Manglaur-Nara Line (25 KM)	14/12/2022	2	0	2
Mundel	220 kV Manglaur-Nara Line (25 KM)	15/12/2022 19/04/2023	4	7	11
Litahadi	220 kV Manglaur-Nara Line (25 KM)	14/12/2022	1	1	2
Nagla Chawa	220 kV Manglaur-Nara Line (25 KM)	15/12/2022	2	1	3
Aankhat	220 kV Manglaur-Nara Line (25 KM)	15/12/2022	1	0	1
Gopalpur	220 kV Manglaur-Nara Line (25 KM)	14/12/2022 19/04/2023	4	6	10
Bukarpur	220 kV Manglaur-Nara Line (25 KM)	18/12/2022	1	0	1
Mohd Pur Bazar Ait	220 kV Manglaur-Nara Line (25 KM)	18/12/2022	3	0	3

Location / Village Name	Name of Project Component	Date of Consultation	Male participants	Female Participants	Total Participants
Khempur	220 kV Manglaur-Nara Line (25 KM)	16/12/2022	3	0	3
Shikarpur	220 kV Manglaur-Nara Line (25 KM)	16/12/2022	2	0	2
Zabardast Pur	220 kV Manglaur-Nara Line (25 KM)	16/12/2022	2	1	3
Gadar Judda	220 kV Manglaur-Nara line (25KM), 220 kV Manglaur-Nara (1KM), and 132 kV Manglaur-Asan line (1KM)	18/04/2023	10	10	20
Ramnagar Ganda	220 kV Manglaur-Nara Line (25 KM)	19/04/2023	2	3	5
Potachar	Stringing of second circuit of 132 KV DIC Power line	21/09/2022	7	3	10
Dastl	Stringing of second circuit of 132 KV DIC Power line	21/09/2022	5	2	7
Birni	Badave Associated line	22/09/2022	4	4	8
Badave	Badave Associated line	22/09/2022	6	1	7
Bhaloun	Badave Associated line	22/09/2022	2	3	5
Gajani	Kareya Associated Line	15/11/2022	2	1	3
Hamatpur dohyal	Kareya Associated Line	15/11/2022	2	0	2
Jamkhori	Bharauti Associated line	16/11/2022	2	0	2
Bagpur	Bharauti Associated line	16/11/2022	3	1	4
UPCL COMPONENTS					
Rampur Kala	Selagi UG line (UPCL)	23/04/2023	2	3	5
Dehardun North	Underground cabling	01-02-10/2022	15	3	18
Dehardun Central	Underground cabling	03-04-10/2022	7	4	11
Dehardun South	Underground cabling	05-07-10/2022	8	3	11
Dehardun Rural	Underground cabling	11/10/2022 & 23/04/2023	9	4	13
Multi-stakeholder Consultation	Underground cabling	29/03/2023	30	12	42
Gender Consultation			52	126	178
Total			367	303	680

D. Continued Consultation and Participation

107. One of the essential elements of a meaningful consultation is that the consultations take place during all stages of the project. The consultation and disclosure process for the Project will need to address the entire range of stakeholders, including but not limited to the stakeholders identified and consulted during preparation of this RP. In order to ensure that the consultations held during this project preparatory phase also continue during construction and operation phase, it is important to allocate responsibilities clearly. The responsibility of consultation with local community and project affected persons will be handled by PTCUL and UPCL through EPC contractor and project implementation and support consultant (PISC). The information to be shared with local communities and affected persons and beneficiaries include but not limited to the following:

- Changes in the project design (locations of tower, changes in power line corridor or ROW) and implementation schedule and their potential impacts.
- Measures taken by the project to avoid and minimize these potential impacts such as re-routing, adjusting tower locations, adoption of better tower design etc.
- Details of the entitlements and compensation towards ROW imposition and damages during construction of power line towers and lines.
- Details of calculation of the compensation amount and procedure involved in compensation payment.
- Grievance Mechanism which affected persons and local communities can use to register their concerns and seek appropriate redress.
- Construction schedule

E. Communication and Consultation Plan

108. PTCUL and UPCL shall continue to regularly inform project stakeholders particularly affected persons about project details, including the schedule of works, impacts, grievance mechanism, and changes to project design or implementation, if any. Consultation will be continued throughout the project cycle especially during finalizing and updating of the resettlement plan and during implementation with conscious effort to increase the participation of affected persons. Future consultations will be carried out by the PTCUL and UPCL through the concerned contractor and project implementation and supervision consultant (PISC). For future consultations during the implementation, following processes are envisaged:

- (i) Identification of key stakeholders will be done which will be finalized in due consultation with officers of PTCUL and UPCL.
- (ii) PTCUL and UPCL will ensure that the concerned contractors and PISC, will identify appropriate methods for consultation and dissemination platforms for broader reach.
- (iii) PTCUL and UPCL will ensure that the contractors and PISC will develop appropriate communication materials in local language considering the fact that affected people include scheduled tribe or indigenous peoples.
- (iv) For disclosure, the communication materials will include the positive and negative impacts of the project, mitigation measures, grievance redress mechanism, construction schedule and summary of the resettlement plan.

- (v) PTCUL and UPCL will ensure that the contractors and PSC will give advance notice about the consultations or other engagement and will disseminate properly for wider participation of beneficiaries.
- (vi) The consultation and engagement process will be utilized to address the complaints, concerns and implementation issues raised by the affected people during the consultation.
- (vii) There will be budgetary provision to implement the future consultation and dissemination strategy.
- (viii) Applicable coronavirus disease (COVID-19) guidelines of Government of India and state government of Uttarakhand will be followed during the consultation.

109. A broad stakeholder communication strategy has been outlined in the Project Administrative Manual (PAM). This section is specifically for the planning, updating and implementation procedure and respective consultation strategy for resettlement plan activities. For the implementation of consultation plan in the project area, contractor and PSC will coordinate with the concerned division office of PTCUL and UPCL and also the administrative unit (Taluk) for permission to conduct the public consultation in the project area. The concerned contractor and PSC will coordinate with the village head for implementing the consultation strategy such as distribution of consultation material, venue of consultation, advance notice for participation in the consultation. The target audience, mechanisms for participation, entities responsible for implementation and indicative schedules are set out in the consultation and participation plan as described in **Table 62**.

Table 62: Consultation and Participation Plan

Issue	Target Audience	Means of Communication	Responsible	Timing
Disclosure of draft RPI	Beneficiaries and affected people and concerned government agencies especially revenue department related to valuation and compensation	Posting on websites of ADB and PTCUL and UPCL	PTCUL and UPCL and ADB	Prior to land negotiation
Information dissemination and consultation on project final design, risk mitigation measures and entitlement principles.	Beneficiaries and affected people	Public consultation meetings, small group meetings	PTCUL and UPCL through concerned contractor and PSC	During finalization of route alignment and project design and updating of resettlement plan
Project impacts (positive, negative), project benefits, implementation arrangements and grievance redress mechanism	Beneficiaries and affected people	Public consultation meetings, small group meetings	PTCUL and UPCL through concerned contractor and PSC	Before start of construction

Issue	Target Audience	Means of Communication	Responsible	Timing
Disclosure of updated RP (Leaflet, Brochure to be prepared by PTCUL and UPCL with assistance from PISC.)	Beneficiaries and affected people and concerned government agencies especially revenue department related to valuation and compensation	Public consultation meetings, small group meetings*	PTCUL and UPCL through concerned contractor and PISC for dissemination of brochure PTCUL, UPCL and ADB for disclosure on respective website	Following final approval and concurrence from PTCUL and UPCL and ADB on updated RP during project implementation
Implementation schedule of construction of civil works	Beneficiaries and affected people	Public consultation meetings, small group meetings*	Contractor, PISC, field offices of PTCUL and UPCL	Prior construction to
Project grievance redressal mechanism, procedures to lodge complaint on social, environmental, health and safety issues	Beneficiaries and affected people including villagers and concerned government agencies such as revenue department and forest department	Public consultation meetings, small group meetings*, individual meeting	Contractor, PISC, field offices of PTCUL and UPCL	At completion of project design

*Small group meetings can be conducted if COVID-19 protocols are enforced to ensure social distancing norms.

F. Disclosure

110. PTCUL and UPCL, with support from contractor and PISC, will provide relevant information in a timely manner, in an accessible place, and in a form and language understandable to affected persons and other stakeholders. The Resettlement Plan will be made available in corporate and site offices of PTCUL and UPCL and at the project site office of concerned contractor. A summary of the Resettlement Plan will be shared with the affected persons and made available to the district revenue offices. A summary of the Resettlement Plan will be made available in Hindi in the form of leaflet for distribution during consultation. The same process will be followed during the updating of this draft Resettlement Plan. The draft Resettlement Plan will be disclosed on the website of ADB and in PTCUL and UPCL website prior to the management review meeting/loan negotiation. Subsequently, the updated Resettlement Plan as per the final design will also be disclosed separately on the websites of ADB, PTCUL, and UPCL. The monitoring reports on the implementation of the Resettlement Plan (i.e., through the semi-annual social safeguards monitoring report) will also be posted on the ADB website and on the websites of PTCUL and UPCL.

V. GRIEVANCE REDRESS MECHANISM

A. Background

111. A 4-tier grievance redress mechanism shall be established to address concerns and grievances of affected persons and workers involved in this Project. Considering that the three (3) implementing agencies will implement different project sub-components and will likely receive complaints that may differ in nature and complexity, the Project will have GRM established separately at each implementing agency for their respective components. It will however, follow the same four tier structure with (i) Tier-1 at EPC Contractor/Division level; (ii) Tier-2 at PIU level; (iii) Tier-3 at PMU level (supported by PISC); and (iv) Tier-4 at the Energy Department of the Government of Uttarakhand (the executing agency) at the highest level. Due to the importance of GRM in addressing feedback and grievances of project affected persons, Tiers 3-4 of the GRM shall be established within one month from loan effectiveness and Tier 1, during the preparation of detailed design/prior to the conduct of detailed measurement survey/census/inventory of assets. Information about the GRM shall be communicated to the affected people across the project area as part of the overall communication, consultation, and disclosure process of the Project.

112. At costs involved in resolving the complaints/grievances (meetings, consultations, communication, and reporting/information dissemination) will be borne by the respective project implementing agencies. Any complaints resolution pertaining to the performance of EPC contractors will be borne by the EPC contractors. Further, ADB also has its Accountability Mechanism which is a forum of last resort where people adversely affected by ADB-financed projects can express their grievances; seek solutions; and report alleged violations of ADB's operational policies and procedures. Notwithstanding the presence of these complaints mechanisms, any affected person can always freely access and seek remedies from courts or other judicial or quasi-judicial venues available in India.

B. Need for a Project Grievance Redress Mechanism

113. ADB's SPB (2006) requires the establishment of a responsive, readily accessible, and culturally appropriate GRM that is capable and available to address complaints/grievances/claims of project affected persons and workers involved in project implementation. It facilitates the resolution of affected persons' concerns and grievances about the environmental, social and economic impacts of the projects. The GRM aims to: (i) reduce conflict, avoid undue delays and complication in project implementation; (ii) improve the quality of project activities and outputs; (iii) ensure that the rights of affected parties are respected; (iv) identify and respond to unintended adverse impacts of projects on individuals; and (v) maximize participation, support, and benefit to local communities.

114. The GRM is an accessible and trusted platform for all the affected persons to seek solutions and relief for their project-related problems and grievances, without resorting to lengthy and costly judicial process. The GRM will not deal with matters pending in a court of law. Its success and legitimacy will depend on the affected persons' capacity for consultations and desire to resolve grievances through discussion and negotiation. A culturally appropriate, gender responsive, and accessible mechanism shall be established for the Project but which shall not impede access to the country's judicial or administrative remedies. The presence of GRM or seeking relief from GRM is not a bar to take grievances and complaints to courts for arbitration.

This includes ADB Accountability Mechanism whereby people adversely affected by ADB-financed projects can express their grievances; seek solutions; and report alleged violations of ADB's operational policies and procedures, including safeguard policies.

C. Objectives

115. The GRM are established fundamentally for the following objectives:

- To provide an accessible mechanism to the affected people, community or any project stakeholder to raise their issues and grievances related to project implementation;
- 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 party;
- To facilitate the smooth implementation of the Environmental Management Plan and prevent delay in project implementation;
- To democratize the development process at the local level, while maintaining transparency as well as to establish accountability to the affected people;
- To facilitate an effective dialogue and open communication between the project stakeholders; and
- To have clear definition of roles and responsibilities.

116. As the project components will be implemented by PTCUL, UPCL, and UREDA under one executing agency, it would be more cost efficient and effective to have a GRM that addresses grievances at the appropriate level and in a focused manner based on the project's institutional setup. A GRM will be established separately at each implementing agency to address complaints relating to their respective components.⁴

D. Structure of the Grievance Redress Mechanism

117. The Project will have a 4-tier GRM having a grievance redress committee (GRC) at each level as described below and shown in the **Figure 4**.

- **Tier-1:** EPC Contractor/Division level where project sub-components are executed;
- **Tier-2:** PUs (PTCUL and UPCL), the apex level of each of the implementation agency;
- **Tier-3:** PMU (supported by PISC), at the overall project level; and
- **Tier-4:** The Energy Department of the Government of Uttarakhand (Steering Committee)

E. GRM Process and GRC in the Project

118. The GRM process followed by subsequent formation of grievance redress committee (GRC) at each tier is described in **Table 55**.

Table 55: GRM Process and GRC Formation

⁴ Since this Foundation Plan covers the project sub-components to be implemented by PTCUL and UPCL, a GRC for PTCUL is described in detail in the Project Implementation Manual of the project team.

Tier/Level	GRM Process	Grievance Redress Committee
Tier-1: EPC Contractor/Division level	- The complaints/grievances will be received by the Junior Engineer in charge of the site or at the Divisional/Sub-Divisional Office or by a site-supervisor of the EPC Contractor executing the work verbally or through written communications (both on paper and electronic) shall be submitted to Superintending Engineer (SE). - The complaints will be reviewed at this level and efforts will be made to resolve them in consultation with the affected persons or any other stakeholder, who has lodged the grievance/complaint. - At this level there will be efforts to resolve the grievance/ complaint within a period of 10 days from the date of receipt of the complaint. In case the aggrieved is not satisfied with the solution provided Tier 1 he may escalate it to Tier 2, PU level.	The Grievance Redress Committee (GRC-1) at this tier will comprise of four members, i.e., (i) Superintending Engineer (SE), (ii) Executive Engineer (EE), (iii) Assistant Engineer (AE) Sub-Divisional Officer (SDO), (iv) Project Manager of EPC Contractor and (v) safeguard specialists from RSC.
Tier-2: PILs (PTOL and UPCL) Level	- Both UPCL and PTOL will establish a PU which will have a team of safeguard experts (Environment and Forest, Health and Safety, and Social). Complaints (grievances) that cannot be resolved at Tier-1 or if the aggrieved is not satisfied with the decision of the Tier 1 and appeals for redressal only such cases would be taken up at Tier 2. - The Tier-2 Grievance Committee will examine the documents (copy of the complaint, investigation report, MoUs of GRC-1, response to complainant or other relevant documentation submitted to them) and will hear the aggrieved. The GRC-2 will make an effort to provide relief to the aggrieved. - The CE will hold a meeting of the GRC-2 within one week of resolving the complaint and the entire process should be completed within 10 days of the complaint being referred to Tier 2. If unsatisfied with the solution provided by GRC-2, the Complainant may elevate the complaint to Tier 3 of the GRM. If the GRC-2 finds that the potential	The Grievance Committee at Tier-2 (GRC-2) will comprise of (i) the Chief Engineer, (ii) Superintendent Engineers (SE), (iii) Executive Engineers (EE), (iv) representative from land revenue, agricultural and horticultural department and (v) elected representative of each Panchayat/Nagar Nigam including women members (If woman member is available and in case the elected member is a woman)

Tier/Level	GRM Process	Grievance Redress Committee
	solution to the complaint is beyond their official powers and authority, they will send the complaint to Tier 3 simultaneously informing the complainant about the decision and reason for the elevation of complaint to Tier 3 of the GRM.	
Tier-3: PMU (supported by PISC) Level	- The 3rd level will be the Grievance Committee (GC-3) will be constituted at PMU level. The PMU is supported by a Project Implementation Support Consultant (PISC) which will have safeguard team with experts from all subjects (Environment, Health & Safety, Biodiversity, Social, Labour, and Gender). Any grievances that cannot be addressed or resolved at Tier 2 may be brought up to GC-3. - The secretary of GRC-3 will convene a meeting within 15 days of receiving the complaint. The secretary will lead the process of investigation and take help from the subject experts in PISC to find likely solutions. All such solutions will be discussed during the meeting of the GRC-3. If required multiple GRC-3 meetings will be held and the complainants will be requested to appear before the GRC-3. The GRC-3 will resolve the matter within a time period of 30 days from receiving the complaint.	The GC-3 at PMU will be comprised of (i) AOR Project Director, (ii) Concerned Managing Director of PTCUL/UPCL as case may be (iii) a senior lawyer from District Court or social worker of high reputation. It is expected that most of the complaints are resolved by GC-2 and the meetings of the GC-3 will be held only when an unresolved complaint is referred to them. The respective Chief Engineer of the Zone from where the complaint has been lodged would be an invited member.
Tier-4: The Energy Department of the Government of Uttarakhand	It is expected that most of the grievances will be resolved at GRC-1 and GC-2 and GRC-2 level only. The complaints referred to this apex level will be the matters that has wider policy implications or of high financial consequences. The efficient functioning of the GC-1 and GC-2 can prevent escalation of such complaints. The PMU with support from PISC will monitor their functioning.	Grievance Committee at the fourth level (GC-4) will comprise of (i) Chief Secretary, Government of Uttarakhand (ii) Secretary, Power Department acting as AOR Project Director, (iii) Concerned Managing Director of PTCUL/UPCL, as case may be.

F. Registering a Complaint

119. How to file a Grievance or Complaint: Grievances or complaints can be lodged verbally (in person or through telephone calls) or through written applications to the Junior Engineers (JE)

at site or Site Supervisor of the EPC Contractor. Verbal complaints should be documents using a form (to be devised by PIU/safeguards unit during the establishment of the GRM). The existence of the grievance mechanism and the numbers of the persons responsible to register complaints will be displayed at all work sites as well as on notice boards of site offices or at offices of PTCUL, UPCL, and UREDA. The UPCL has an existing toll-free helpline number (8012) for its customers. This channel is popular and shall be used to register grievances related to execution of the project components. Grievances pertaining to implementation of the Project can also be filed online at the website of PTCUL and UPCL and UREDA through the designated email address for sending grievances.

120. Who can complain: A complaint may be brought by one or more people (including contracted laborers/workers employed by the Project) who are, or could be, "directly, indirectly, materially, and adversely" affected by the Project. A complaint can be submitted on behalf of the affected person/people by a representative, provided that he or she identifies the affected person/people and includes evidence of the authority to act on their behalf.

121. Record keeping and reporting: All the complaints received by the EPC Contractor Site Supervisor/Junior Engineer/Divisional/Sub-Divisional Offices either verbally or through written communication shall be documented in a Grievance Register maintained at Tier-1 or Division Level. It must contain name of the complainant, date of receipt of the complaint, address/contact details of the person, location of the problem area and how the problem is addressed. The Grievance Register will help track cases, respond to grievances in a timely manner, check the status of complaints and track actions taken/progress towards resolution, measure effectiveness, and report on results. The grievances received and their status will be compiled in the first week of every month at GRC-2 or PIU level of both UPCL and PTCUL and shared with GRC-3 at PMUPISC level. The PISC will provide a summary of functioning of the GRM to ADB as part of the semi-annual safeguard monitoring reports to be submitted during the implementation period. A project-wide grievance handling database shall be set up by the PMU GRM focal replicating the PIU logs at project-level. Once a resolution has been proposed to the complainant or an action to resolve the complaint has been completed, the complainant will be requested to sign a form providing approval or refusal of the proposed action or satisfaction with complaint resolution, as applicable. This form will be added to the grievance/complaint register and once all actions are taken the associated entry will be closed but not deleted. All GRC meeting deliberations and decisions will be recorded and may be accessible to the public, upon request. The log must be publicly available and the number of grievances recorded and resolved and the outcomes will be displayed/discussed at the PIU Office. All complaint-related documentation such as minutes of the meetings and decisions will be summarized and become part of the environmental and social safeguard monitoring reports submitted to ADB.

G. Disclosure and Budget of the Grievance Redress Mechanism

122. The formation and effectiveness of GRM will be communicated to the affected people across the project area (a month after loan effectiveness) as part of the overall consultation and disclosure process of the project. The EPC contractors and PISC consultant will assist PTCUL and UPCL in disseminating information related to the GRM to affected people. Special efforts should be made to ensure that poor and vulnerable households are made aware of grievance redress procedures and entitlements during information dissemination. All costs involved in resolving the complaints/grievances (i.e., for meetings, information dissemination, consultations, communication, and reporting) will be borne by PTCUL, UPCL and UREDA. Any actions and expenses in resolving complaints pertaining to the performance of EPC contractors and EMP-related complaints will be borne by the EPC contractors.

VI. LEGAL FRAMEWORK AND ENTITLEMENTS

A. General

123. This chapter discusses the applicable legal framework (including legal provisions, policies and administrative guidelines), the relevant ADB social safeguards requirements, key gaps between legal framework and ADB requirements and an outline of proposed compensation framework and implementation process that ensures projects compliance to ADB requirements.

B. Applicable National Legal and Policy Framework

124. The laws and administrative guidelines relevant for procuring land and ROW for the project are discussed in sub-sections below.

1. Electricity Act 2003

125. Section 67 and 68 of the Electricity Act, 2003 has provisions for minimizing impacts (damages, detriment or inconvenience) while laying (and repair) of Power lines and for paying compensation where such impacts take place.

126. Section 67 (3&4) reads as follows: "(3) A Licensee shall, in exercise of any of the powers conferred by or under this section and the rules made thereunder, cause as little damage, detriment and inconvenience as may be, and shall make full compensation for any damage, detriment or inconvenience caused by him or by anyone employed by him. And (4) where any difference or dispute [including amount of compensation under sub-section (3)] arises under this section, the matter shall be determined by the appropriate commission"

127. Further, provisions under section 68 (5&6) reads as follows: (5) Where any tree standing or lying near an overhead line or where any structure or other object which has been placed or has fallen near an overhead line subsequent to the placing of such line, interrupts or interferes with, or is likely to interrupt or interfere with, the conveyance or transmission of electricity or to interrupt or interfere with, the conveyance or transmission of electricity or the accessibility of any works, an Executive Magistrate or authority specified by the Appropriate Government may, on the application of the licensee, cause the tree, structure or object to be removed or otherwise dealt with as he or it thinks fit. (6) When disposing of an application under sub-section (5), an Executive Magistrate or authority specified under that sub-section shall, in the case of any tree in existence before the placing of the overhead line, award to the person interested in the tree such compensation as he thinks reasonable, and such person may recover the same from the licensee.

128. The Electricity Act 2003 requires compensation to be paid to the owner, in case of any existing trees/structures/ objects/damages to crops which have to be removed from the ROW and also has provisions for a grievance mechanism. The Electricity Act 2003, however, did not have any guideline on how to determine the full and reasonable compensation. Therefore, the practice of compensation paid to affected persons for damage, detriment or inconvenience visited from project to project, Ministry of Power (MoP), Government of India, had a state level Power Minister's conference on 9-10th April 2015 where the problem faced by the transmission companies with respect to the procurement of land for transmission lines were discussed. After considering the views of all the states, MoP came up with a guideline.

2. The Indian Telegraph Act, 1885, Part-III, Section 10

Quote:

Section 10 – The telegraph authority may, from time to time, place and maintain a telegraph line under, over, along, or across, and posts in or upon any immovable property. Provided that

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

Unquote:

Section 18 of the Indian Telegraph Act, 1885 which stipulates as under:

18. Exercise of powers conferred by section 10, and disputes as to compensation, in case of property other than that of a local authority:

- (1) If the exercise of the powers mentioned in Section 10 in respect of property referred to in clause (c) of that section is resisted or obstructed, the District Magistrate may, in his discretion, order that the telegraph authority shall be permitted to exercise them.
- (2) If, after the making of an order under sub section (1), any person resists the exercise of those powers, or, having control over the property, does not give all facilities for this being exercised, he shall be deemed to have committed an offence under section 100 of the Indian Penal Code (46 of 1860).

125. Indian Telegraph Act (1885) has also been taken in to consideration for its relevant applicability. Part-III of the Act² is applicable for transmission and distribution projects. The Indian Telegraph Act does not have any provision for permanent land acquisition except for payment of compensation for construction of lines and towers as temporary impacts. The Indian Telegraph Act, 1885 is usually followed, which does not have any provision of land acquisition for construction of transmission pillars and lines. The act exercises the power to remove any trees interrupting the transmission lines, however, subsection of section 18 of the Act provides the opportunity for compensation for cutting the trees if the tree is in existence before the telegraph line was placed. The telegraph authority may, from time to time, place and maintain a telegraphic line under, over, along or across, and post in or upon, any immovable property provided that the

telegraph authority shall not exercise the powers conferred by this section except for the purpose of a telegraph established or maintained by the Central Government, or to be so established or maintained, if any tree standing or lying near a telegraph line interrupts, or is likely to interrupt, telegraphic communication, a Magistrate of the first or second class may, on the application of the telegraph authority, cause the tree to be removed or dealt with in such other way as he deems fit. When disposing of an application under sub-section (1), the Magistrate shall, in the case of any tree in existence before the telegraph line was placed, award to the persons interested in the tree such compensation as he thinks reasonable, and the shall be final.

1. Ministry of Power, Government of India Guidelines for payment of compensation towards right of way for transmission lines

130. On 15 October 2015, the Ministry of Power (MoP) issued the 'Guidelines of ROW for transmission line projects and payment of compensation towards damages regarding ROW for transmission line'. The guideline recommended to pay compensation only for transmission lines supported by a tower base of 66 KV and above and not for sub-transmission and distribution lines below 66KV.

131. The MoP 2015 guidelines recommended to pay compensation for the base area for the transmission tower (the area between four legs) and towards the diminution of land value in the width of the ROW corridor. The recommended minimum compensation for the area under transmission tower base is 85 percent of the land value as determined by the District Magistrate or any authority based on the circle rate/guideline value/stamp value/stamp act. The recommended minimum compensation for the area within ROW or transmission corridor is 15 percent of the land value.

132. The Government of Uttarakhand has issued a Department Order (8/1735/N-2/2021-07/3)-13/2019 dated 8 Dec 2021) which is aligned to the MoP 2015 guideline.

4. MOP Guidelines for payment of compensation regarding ROW for transmission lines in Urban Areas, July 2020

133. In July 2020, MOP issued another guideline which considered an additional compensation in the form of non-usability allowance for land falling within ROW corridor in urban areas. The recommended additional compensation was for a maximum of 15% of the land value. The compensation provisions as per both these MOP Guidelines are provided in **Table 60**. The compensation for transmission tower footing is 85 percent of the land value. The compensation for land within ROW or transmission corridor is 15% of the land value in rural areas and 30% in urban areas.

Table 60: MOP Guidelines (Oct 2015 and Jul 2020) provisions for compensation for transmission tower and ROW corridor

Defoliant/ Considered	Inconvenience	Compensation Provision
Compensation for Tower Footing		Compensation to be paid at 85 percent of land value as determined by District Magistrate or any other authority based on Circle rate/ Guideline value/ Stamp Act/rates for tower base area (between four legs) impacted severely (difficult to access and make any productive use) due to installation of tower/pylon structure

Detriment Considered	Inconvenience	Compensation Provision
Compensation for width of ROW Corridor for diminution of land value		Compensation towards diminution of land value in the width of ROW corridor due to laying of transmission line and imposing certain restriction would be decided by the States as per categorization/type of land in different places of States, subject to a maximum of 15 percent of land value as determined based on Circle rate/ Guideline value/ Stamp Act rates. Additional compensation in form of non-usability allowance up to 15% of the land value for the width of ROW corridor would be applicable in the notified urban areas. No construction activity of any kind would be permitted under the ROW of the power line. Note: For the purpose of this guidelines, Urban Area is defined as all places with a municipality corporation, cantonment board or notified town area committee etc.

C. ADB's Involuntary Resettlement Safeguard Requirements

134. The involuntary resettlement safeguards cover 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. ADB's safeguard requirement for involuntary resettlement is applicable whether losses and involuntary restrictions are full or partial, permanent or temporary. The main policy principles of the Involuntary Resettlement Safeguard are:

- Screen the project early on to identify past, present, and future involuntary resettlement impacts and risks. Determine the scope of resettlement planning through a survey and/or census of displaced persons, including a gender analysis, specifically related to resettlement impacts and risks.
- Carry out meaningful consultations with affected persons, host communities, and concerned non-government organizations. Inform all displaced persons of their entitlements and resettlement options. Ensure their participation in planning, implementation, and monitoring and evaluation of resettlement programs. Pay particular attention to the needs of 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, and ensure their participation in consultations. Establish a grievance redress mechanism to receive and facilitate resolution of the affected persons' concerns. Support the social and cultural institutions of displaced persons and their host population. Where involuntary resettlement impacts and risks are highly complex and sensitive, compensation and resettlement decisions should be preceded by a social preparation phase.
- Improve, or at least restore, the livelihoods of all displaced persons through (i) land-based resettlement strategies when affected livelihoods are land based where possible or cash compensation at replacement value for land when the loss of land does not undermine livelihoods, (ii) prompt replacement of assets with access to assets of equal or higher value, (iii) prompt compensation at full replacement cost for assets that cannot be

restored, and (iv) additional revenues and services through benefit sharing schemes where possible.

- Provide physically and economically displaced persons with needed assistance, including the following: (i) if there is relocation, secured tenure to relocation land, better housing at resettlement sites with comparable access to employment and production opportunities, integration of resettled persons economically and socially into their host communities, and extension of project benefits to host communities; (ii) transitional support and development assistance, such as land development, credit facilities, training, or employment opportunities; and (iii) civic infrastructure and community services, as required.
- Improve the standards of living of the displaced poor and other vulnerable groups, including women, to at least national minimum standards. In rural areas provide them with legal and affordable access to land and resources, and in urban areas provide them with appropriate income sources and legal and affordable access to adequate housing.
- Develop procedures in a transparent, consistent, and equitable manner if land acquisition is through negotiated settlement to ensure that those people who enter into negotiated settlements will maintain the same or better income and livelihood status.
- Ensure that displaced persons without titles to land or any recognizable legal rights to land are eligible for resettlement assistance and compensation for loss of non-land assets.
- 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.
- Disclose the final resettlement plan and its updates to affected persons and other stakeholders.
- Conceive and execute involuntary resettlement as part of a development project or program. Include the full costs of resettlement in the presentation of project's costs and benefits. For a project with significant involuntary resettlement impacts, consider implementing the involuntary resettlement component of the project as a stand-alone operation.
- Pay compensation and provide other resettlement entitlements before physical or economic displacement. Implement the resettlement plan under close supervision throughout project implementation.
- 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 considering the baseline conditions and the results of resettlement monitoring. Disclose monitoring reports.

D. Key Gaps: Legal Framework vis-à-vis ADB Safeguard Requirement

135. The applicable legal framework does consider the damage, detriment or inconvenience caused to affected land owners and makes provision for payment of compensation. However, there are a few gaps vis-à-vis ADB's safeguard requirements both in terms of process and

outcomes. Table 61 highlights these key gaps and how these gaps were addressed during preparation of this report.

Table 61: Gap in legal framework vis-à-vis ADB safeguard requirements

Relevant ADB Safeguard Policy Principles	Legal Framework of India relevant to Transmission/Distribution Project	Degree of alignment or Gaps and proposed actions to address gaps
Principle 1: Screen the project early on to identify past, present, and future involuntary resettlement impacts and risks. Determine the scope of resettlement planning through a survey and/or census of displaced persons, including a gender analysis, specifically related to resettlement impacts and risks.	The Electricity Act-2003, The Indian Telegraph Act, 1885 and the MoF Guidelines do not refer to such policy principles and hence, do not align.	PTCLJL and UPCL have already carried out the screening and categorized the projects. Preparation of resettlement plan begins with screening and further assessment on scope of land acquisition. The process will be continued during the updating as specified in the draft resettlement plan.
Principle 2: Carry out meaningful consultations with affected persons, host communities, and concerned nongovernment organizations. Inform all displaced persons of their entitlements and resettlement options. Ensure their participation in planning, implementation, and monitoring and evaluation of resettlement programs. Pay particular attention to the needs of 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, and ensure their participation in consultations. Establish a grievance redress mechanism to receive and facilitate resolution of the affected persons' concerns. Support the social and cultural institutions of displaced persons and their host population. Where involuntary resettlement impacts and risks are highly complex and sensitive, compensation and resettlement decisions should	The Electricity Act-2003, The Indian Telegraph Act, 1885 and the MoF Guidelines do not refer to such policy principles related to meaningful consultation and grievance redress mechanism hence, do not align.	PTCLJL and UPCL will continue to ensure a comprehensive process of consultation with affected persons and others during resettlement plan preparation, updating and implementation, to inform them of their entitlements, to ensure their participation in planning and to address the needs of vulnerable groups. PTCLJL and UPCL will establish a project based GRM through the resettlement plan to project related address grievances.

Relevant ADB Safeguard Policy Principles	Legal Framework of India relevant to Transmission/Distribution Project	Degree of alignment or Gaps and proposed actions to address gaps
be preceded by a social preparation phase.		
Principle 2 Improve, or at least restore, the livelihoods of all displaced persons through (i) land-based resettlement strategies when affected livelihoods are land based where possible or cash compensation at replacement value for land when the loss of land does not undermine livelihoods; (ii) prompt replacement of assets with access to assets of equal or higher value; (iii) prompt compensation at full replacement cost for assets that cannot be restored; and (iv) additional revenues and services through benefit sharing schemes where possible.	The Electricity Act-2003, The Indian Telegraph Act, 1885 and the MoP Guidelines, do not refer to such policy principles and hence, does not align. However, it may be noted that this is not applicable as there is no physical displacement in this project and only temporary loss of livelihood. The Electricity Act-2003, The Indian Telegraph Act, 1885 do not say directly about the replacement cost, however, MoP Guideline, has the provision for 80% land value for tower base, 15% land value for right of way as determined based on Circle rate/Guidelines value/Stamp Ac rates. This is partially aligned.	PTCLIL and UPCL will provide adequate compensation for all losses as per the Entitlement Matrix and will be based on the valuation to be determined by the concerned departments which is the revenue department as per the latest circle rates.
Principle 4 Provide physically and economically displaced persons with needed assistance, including the following: (i) if there is relocation, secured tenure to relocation land, better housing at resettlement sites with comparable access to employment and production opportunities, integration of resettled persons economically and socially into their host communities, and extension of project benefits to host communities; (ii) transitional support and development assistance, such as land development, credit facilities, training, or employment opportunities; and (iii) civic infrastructure and community services, as	The Electricity Act-2003, The Indian Telegraph Act, 1885 and the MoP Guidelines, do not refer to such policy principles and hence, does not align. However, it may be noted that this is not applicable in this project as there is no physical displacement in this project and minimal economic displacement impacts.	No specific action is required, however, any such impacts to be occurred during construction is covered, including under the unanticipated impacts of the entitlement matrix.

Relevant ADB Safeguard Policy Principles	Legal Framework of India relevant to Transmission/Distribution Project	Degree of alignment or Gaps and proposed actions to address gaps
required.		
Principle 5. Improve the standards of living of the displaced poor and other vulnerable groups, including women, to at least national minimum standards. In rural areas provide them with legal and affordable access to land and resources, and in urban areas provide them with appropriate income sources and legal and affordable access to adequate housing.	The Electricity Act-2003, The Indian Telegraph Act, 1885 and the MoP Guidelines do not refer to such policy principles and hence, does not align.	Provision for vulnerable groups have been made in the entitlement matrix. PTCL and UPCL will ensure that equal wages for men and women if engaged by the contractor with adequate provision for the occupational health and safety of women under the environment management plan.
Principle 6. Develop procedures in a transparent, consistent, and equitable manner if land acquisition is through negotiated settlement to ensure that those people who enter into negotiated settlements will maintain the same or better income and livelihood status.	The Electricity Act-2003, The Indian Telegraph Act, 1885 and the MoP Guidelines do not refer to such policy principles and hence, does not align.	PTCL has entered in to negotiated settlement in case of private land for substations through transparent manner. And, the same will be followed during finalization of remaining sites.
Principle 7. Ensure that displaced persons without title to land or any recognizable legal rights to land are eligible for resettlement assistance and compensation for loss of non-land assets.	The Electricity Act-2003, The Indian Telegraph Act, 1885 and the MoP Guidelines do not refer to such policy principles and hence, does not align.	Provisions are included in the Entitlement Matrix of the resettlement plan to pay compensation to the non-landholders (informal and non-registered) for their non-land lost assets.
Principle 8. 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.	The Electricity Act-2003, The Indian Telegraph Act, 1885 and the MoP Guidelines do not require this and hence, this aspect does not align.	PTCL and UPCL will prepare resettlement plan and obtain approval for the resettlement plan by ADB then disclose. A draft resettlement plan has already been prepared to this context.
Principle 9. 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	The Electricity Act-2003, The Indian Telegraph Act, 1885 and the MoP Guidelines do not refer to such policy principles and hence, does not align.	PTCL and UPCL will prepare and obtain approval for the resettlement plan and subsequent disclosure which will be applicable to the draft resettlement as well as to the final and updated resettlement plans.

Relevant ADB Safeguard Policy Principles	Legal Framework of India relevant to Transmission/Distribution Project	Degree of alignment or Gaps and proposed actions to address gaps
stakeholders. Disclose the final resettlement plan and its updates to affected persons and other stakeholders.		
Principle 10. Conceive and execute involuntary resettlement as part of a development project or program. Include the full costs of resettlement in the presentation of projects costs and benefits. For a project with significant involuntary resettlement impacts, consider implementing the involuntary resettlement component of the project as a standalone operation.	The Electricity Act-2003, The Indian Telegraph Act, 1885 and the MoP Guidelines do not refer to such policy principles and hence, does not align.	An indicative budget provision has been made by PTCLJL and UPCL in the resettlement plan as part of counterpart funds and the budget will be updated during updating of the resettlement plan and will be allocated in advance from the counterpart funds prior to implementation of the project.
Principle 11. Pay compensation and provide other resettlement entitlements before physical or economic displacement. Implement the resettlement plan under close supervision throughout project implementation.	The Electricity Act-2003, The Indian Telegraph Act, 1885 and the MoP Guidelines do not refer to such policy principles and hence, does not align.	Compensation for any permanent impacts such as land compensation for privately owned substation, land compensation for tower base (80% land value per MoP guidelines) shall be made prior to start of the construction. Compensation related to RoW, trees and crops etc will be paid within three (3) months from the valuation/construction. For the construction of high voltage power lines and 33/11 KV distribution line, a phase wise approach can be adopted for payment of compensation. PTCLJL and UPCL will ensure that compensation is being paid simultaneously during the construction of line which shall be within three (3) months from construction for the stretch which is ready for construction.
Principle 12. 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	The Electricity Act-2003, The Indian Telegraph Act, 1885 and the MoP Guidelines do not refer to such policy principles and hence, does not align.	PTCLJL and UPCL will monitor the processes, outputs, outcomes, and impacts of the resettlement plan implementation and share the monitoring reports with affected persons and other stakeholders including ADR.

Relevant ADB Safeguard Policy Principles	Legal Framework of India relevant to transmission/Distribution Project	Degree of alignment or Gaps and proposed actions to address gaps
achieved by taking into account the baseline conditions and the results of resettlement monitoring. Disclose monitoring reports.		Semi-annual monitoring reports will be submitted to ADB and will be disclosed on the ADB website.

6. Core Policy Principles

136. The basic principles adopted for the project are:

- Avoid negative impacts of private land acquisition and involuntary resettlement on persons affected by the project to the extent possible.
- Land for permanent impact shall be acquired through direct purchase.
- Where negative impacts cannot be avoided, assist affected persons, through adequate compensation and resettlement.
- Carry out meaningful consultations with affected persons and inform the affected persons of their eligibility and entitlements. Ensure their participation in planning, implementation and monitoring of the project.
- Update the Draft Resettlement Plan based on final design and alignment prioritizing construction.
- Disclose information related to impacts, eligibility, cut-off date, and entitlement and **ensure affected persons' participation in planning and implementation of compensation plan.**
- Provide compensation for all losses at full replacement/market value in accordance with the Resettlement Plan.
- Ensure that affected persons without titles to land or any recognizable legal rights to land are eligible for compensation for loss of non-land assets such as trees and crops and any other assets if built by the non-titleholders.
- Anyone moving into the project area after the cut-off-date will not be entitled to compensation.
- Compensation for any permanent impacts such as land compensation for privately owned habitation, land compensation for lower base (80% land value per MoP guidelines) shall be made prior to start of the construction. Compensation related to RoW, trees and crops etc will be paid within three (3) months from the valuation/construction. For the construction of high voltage power lines and 33/11 kV distribution line, a phase wise approach can be adopted for payment of compensation. FTCLJL and UPCL will ensure that compensation is being paid simultaneously during the construction of line which shall be within three (3) months from construction for the stretch which is ready for construction.
-
- Establish Tier 2 to 4 of the project grievance redress mechanisms within one month of loan effectiveness and Tier 1 during the preparation of detailed design/prior to the conduct of detailed measurement survey/consult/inventory of losses to ensure speedy resolution of disputes.
- Ensure adequate budgetary support to cover implementation costs for the Resettlement Plan.
- Monitor the implementation of the Resettlement Plan.

- Ensure that lands temporarily used/occupied or disturbed/damaged by project activities such as but not limited to those under the right of way and towers are restored to their previous use after the construction consistent with the environmental management plan of the Project.
- Ensure proper traffic management, provision for alternate access to the business establishments, temporary shifting of vendors and bring them back, full restoration of disturbed public areas to pre-project condition within 3 to 5 days from completion of laying of underground cables in Dehradun city areas.
- People shall be allowed to continue their agricultural activities under the ROW after civil works relating to the erection of power lines are completed, though there will be restrictions on construction and planting tall trees in the ROW.

F. Standard Practice to be followed for the Project

137. The applicable legal and policy framework for land acquisition and involuntary resettlement depends on how and what category of land is procured. The project will adopt different land procurement methods for different categories of land required for the project. The summary of land procurement methods and applicable legal framework is provided in **Table 82**.

Table 82 : Land or ROW Procurement Methods and Legal Framework

Sub-Component	Sub-project type	Land or ROW Procurement Method and Legal Framework
Power Lines	New sub-stations on Government Land allotted to PTCUL or UPCL	• The District Magistrate to issue an allotment letter under provisions of (Uttarakhand) (Uttar Pradesh) Zamindari Abolition and Land Reforms Act, 1950.
	New sub-stations on land purchased by PTCUL from private owners	• Sale Deed to be signed by both parties and registered under the provision of Indian Stamp Act, 1899 (Act), and notification no. 25/30XVI (SUGD)/Stamp-812003 dated May 15, 2011, issued by the Department of Finance, State of Uttarakhand.
	Overhead High Voltage (440, 220, 132 KV) Power Lines	• ROW to be notified in Gazette of Government of Uttarakhand under the provision of Electricity Act 2003; and • Compensation is to be paid to affected land owners as per MOP Guidelines of 2015 and 2020.
	Underground High Voltage (220, 132 KV) Power Lines	• The route will use public land (mainly roads) and no ROW acquisition is imposed.
	Stringing of existing Power corridor	• The ROW is already notified in Gazette of Government of Uttarakhand; and • Compensation for land within ROW is paid as per MOP Guidelines of 2015. • No new ROW will be required.
Distribution	Rehabilitation of Existing Sub-stations	• No additional land is required.

Sub-Component	Sub-project Type	Land or ROW Procurement Method and Legal Framework
	New Sub-stations on Govt Land allotted to UPCL	The District Magistrate to issue an allotment letter under provisions of Uttaranchal (Other Provisions) Zoning-Rotation and Land Revenue Act 1991.
	New sub-stations on land purchased by UPCL from private owners	Sale deed to be signed by both parties and registered under the provision of Indian Stamp Act, 1899 (Act), and notification no. 20/2009/S&OT/Stamp-412009 dated May 25, 2011, issued by the Department of Finance, State of Uttaranchal.
	High voltage overhead lines connecting seven new eight Sub-stations	- ROW to be notified in Gazette of Government of Uttaranchal under the provision of Electricity Act 2003, and - Compensation is to be paid to affected land owners as per MOP Guidelines of 2015 and 2020.
	Conversion of Existing 33kV and 11kV Overhead Lines to Underground Cables	The route will use public land² (mostly roads) and no ROW restrictions are imposed.

9. Cut-off Date

138. Cut-off date for PTCL components: For the title holders, the date of Newspaper publication or Gazette Notification of ROW and the Notice⁷ to landowner, whichever is later will be treated as the cut-off date. For non-titleholders the date of the detailed/check survey of the power line route by the contractor will be treated as cut-off date and accordingly disclosed to ensure that affected people are made aware of it.

139. Cut-off date for UPCL components: The cut-off date for underground work will be the public announcement of the start date of the commencement of construction work for a particular area or line. For non-titleholders the date of the detailed/check survey of the power line route by the contractor will be treated as cut-off date and accordingly disclosed to ensure that affected people are made aware of it.

² As per S-54 of UP Revenue Code, all public roads, lanes, paths, bridges, ditches, dykes and fences on or beside them, the bed of rivers, streams, tanks, lakes, ponds and tanks and all canals and water channels, and all standing and flowing water, and all lands whenever situated, which are not owned by any person, and except in so far as any rights of any persons may be established in or over the same, and except as may be otherwise provided in any law for the time being in force, are hereby declared, with all rights in or over the same, or appertaining thereto, to be the property of the State Government. Similarly, S-56 declares all trees, brushwood, jungle or other natural products are deemed to be the property of State Government.

⁷ A prior notice is served after the detailed check survey and finalization of tower location during the construction to the land owners informing that the proposed transmission line is being routed through the property of the individual. The notice shall contain the particulars of the land, ownership details and the details of the investments inevitably likely to be damaged during the course of the construction of the proposed transmission line and acknowledgement received from landowner.

VII. ENTITLEMENTS, ASSISTANCE AND BENEFITS

A. General

140. In line with national policies and in compliance with ADB's Safeguard Policy Statement (SPS, 2009), the Project will seek to avoid involuntary resettlement wherever possible, minimize involuntary resettlement by exploring project and design alternatives, enhance, or at least restore, the livelihoods of all displaced persons in real terms relative to pre-project levels; and improve the standards of living of the displaced poor and other vulnerable groups. In implementing project activities, determining the location of substations or any other project facility; and finalizing the route of the power lines, PTCUL and UPCL will avoid partial, full, temporary or permanent 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.

141. The eligibility and entitlement in this draft Resettlement Plan are based on the policies and guidelines of the Government of India, the State of Uttarakhand, and ADB's SPS. The core national policies relevant to the implementation of this plan are (i) The Electricity Act, 2003 to be read with Indian Telegraph Act, 1885 and (ii) Ministry of Power (MoP), Government of India Guidelines for payment of compensation towards right of way (RoW) for transmission lines. Affected households will be eligible and entitled for compensation as described in the Entitlement Matrix separately prepared for PTCUL and UPCL components as below.

B. Eligibility

142. Depending on type of loss or impact, this draft Resettlement Plan covers the following eligible persons/individuals who are residing or conducting business or livelihood activities in the areas affected by project activities or facilities at the time of the Detailed Measurement Survey (DMS):

- Legal title holders
- Persons who have no formal legal title document, but who have claims to such lands that are recognized or recognizable under national laws
- Non-titled/informal users who have been using the areas required by the Project for livelihood or residence and who will need to move/be displaced involuntarily, will also be eligible for compensation, except compensation for land
- Sharecroppers, leaseholders, and tenants on affected private lands

143. Those who encroach into the impacted area after the cut-off date will not be entitled for any compensation or assistance unless there is a change in the project design.

C. Entitlement Matrix for PTCUL components

144. Entitlement matrix for PTCUL components is provided in **Table 62**.

Table 62: Entitlement Matrix for PTCUL Component

#	Type of Loss	Entitled Persons	Entitlement	Details
1	Land affected by tower base (between four legs)	Legal titleholders	Compensation at 85% of land value	- Compensation to be paid at 85% of land value as determined by District Magistrate or any other competent authority based on Circle rate/Guideline value/Stamp Act rates for tower base area (between four legs) impacted severely due to installation of tower/pylon structure.¹ - Compensation will be paid (if applicable) for the tower footing located on government land as per the prevailing state/central government rules
2	Land in the width of right of way (ROW) corridor due to laying of power lines and imposing certain restrictions	Legal titleholders of the land within width of ROW corridor	Compensation at 15% of land value	- Compensation towards diminution of land value in the width of ROW corridor will be paid at 15% of land value as determined by District Magistrate or any other competent authority based on Circle rate/Guideline value/Stamp Act rates. - Compensation will be paid (if applicable) for the government land within the width of ROW corridor as per the prevailing state/central government rules
3	Loss of trees and standing crops as follows: a. Trees and crops under the tower base b. Trees and crops in the width of the ROW c. Construction-related impacts on trees and crops, if to	All affected persons (Titleholder, sharecroppers, leaseholders and tenants on private lands)	Compensation at replacement value	- Affected persons will be notified and given 30 days advance notice to remove trees.² - For seasonal crops and fruit trees 15 days advance notice is to be given - Compensation for cash crops as per valuation done by the concerned department (Revenue Department with assistance from agricultural department and horticulture department) - Compensation for one-year net harvest for seasonal crops as per valuation done by the concerned department (Revenue Department with assistance from agricultural department,

¹ This is based on the Guidelines for the payment of compensation to the landowners in regard to Right of Way for transmission lines dated 12th October 2012 which was issued by the Ministry of Power of the Government of India.

² As mentioned under 3.4 Impacts on Crops and Trees above, PDSI (a)7 which has setting norms from the revenue and forest departments provide minimal cut damage for the standing trees/leg.

#	Type of Loss	Entitled Persons	Entitlement	Details
	occur beyond the width of ROW			horticulture department and forest department) • Compensation as per valuation done by the concerned department of wood/timber or firewood depending on the kind of tree to be determined by the forest department • For fruit bearing trees compensation to be calculated as per valuation done by the concerned department (Revenue Department with assistance from agricultural department, horticulture department and forest department)
4	Loss of structures (primary and secondary structures) under the tower base and ROW, if affected during construction	All affected households including Legal titleholders, non-titleholders	Compensation at replacement value	Compensation to be determined by the competent authority/department as per the prevailing government rules and regulations
5	Other Impacts Not Identified (Unanticipated impacts)	Affected households or individuals	Compensation at full replacement cost and/or assistance	Unforeseen impacts will be documented and mitigated based on the principles agreed upon in the resettlement plan and, if need arises, revision of the entitlements to comply with ACB's SPS requirement by adding additional provision based on the nature of impacts.

D. Entitlement Matrix for UPOL components

145. Entitlement matrix for UPCL components is provided in **Table 64**.

Table 64: Entitlement Matrix for UPCL Component

#	Type of Loss	Entitled Persons	Entitlement	Entitlement Options
1	Temporary loss of access to public space used for livelihood (Temporary disruption of economic and livelihood activities)	Business owners and Entrepreneurs and Street vendors	Assistance	• An alternate business location of not more than 200m from original site will be provided. • If the construction works require complete closure of the registered street vendors or small businesses for more than a day (or a continuous period of 24 hours), the affected persons will be provided one time substantial allowance of INR 1,000 (or an

#	Type of Loss	Entitled Persons	Entitlement	Entitlement Options
				amount that is mutually determined UPCL and affected persons. In case of any unavoidable economic or livelihood loss, UPCL will assess on a case-to-case basis for suitable allowance.
2	Damage to structure (Residential and commercial)	Legal titleholders and non-titleholders	Compensation at replacement value	The replacement value of the part of the structure that was damaged will be provided, calculated as per the latest prevailing Schedule of Rates without depreciation. - Where the loss of structure is partial and the remaining structure is viable, compensation will be based on the total structure and right to salvage material from the demolished structure at no cost; and - For those who need to temporarily shift to give way to repairing the damage caused by project activities, rental assistance¹⁹ will be provided until full restoration and availability for use of the damaged structure.
3	Loss of trees and standing crops	Titleholder, sharecroppers, leaseholders on private land	Compensation at replacement value	- Affected persons will be given 30 days advance notice to remove trees. - For seasonal crops and fruit trees 15 days' advance notice is to be given. - Compensation as per valuation done by the concerned department (Revenue Department with assistance from agricultural department, horticulture department and forest department) of wood/timber or firewood depending on the kind of tree to be determined by the Forest or Horticulture Department.
4	Other Impacts Not Identified (Unanticipated impacts)	Affected households or individuals	Compensation at full replacement cost and/or assistance	Unforeseen impacts will be documented and mitigated based on the principles agreed upon in the resettlement plan and, if need arises, revision of the entitlements to comply with ADB's SPS requirement by adding additional provision based on the nature of impacts.

VIII. RESETTLEMENT BUDGET AND FINANCING

¹⁹ Rental assistance will be based on rental prices in the area of current residence and will be fixed after discussions.

A. Background

146. This is an indicative and estimated cost which will be updated during the updating of RP. Separate cost estimate has been done for UPCL and PTCUL and both UPCL and PTCUL will ensure adequate allocation and approval of budget for the implementation of RP activities. Resettlement cost estimate for this Project includes eligible compensation and assistance and support cost for RP implementation. These are part of the overall project cost. The cost related to the implementation of this Resettlement Plan is to be borne by UPCL and PTCUL for their respective components.

B. Budget for Project Components Implemented by UPCL

147. The resettlement budget for project components implemented by UPCL covers various cost items such as (i) One time subsistence allowance for temporary disruption of livelihood if restoration is more than a week; (ii) one-time subsistence allowance for street vendors for business closure for more than 24 hours; (iii) loss of trees and crops and (iv) administrative cost pertaining to RP implementation and monitoring. UPCL shall require to make additional provision of INR 12,000,000 (12 million INR) for implementation of the provisions under this Resettlement Plan. The detailed break-up of this is provided in Table 66.

Table 66: Budget for implementation of RP for UPCL Component

#	Particular	Estimate in INR	Remarks and assumptions
A	Project Components implemented by UPCL		
A.1	One time subsistence allowance for temporary disruption of livelihood where relocation requires more than one week	55,00,000	(INR 10,000 per AP for 500 APs (20% of identified sensitive spots, i.e. 10 spots with ~50 small business each)
A.2	One-time subsistence allowance for street vendors for business closure for more than 24 hours	20,00,000	A lump sum contingency fund to be used for paying 2000 street vendors one time assistance of INR 1000 each, if required
A.3	Loss of Trees and Crops or any other asset	30,00,000	Lump-sum
A.7	Cost for RP implementation and monitoring support (administrative)	20,00,000	Lump-sum
Sub-Total A (UPCL Components)		120,00,000	

C. Budget for Project Components Implemented by PTCUL

145. The resettlement budget for project components implemented by PTCUL will cover various cost items such as (i) 85% of land value compensation for private land owners for tower base, (ii) 10% land value compensation for in ROW (ii) compensation for damage to crop area during tower construction; (iv) compensation for damage to crop area in private land in ROW during stringing, and (v) Administrative cost for RP implementation and monitoring.

1. Compensation for Land under Tower

146. The compensation to be paid to 269 APs prior to the construction of the tower bases as per the provisions under MoP Guideline of 2015 and 2020 and Government of Uttarakhand Department Order (#17351-(2)/2021-07(3)-13/2019 dated 8 Dec 2021). **Table 66** provides the summary of estimated compensation for each of the high-voltage power line to be constructed by PTCUL.

Table 66: Estimated compensation to private landowners for land under tower base

District	High Voltage Overhead Power Line Name	Tower Base Area in Sqm (Pvt Land) in Ha	Tower Compensation @ 85% of circle rate in INR
Haridwar	1. 400 kV Kashipur-Pithana	0.54	13,61,700
	2. 220 kV Manglaun-Nara	3.12	1,00,50,400
	3. 220 kV Roohwa-Nara	0.28	5,47,400
	4. 132 kV Manglaun-Joshi	0.14	2,73,700
U.S. Nagar	5. 132 kV Khatima-Sitarganj	0.14	3,21,300
	6. 132 kV Kashipur-Mahuliherganj	0.56	23,20,500
	7. 132 kV Mahuliherganj-Jaspur	2.975	1,27,27,000
Nainital	8. 132 kV Kathgodam-Rudrapur		
Total		7.76	2,76,00,040

150. The compensation for affected tower base area (7.76ha) is INR 27,602,050 (INR 27.7 million) as per the current notified circle rates.

2. Compensation for Private Land within ROW Corridor

151. Compensation to be paid to 1303 affected APs for 165.83ha of land within the ROW corridor as per the provisions under MoP Guideline of 2015 and 2020 and Government of Uttarakhand Department Order (#17351-(2)/2021-07(3)-13/2019 dated 8 Dec 2021). **Table 67** provides the summary of estimated compensation for each of the high-voltage power line to be

constructed by PTCUL. The compensation for affected private land within ROW corridor (105.03ha) is INR 106,503,481 (INR 106.5 million) as per the current notified circle rates.

Table 67: Estimate of compensation for private land within ROW corridor for high voltage powerlines by PTCUL

District	High-voltage Overhead Power Line Name	Total number of affected land owners	Pvt Land Area under ROW corridor (In Ha)	ROW corridor Compensation @14% of circle rate in INR
Haridwar	Kashipur-Puhana	68	10.23	47,29,917
	Manglaur-Nara	551	73.79	4,21,16,658
	Roorkee-Nara	19	2.68	9,23,738
	Manglaur-Azadi	4	0.20	69,069
UD Nager	Khatima-Birganj	19	2.09	8,38,580
	Kashipur-Mahukheraganj	213	25.26	1,88,73,456
	Mahukheraganj-Josour	429	50.79	3,89,14,694
Nainital	Kathgodam-Rudrapur		0.04	17,370
Total		1003	186.92	10,66,03,481

3. Compensation for Damage to Crops

152. Compensation for damage to crop shall be covered at two occasions, i.e. (i) during construction of the tower base and erecting the tower, and (ii) during stringing conductors between the towers. The construction works for tower base and erection of tower structure will impact the area directly under the tower base and an additional 225sqm area around the tower. The project area has two major crops, i.e. wheat and rice, though sugarcane is also grown in some areas. The estimate of budget for damage to crop is based on the productivity of the most prevalent main crops (wheat and rice) and the minimum support price determined by the commission of agricultural cost and prices by Government of India for the year 2022-23. The construction of the towers will be scheduled in the gap period between agricultural seasons to avoid loss to APs. If such avoidance is not possible, the maximum crop area to be compensated is 12.55ha and the total compensation to be paid is INR 762,032 (INR 0.76 million). **Table 68** provides the break-up of the estimate of the compensation for damage of crops during construction of towers for each of the proposed high voltage power lines by PTCUL.

153. The stringing of conductors between towers is expected to damage crops in some part of the ROW corridor, and the actual damage to specific crop and area will be determined by the EPC contractor soon after the stringing operation is completed. However, for sake of deriving an estimate of damage to crop area, it is assumed that maximum 50% of the private land within ROW will be affected. The stringing of conductors is expected to affect a maximum area of 82.5ha and the estimate of compensation to be paid for damage to the crops based on the crop productivity of the particular district and MSP for the major crops cultivated in the project corridor is INR 5,110,841 (INR 5.1 million). **Table 69** provides the break-up of the estimate of the compensation

for damage of crops during stringing operation for each of the proposed high voltage power lines by PTCUL.

Table 68: Estimate of compensation for damage of crop during construction of towers

District	High-voltage Over-head Power Line Name	Estimated Affects of Land Owners	Area of 1st Land Crop Area within a 100 ft. Zone	Additional Area for Crop Damage in sqm (222 sqm per tower)	Crop Area to be compensated for tower construction in Ha	Unit Cost of Crop (Wheat or Rice) Compensation for 100 in 2011	Crop Productivity for Main Crops (Wheat and Rice) in 2011	Estimate of Compensation for Affected Crop Area for Tower Construction
Hardwar	1. Kashipur-Punera	12	5400	2700	0.81	2083	25	42,181
	2. Mangla-Nara	78	3120	17550	4.875	2083	25	2,53,866
	3. Roona-Nara	8	2400	1350	0.375	2083	25	19,529
	4. Mangora-Aashi	8	2100	1350	0.345	2083	25	17,966
US Nagar	5. Khatima-Sitarganj	6	2100	1350	0.345	2083	35	25,153
	6. Kashipur-Mahukheragan	16	3600	3600	0.92	2083	35	67,673
	7. Mahukheragan-Jaspur	85	2975	19125	4.8875	2083	35	3,56,324
Nainital	8. Kathgodam-Rudrapur	0	0	0	0	2083	25	-
Total		208	7586	47925	12.6675			7,82,082

Source:

Table 69: Estimate of compensation for damage to crop area within ROW corridor during stringing.

District	High-voltage Over-head Power Line Name	Private Land within ROW corridor in Ha	Total number of affects of land owners	Affected Crop Area (50% of 1st Land within ROW) during stringing in Ha	Unit Cost of Crop (Wheat or Rice) Compensation for 100 in 2011	Crop Productivity for Main Crops (Wheat and Rice) in 2011	Estimate of Compensation for Affected Crop Area within ROW corridor for stringing
Hardwar	1. Kashipur-Punera	10,229	68	5,114	2083	25	2,66,527
	2. Mangla-Nara	73,758	551	36,879	2083	25	18,30,483
	3. Roona-Nara	2,678	19	1,339	2083	25	65,718
	4. Mangora-Aashi	0,280	4	0,140	2083	25	2,228
US Nagar	5. Khatima-Sitarganj	2,983	19	1,491	2083	35	78,292
	6. Kashipur-Mahukheragan	25,261	213	12,631	2083	35	8,20,839

District	High-voltage Over-head Power Line Name	Private Land within ROW corridor in Ha	Total number of affected land owners	Affected Crop Area (50% of Pft Land within ROW) during Shifting in Ha	Unit Cost of Crop (Wheat or Rice) Compensation for Q1 in INR	Crop Productivity for Main Crops (Wheat and Rice) in Q1/Ha	estimate of Compensation for Affected Crop Area within ROW corridor for Shifting
	7. Mahuaehingga-Jodpur	50.778	429	25.389	2052	25	15,50,862
Narail	8. Pathgodam-Rudrapur	0.535		0.015	2052	25	1,508
Total		146.08 \$	1998	82.517			15,50,841

Source:

4. Administrative cost for implementation and Monitoring of Resettlement Plan

154. This draft resettlement plan shall be updated to reflect the anticipated impact relating to temporary or permanent, physical or economic displacements to be caused by the Project based on the final design of substations and alignment of power lines. The budget for implementing this resettlement should include the estimated cost for updating the resettlement plan; conduct of the census/baseline survey of APs; information dissemination, various consultations, implementing the RP and monitoring the RP. Hence, a provision under administrative cost has been made on a lump-sum basis amounting to be INR 4,000,000 (INR 4 million) is considered to cover this cost.

5. Summary of Budget for PTCUL

155. The total budget estimate for implementing the RP for project components by PTCUL is INR 172,319,546 (INR 172.3 million). The break-up of the budget is provided in Table 70.

Table 70: Budget for implementation of RP for PTCUL Component

#	Particular	Estimate in INR	Remarks and assumptions
B.1a	Compensation for Private land owners in ROW and Tower Sites as per Circle Rate	13,41,05,511	Calculation is based on 85% of the circle rate for tower base area and 15% of the current circle rate for ROW corridor
B.1b	Contingency for revision of Circle Rates	2,08,21,102	The maximum upward revision of 20% is considered
B.2	Compensation for Damage to Crop area in Tower Construction	7,82,092	Estimated with presumption of an additional 225 sqm per tower will be damaged. The average MSP and productivity in affected district for major crops Wheat and Rice is taken into account
B.3	Compensation for Damage to Crop area in Private land in ROW during stringing	51,10,841	Estimated with presumption that 50% of the private land under cultivation within ROW will be affected. The average MSP and productivity in affected district for major crops wheat and rice is taken into account.
B.4	Administrative cost for RP implementation and monitoring	40,00,000	Lump-sum
Sub-Total B (PTCUL Components)		17,23,19,546	
B.4	Miscellaneous benefits	CSR	15,00,000
			Lump-sum

D. Summary of Budget Estimates (PTCUL and UPCL)

106. The project shall make a budget provision of INR 22,11,35,466 (INR 221.18 million equivalent to USD 2.67 million) as estimated for implementation of the provisions under this RP. This includes a contingency amount of 20% of the estimated cost for each PTCUL and UPCL to accommodate any cost related to unanticipated impacts. The budget is divided in two parts. Part-A of the budget (INR 14.40 million) is required for UPCL components and Part-B (INR 206.78 million) is required for PTCUL components. The overview of the budgeted particulars, estimates and key assumptions are provided in Table 71.

Table 71 Overview of the total budget estimated for implementation of this RP

#	Components	Amount (INR)	Amount (Million INR)
A	UPCL Components		
A-1	Estimated total cost for UPCL Component	1,20,00,000	12
A-2	Contingency @ 20% of the total cost	24,00,000	2.40
A-3	Total (UPCL Components)	1,44,00,000	14.40
B	PTCUL Components		
B-1	Estimated total cost for PTCUL Component	17,23,15,540	172.32
B-2	Contingency @ 20% of the total cost	3,44,63,509	34.46
B-3	Total (PTCUL Components)	20,67,79,049	206.78
C	GRAND TOTAL (UPCL+PTCUL)	22,11,35,466	221.18

IX. INSTITUTIONAL ARRANGEMENTS FOR IMPLEMENTATION

A. General

157. The Energy Department, Government of Uttarakhand is the executing agency (EA) for the project. Power Transmission Corporation of Uttarakhand Ltd (PTCUL) will be the implementing agency for Grid improvement components, Uttarakhand Power Corporation Limited (UPCL) will be the implementing agency for Distribution network improvement component. A Project Management Unit (PMU) will be established at executing agency level for this project for overall coordination and implementation of the Project which will be supported by various individual consultants including social safeguard which will be a senior social safeguard officer (SSO). PTCUL and UPCL will have their own respective project implementation unit (PIU) for implementation of projects including safeguards. Respective PIUs will assume primary responsibility for the planning, preparation, updating and implementation of resettlement plan. PTCUL and UPCL will designate one expert responsible for social safeguards activities as social officer (SO). Respective PIU at PTCUL and UPCL will be supported by respective Project Implementation and Supervision Consultant (PISC) which will be a firm consultant and will have social safeguards specialist in the team. The project will create institutional capacity for meeting ADB safeguard requirements by creating staff positions at PMU and PIU. The overall project management roles and responsibilities, as per the project admin is described in **Table 72** and the subsequent section describes in details the institutional roles and responsibilities related to safeguards planning, updating, implementing and monitoring. An overview of project implementation structure related to RP implementation is depicted in **Figure 6**.

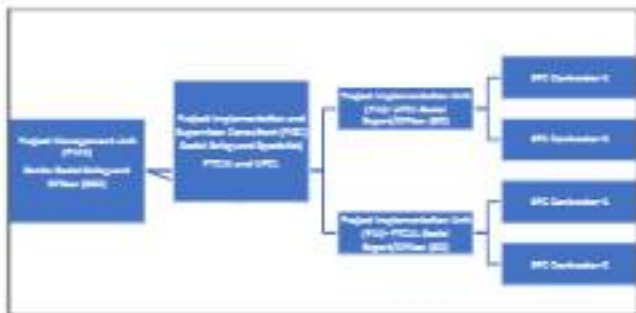
Table 72: Project Management Roles and Responsibilities

Project Implementation Organization	Management Roles and Responsibilities
Executing agency: Energy Department, GOU	(i) Overall responsibility for execution of the project and ensuring project implementation on behalf of GOU. (ii) Oversee satisfactory safeguards implementation for the project. (iii) Coordinate communication with GOI and GOU with respect to the project.
Finance Department, GOU	(i) Oversee and monitor project implementation as well as the adequacy of overall project funding. (ii) Provide the Asian Development Bank (ADB) loan disbursements in timely manner to the project executing and implementing agencies. (iii) Provide equity injections to PTCUL, UPCL, and UREDA to meet counterpart fund requirement.

Project Implementation Organization	Management Roles and Responsibilities
Implementing agencies PTCL, UPCL, and UREDA	(i) Conduct day-to-day project management. (ii) Procurement of goods and works. Timely approval of bid documents, bid evaluation reports, and contract awards. (iii) Overall responsibility for satisfactory safeguards implementation, supervision and monitoring. (iv) Periodic monitoring of the project implementation activities and timely submission of project progress reports and safeguard monitoring reports to ADB. (v) Prepare withdrawal applications, maintain project accounts, and complete loan and grant financial records. (vi) Prepare financial statements and ensure timely conduct of audit. (vii) Ensure coordination between the technical department responsible for project implementation and the finance department to ensure timely availability of counterpart funds.
Ministry of Finance (Department of Economic Affairs)	(i) Access, negotiate, and coordinate external financing for the economic development of the country. All the project proposals from the state government are routed through MOF (DEA). (ii) Responsible for reviewing and approving any major change in the project scope and implementation arrangements during project implementation.
Project management unit	(i) Periodic review of the project activities to ensure timely implementation of the project and safeguard requirements. (ii) Ensure compliance with loan covenants including social and environmental safeguards, financial, economic, and others. (iii) Ensure timely submission of bid documents, bid evaluation reports, and contract awards ensuring that the EMP is included in the contract documentation. (iv) Responsible for finalizing surveys and detailed designs, update of safeguard documents to reflect detailed designs as needed, safeguards monitoring and implementation, preparation of safeguard monitoring reports and timely submission to ADB. (v) Responsible for requesting budgetary allocations from counterpart fund. (vi) Responsible for preparation of annual contract awards and disbursement projections. (vii) Shall provide information to ADB missions as necessary.

ADB = Asian Development Bank, DEA = Department of Economic Affairs, GOI = Government of India, GOU = Government of Uttarakhand, MOF = Ministry of Finance, PTCL = Power Transmission Corporation of Uttarakhand Ltd., UPCL = Uttarakhand Power Corporation Limited, UREDA = Uttarakhand Renewable Energy Development Agency.

Figure 4: An overview of the project implementation structure for resettlement plan



B. Implementation Arrangements Including Safeguards

B-1 Project Management Unit (PMU)

158. There will be a single PMU to cover all project components being implemented by PTCUL and UPCL. The PMU will be supported by a team of individual consultants including a senior social safeguards officer (SSO). The SSO will oversee and coordinate the implementation of resettlement plans by PTCUL and UPCL and will assist the PIUs for overall decision making and monitoring. The duties of the PMU SSO will include at a minimum: (i) oversight of field offices and construction contractors for monitoring and implementing mitigation measures; (ii) liaising with the field offices and contractors and seeking their help to solve the social-related issues of project implementation; and (iii) preparation of social monitoring reports every 6 months (as required by ADB). The expert will coordinate with PIU for monitoring as well as designing appropriate mitigation measures to address social issues. The PMU SSO will be entrusted with responsibilities to effectively implement the RP complying with the safeguard provisions of the Project. The roles and responsibilities of the PMU safeguard specialist include but not limit to the following in terms of guiding and assisting the overall social safeguards management:

- Coordinate implementation of RP activities with the assistance of other technical staff of PMU and PIUs
- Organize public awareness campaigns including resettlement provisions
- Facilitate and coordinate joint verification survey of APs with the elected representatives as appropriate, finalize list of APs and inform them about tentative schedule of construction activities.
- Providing notice for cut-off-date
- Coordinate valuation of assets
- Finalize compensation packages.

- Coordinate the land acquisition processes (where applicable) with the associated Government departments.
- Inform APs about entitlement matrix and compensation packages against different categories of losses.
- Liaise with the District Administration and line departments (PWD, PHED, municipalities etc.) for construction activities.
- Make budgetary provisions for R&R activities.
- Coordinate, supervise and monitor disbursement of compensation.
- Coordinate monitoring activities to be taken up for assessing progress in implementing the RP.
- Participate in the GRC.

B-2 Project Implementation Units (PIUs)

159. There will be two PIUs one for PTCUL and the other for UPCL. Each of these PIUs will have a Social Officer (SO). The social officer in each of these PIUs will be responsible for implementing the provisions under this RP which are applicable for their respective project components. PTCUL and UPCL will designate social safeguard officers/engineer designated for social safeguards, from the in-house source in the PIU. The social officer in PIUs will receive training and guidance from the senior social expert in PMUSSO. The PIU social officer will be responsible for ensuring the implementation of RP. The PIU field offices of EA will have overall responsibility to manage the site activities such as overall coordination, preparation, planning, implementation, and financing of all field level activities. The roles and responsibilities of the PIU social safeguard officer include but not limit to the following:

- Assist PMU in overall preparation and implementation of social and involuntary resettlement activities.
- Estimate assets of APs and listing of vendors and hawkers to be affected including list of APs losing business and income.
- Have overall responsibilities for RP activities in the field including listing APs after verification, recording of individual losses, informing APs about their entitlements, disbursement of compensation, providing assistances, etc.
- Support the senior safeguard officer at PMU towards ensuring the conformance of the project to the social safeguard requirements including updating of draft resettlement plan if required.
- Work closely with the engineering team at PIU as well as the contractor in minimizing the involuntary resettlement in the project and select the
- Carry out close consultation with APs and ensure that all the stakeholders are involved in the project activities, such as planning and implementation of the project.
- Collect necessary data related to land status and work closely with the engineers of PTCUL/UPCL and contractor for carrying out necessary surveys such inventory of assets, census surveys etc. and list of vendors and hawkers.
- Work closely with all the stakeholders including the APs to address all the grievance on time and keep the records of all the grievance.
- Liaise with the local relevant government departments for finding alternate site for temporary shifting of vendors and hawkers where applicable.

- Provide input to the PMU senior safeguard officer on progress of the implementation of RP and project monitoring progress report
- Responsible for smooth functioning of RP activities and implementation of RP.
- Carry out close consultation with the APs and will be responsible for disclosure of the RPs at various project locations including the pamphlets.
- Will be responsible for all the field level activities required for updating, preparation, and implementation and monitoring of RPs in the project.
- Will be responsible for addressing the grievance at ground level and keeping the records of the grievance. Responsibility will include promptly making the PMU aware about the grievance and helping the stakeholders participate in the grievance redress mechanism.

B-3 Project Implementation and Supervision Consultant (at respective PIUs)

160. PTCUL and UPCL will be assisted with respective project implementation and supervision consultant (PISC) who will be primarily responsible for undertaking such tasks and will work closely with PIU safeguard officer. Each PISC will have social safeguard specialist in the team and will do most of the work on behalf of the PIU social safeguard officer as mentioned above. Respective PISC social safeguard specialist will assist PTCUL and UPCL in overall project implementation and monitoring. The PISC social safeguard specialist will have a qualified social safeguard specialist. Overall responsibility include: to deliver on project social development commitments throughout pre-construction and construction phases of the project, Monitor project activities in a systemic and well-documented manner to demonstrate that implementation activities are carried out with compliance with ADB Safeguard Policy Statement (2009) including legal requirements applicable to community and stakeholder engagement; Prepares regular reports on project status and activities in conformity with the provisions of the social safeguard documents and social provisions of environmental planning documents and Facilitated regular and ongoing engagement with affected communities. Specific responsibilities of PISC social safeguard specialist include but not limited to the following:

- Collection of required information and field survey work based on the final routing/ alignment of power lines and identify new impacts, if any, and accordingly update the Resettlement Plan.
- Set up and manage a database of project affected persons/households which includes their socioeconomic baseline, inventory of assets, market valuation of affected assets, and rates to be used for compensation and other assistance
- Ensure that project affected persons are aware of and have access to a functional grievance mechanism, prior to the start of the field surveys and through the duration of the implementation of this Resettlement Plan
- Continue the consultation process as proposed in the future consultation strategy this Resettlement Plan
- Provide opportunities for equality and inclusion of all people irrespective of income level, geography, gender, ethnicity, disability, religion, sexual orientation, or other grounds of discrimination during project implementation
- Ensure that Contractors have access to the RP for their contract packages.
- Ensure Contractors understand their responsibilities to implement this Resettlement Plan and mitigate social impacts associated with final alignment, pre-construction, construction, and operational activities and provide training to their staff as required.

- Ensure compensation is paid in case of unavoidable impacts on loss of crops and trees
- Supporting Contractors in undertaking ongoing consultation and implementing the GRM.
- Supervise and monitor that this Resettlement Plan is being properly implemented.
- Prepare semi-annual social monitoring reports and submit to PTCUL and UPCL PMU.
- In case unanticipated social impacts occur during project implementation, including design changes, inform ADB, and, as required, update this Resettlement Plan in consultation with relevant government agencies for clearance/approval by ADB before any changes are implemented.
- 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/approval by ADB.
- Communicate and consult key stakeholders, such as affected persons, women's groups, civil society organizations, as required to share project information and to mitigate impacts of construction/civil works.
- Work closely with the contractor to ensure that mitigation measures described in this Resettlement Plan are implemented, monitored, and complied with.

B-4 Engineering, Procurement, and Construction Contractors

161. Each PIU will appoint one or more EPC contractors to execute works in different packages and lots. The EPC contractors may further appoint sub-contractors. The EPC contractor and its sub-contractors (if any) will require to appoint environment and social experts in their project team. The environment and social expert of the EPC contractor will be involved in executing the provisions of this Resettlement Plan. The roles and responsibilities of each EPC contractor are but not limited to the following:

- Provide all necessary technical input related to line route and assess the impacts related to loss of trees or crops or other assets prior to construction.
- Provide details related to construction related impacts
- Support the PIUs in undertaking ongoing consultation and implementing the GRM.
- Undertake quantitative social and environmental monitoring during pre-construction and construction.
- In case unanticipated social impacts occur during the project implementation stage, including design changes, inform PIUs and, as required, help update the RP for clearance by ADB before any changes are implemented.
- In case of non-compliance, inform PIU, and help prepare and implement as necessary a corrective action plan for clearance by ADB.
- Resolve the first-tier grievance and keep the record
- Carry out consultation and providing information on construction schedule
- Provide all necessary field information as desired by PIUs for the RP activities.

C. ADB's Responsibilities

162. ADB will have following responsibilities:

- Review of draft and updated RP and its disclosure at ADB's website;
- Conduct periodic site visits during the project implementation to confirm compliance with the provisions of this RP as well as related loan covenants.
- Review the semi-annual reports submitted by PMU and provide any additional guidance that may be needed during the project implementation.

- Work with PTCUL and UPCL 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
- Provide any guidance which the executing agency or implementing agencies may need during the project cycle.

D. Capacity Assessment

103. PTCUL and UPCL shall allocate adequate budget, institutional support, and staff resources to implement, supervise and monitor the implementation of the Resettlement Plan as per the roles and responsibilities set out therein. PTCUL and UPCL confirm their commitment to manage the potential impacts and risks, but their safeguards capacity needs to be further strengthened through trainings and consultant support. As such, an environmental and social safeguards team under the project implementation unit (PIU) to include notal (i) environment, (ii) health and safety, and (iii) social staff under a SE, these SE notal officers to be supported by adequate numbers of field officers who are dedicated to EHS supervision. This PIU set up will be the basis for institutionalizing Environment and Social Units (ESU) in PTCUL and UPCL. The PISC will also have a consultant who will (i) support the supervision and monitoring of the implementation of this Resettlement Plan and (ii) provide safeguards capacity building for PTCUL and UPCL.

104. Several capacity development programs on ADB procedures, safeguard processes, and project implementation have been provided to identified officers from the project implementation unit PTCUL and UPCL through ADB's Capacity Development Resource Center (CDRC) of ADB India Resident Mission. ADB has also recruited several experts (procurement, technical, safeguards, and gender) to provide necessary support to PTCUL and UPCL in conducting detailed assessments and due diligence of the project components and develop the project based on International best practices. The ADB project team has also conducted several briefing sessions to PTCUL and UPCL highlighting the ADB procedures and requirements that should be adhered to during project preparation and implementation. Custom-made training programs are being structured in coordination with CDRC and the implementing agencies to develop in-house capacity in prioritized areas, apart from the support being provided through consultants. Further, project implementation support consultants (PISC) have been included as a part of the ADB loan to provide continued support to PTCUL and UPCL and in ensuring the capacity development is being covered across the entire project cycle.

E. Overall Roles and Responsibilities relating to Resettlement Plan implementation

105. Various roles and responsibilities pertaining to resettlement plan activities are summarized in Table 73.

Table 73: Institutional Roles and Responsibilities for Implementing the Resettlement Plan

Activity	Responsible Agency
Institutional Setup for Finalization and implementation of RP	
Establishment of PMU	Energy Department, GOU
Appointment of SSO	Energy Department, GOU

Activity	Responsible Agency
Appointment of PIU	PTCUL and UPCL
Appointment of PIU	PTCUL and UPCL
Appointment of EPC Contractor	PTCUL and UPCL
Appointment of PISC Consultant	PTCUL and UPCL
Updating, Finalization, Implementation and Monitoring of Resettlement Plan	
Finalization of Alignment and pegging of towers and right of way	PIUs (PTCUL and UPCL) through Contractor and PISC
Final Impact Assessment on loss of land and other assets	PIUs (PTCUL and UPCL) through Contractor and PISC
Updating the Draft Resettlement Plan as per the detailed design	PTCUL and UPCL through PISC and EPC contractor to provide field data and the SO to supervise
Field surveys for the Resettlement Plan update	PTCUL and UPCL
Database for RP (affected persons, land and assets inventory)	PTCUL and UPCL
Consultations and Disclosure of Safeguards Information and updated Resettlement Plan	PIUs (PTCUL and UPCL) through Contractor and PISC along with the SO
Approval of updated Resettlement plan	SO (PTCUL and UPCL) of PMU and SSO in PMU and ADB
Disclosure of Updated Resettlement Plan in website	PTCUL, UPCL and ADB
Fixing the compensation and assistance value based on full replacement cost principle	PTCUL and UPCL through revenue department/district magistrate's office with assistance from agriculture, horticulture and forest department
Allocation of Budget related to compensation	PTCUL and UPCL
Implementation of RP: Payment of compensation and other grants	PTCUL and UPCL
Distribution of Cheques	PTCUL and UPCL through its respective PIUs and field office
Implementation of livelihoods restoration measures, as relevant	PTCUL and UPCL
Issuing advance notice to affected persons along stretch/cut locations	PTCUL and UPCL through EPC contractor
Taking possession of land and clearance of Right of Way	PTCUL and UPCL
Grievance Redress	SO in PIUs (PTCUL and UPCL) with assistance from EPC contractor and PISC, SSO in PMU and GRC at various tier
Monitoring	SO in PIUs (PTCUL and UPCL) and SSO in PMU through PISC
No Objection to commence the construction	PIU (PTCUL and UPCL)
Project Construction	EPC Contractor

ADB- Asian Development Bank, GOU- Government of Uttarakhand, PISC- Project Implementation and Supervision Consultant, PIU- Project Implementation Unit, PMU- Project Management Unit, PTCUL- Power Transmission Corporation of Uttarakhand Ltd., SO- Social Officer, SSO- Senior Safeguard Officer, and UPCL- Uttarakhand Power Corporation Limited

X. IMPLEMENTATION SCHEDULE

166. This is a draft Resettlement Plan that has been prepared based on feasibility level assessment. This needs to be finalized based on detailed design; determination of final alignment of power lines; and census of persons to be affected by the Project along those lines.

A. Updating the Resettlement Plan

167. The updating of this draft Resettlement Plan will be undertaken in parallel with the detailed design survey. The final updated resettlement plan, including updates to it, shall be reviewed by ADB and disclosed to affected persons and other stakeholders prior to project implementation or start of civil works. In updating this draft Resettlement Plan, PTCUL and UPCL will do the following for their specific project subcomponents:

- set cut-off dates, accordingly (location or stretch-wise) and update the implementation schedule
- conduct a census of all project affected persons
- gather socioeconomic baseline of affected households, including an assessment of vulnerabilities
- conduct a n-inventory of assets affected by the Project
- conduct market assessment to determine the prevailing market value of affected land and asset categories (based on the asset inventory) as this will be used to determine full replacement cost
- consult with affected persons regarding entitlements
- revisit resources to ensure adequate budget to implement the Resettlement Plan.

168. Information disclosures, communication with stakeholders, particularly, the project affected persons, and public consultations will be continued during project implementation. A tentative resettlement plan implementation schedule matching the overall project implementation schedule is provided in Table 74 which is subject to modification during updating of the draft Resettlement Plan.

B. Implementation of the Resettlement Plan

169. PTCUL and UPCL shall allocate adequate budget, institutional support, and staff resources to implement, supervise, and monitor the implementation of the Resettlement Plan. Both PTCUL and UPCL shall ensure that compensation for all resettlement impacts is provided before the loss is incurred. Even prior to the finalization of the updated Resettlement Plan, the preparatory activities relating to arranging for payment of compensation and other entitlements will commence as soon as practicable. Coordination with government agencies that will have a role in compensation determination and/or payment (e.g., Revenue Department, Agriculture and Forestry units) as well those which are concerned with completion of civil works (e.g., Department of Public Works) will be done by PTCUL and UPCL to ensure timely payment of compensation, avoid complaints, and smoothen the implementation of the Resettlement Plan. The details are given in Table 74.

Table T6: Initiative Implementation Schedule

Reassessment Plan Component/Activities	YEAR																							
	2021				2021				2022				2023				2024				2025			
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Phase I: Project Initiation and Draft Reassessment Plan																								
Development of draft Reassessment Plan					*																			
Submission of draft Reassessment Plan for AGC approval					*																			
Discussion of Draft Reassessment Plan					*																			
Consolidation of the Grievance Redress Mechanism (GRRM)						*	*																	
Agreement of Landmark						*	*																	
Agreement of DP						*	*																	
Phase II: Updating of Reassessment Plan																								
Developed and Test engineering system						*	*	*	*															
Mapping of services and collection of baseline data based on final design						*	*	*	*															
Revised/Updating of Reassessment Plan							*	*	*															
Grievance Redressal Mechanism (GRRM) data collection and feedback						*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Collection of landmark details along the Route based on final design						*	*	*	*	*														
Compilation of final service inventory						*	*	*	*	*														
Compilation of list of affected persons (List of affected households)						*	*	*	*	*														
Comprehensive baseline survey of all affected households, based on household profile, land assessment & acknowledgment, affected persons and preparation of inventory of assets (per household)						*	*	*																
Land use decisions						*																		
Validation by the concerned department						*	*	*																
Approval of plan for the updated RP						*	*	*																
Consolidation of baseline of affected persons						*	*	*																
Approval of the updated Reassessment Plan and documents								*																
Phase III: DP Implementation and Monitoring Stage																								

Revised Plan Component/Action	Yr 2																							
	2022				2023				2024				2025				2026				2027			
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Issuing of notice to affected persons																								
Payment of all eligible compensation and expenses per affected trainee																								
Compensation work																								
Issuing immediate assignment																								
Working time to be used indicated in the written assignment form																								
Revised Plan completion (see below)																								

XI. MONITORING AND REPORTING

A. Monitoring

170. Monitoring will be done internally and will be the responsibility of PTCUL and UPCL through PMU with input from the respective PIUs. Regular monitoring activities will be carried out internally by the PMU/PIU and will provide ADB with progress of compensation payment and identifying potential difficulties, issues, and problems. Monitoring will ensure that implementation and disbursement of compensation is on schedule and problems are dealt with on a timely basis. Gathering of data on grievances that were filed, resolved, and pending resolution will also form part of the monitoring of implementation of the Resettlement Plan. UPCL and PTCUL are required to implement safeguard measures and relevant safeguard plans as provided in the legal agreements, and to submit semi-annual monitoring reports on their implementation performance.

171. A detailed list of monitoring indicators will be developed when the Resettlement Plan is updated based on the final alignment of power lines and field surveys. Reporting will be aligned with the updated list of monitoring indicators.

172. PTCUL and UPCL will (i) monitor the progress of implementation of resettlement plan, (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 semi-annual monitoring reports on safeguard measures as agreed with ADB.

173. The internal monitoring of the implementation of the RP will be at two levels: (i) by the respective PIUs (UPCL and PTCUL), and (ii) by the PMU/PSC level. The safeguard officer at the PIUs will carry out field visits to all active construction sites for monitoring the adherence of the RP provisions by the EPC contractor at least once a month. The PIU SO will prepare and submit a monthly progress and monitoring report to SSO at PMU. The PIU SO will take all necessary assistance from the PSC social safeguard specialist who will be responsible for collecting all field information and consultations with the help of EPC contractor. The monthly progress and monitoring report by PIU SO will mention progress and the non-compliances and points for improvements. The PIU SO may demand action taken report on these points from the EPC contractor or check their adherence in subsequent field visits. Any compliance non-performance by any EPC contractor on RP implementation shall be communicated to SSO at PMU. The SSO at PMU will make monitoring visits to all active construction sites for monitoring at least once in every quarter. The SSO will prepare a project level internal monitoring report for each quarter. The SSO will provide the details of the internal monitoring process in the bi-annual report submitted to ADB. A flow chart is provided in Figure 6.



Figure 6: Overview of the internal monitoring mechanism

Monitoring will include various issues such as progress of final design, update of list of affected persons, update on the impact, update of resettlement plan, valuation of compensation, disbursement of compensation, number of grievances raised and redressed, number of consultations and progress of construction. PTCUL and UPCL, through its contractor and PMO will be responsible for managing and maintaining affected person databases.

174. At the end of the implementation of the Resettlement Plan, PTCUL and UPCL will prepare a completion survey/audit report to assess how each IA fulfilled its commitments as described in the Resettlement Plan; ascertain its implementation performance, and assess the outcomes of the Resettlement Plan implementation.

B. Reporting

175. Internal monitoring reports will be submitted semi-annually by the UPCL and PTCUL through its respective PIUs and the PMU will finally submit officially to ADB semi-annually based on the monitoring plan and indicators developed in the updated Resettlement Plan. The semi-annual social safeguard monitoring reports documenting progress on resettlement plan implementation and completion reports will be provided by PIU to PMU which will subsequently be submitted from the PMU to ADB for review, approval, and disclosure. The semi-annual social safeguard monitoring report which will essentially describe the implementation of the Resettlement Plan for the period covered, shall be submitted to ADB every 15th of July and 15th of January following the format in. All the monitoring reports will be made available at the PIU for providing access to those documents by the affected persons. The approved semi-annual report will be disclosed on the website of ADB, UPCL, and PTCUL. An indicative monitoring template is provided in **Appendix-9**.

Appendix 1: Detailed Project Description

Introduction

This section of the report presents the Project description for all Project components, including the design, construction and operation and maintenance aspects of the Project.

Project Overview and Location

The Project comprises two components, and their sub-projects are arranged as followed:

Component 1: High Voltage Power Lines and Substations

1.1. New overhead Power lines 132kV and 220kV (mainly line in = line out (LLO)) connecting substations to existing Power lines.

1.2. Construction of new substations

1.3. Second circuit stringing of an existing Power line

1.4. Underground LLO cabling

Component 2: Distribution

2.1. New / Conversion of 33kV lines to UG Cable, Conversion of 11kV line to UG Cable, Conversion of Low Tension (LT) line to UG Cable

2.2. Rehabilitation of existing 33/11kV Substations

2.3. Construction of new 33/11kV Substations

2.4. Construction of new 33/11kV OHL

2.5. Construction of new 33/11kV UG

Component 3: Harnessing Renewable Energy for Sustainable Rural Development

3.1. Output 1: At least 200 self-help groups in 100 districts gaining access to renewable energy equipment to enhance their income, engaging 3000 local community members (mostly women). Rooftop based solar photovoltaic (PV) systems 11 and equipments using solar PV will be considered under this output. (US\$ 1.00 million)

3.2. Output 2: 400 community members (at least 50% women) trained in technology, energy conservation, management, business skills, marketing and leadership. (US\$0.4 million).

3.3. Output 3: Financial support to 100 meritorious children (at least 50% girls) for university level education, belonging to related SHGs family. (US\$ 0.20 million).

11. The renewable energy interventions are scattered across 200 self-help groups with small solar PV installations in the rooftop or support the energy efficient equipment's. The procurement for such solar PV equipment's is generally procured locally due to its small scale and the operation and maintenance support required for the users of these dispersed rural locations. Further, the procurement of solar PV under this grant will be reviewed by the SOCC working group and their recommendations will be incorporated appropriately.

Component 1: High Voltage Power Lines and Substations

This component comprises four sub-activities summarized as follows:

Subactivity 1.1 - Above ground Power Lines

Seven line-in, line-out (LILO) overhead lines will be constructed and connected to existing or proposed SS. One other non-LILO OHL is included as part of component 1 linking two substations (see Table below).

Proposed LILO

#	LILO	Connecting Substation	Length	No. of Towers ¹²	Package
1	220 kV Roorkee - Nara	220 kV SS Manglore	0.8km	6	3
2	132 kV Manglore -Asahi	220 kV SS Manglore	0.1km	4	3
3	132 kV Kashigodam - Rudrapur	132 kV SS Dhaulakhera (Haldwani)	0.3km	4	3
4	132 kV Khatima - Sitarganj	proposed 132/33 kV SS Khatima-II	1.0km	6	3
5	400 kV Kashipur-Puhana	400 kV Sub-Station Landhara	2.48km	12	5
6	220 KV Manglaur - Nara	at proposed 400/220/132 kV SS Landhara	25.0km	80	5
7	132 kV Kashipur - Mahalakheraj	132 kV Sub-Station Sarvekhera ¹³	10.0km	16	6
Total			39.68km	128	

Proposed OHL

#	Line	Length	No. of Towers	Package/Lot
1	132 kV D/C Power line from 220 kV S/s Mahalakheraj to 132 kV S/s Jaspur – update for realignment	20.1	66	8

Note: Red text indicates sites not yet visited

Footprint

¹² Based on an average span of 220m

¹³ The need for this substation has not yet been assigned

This temporary footprint represents the work area that needs to be free of people and livestock during the construction phase for safety reasons. It does not represent the whole area which will necessarily be impacted by construction activities.

The area between the towers, between 150 and 225m, will not be impacted significantly by Project works. The areas between the towers will only be affected by the following activities:

Laying out of the wires between the towers prior to the stringing.

Pulling/tensioning sites.

Staging areas.

These locations will be kept out of production and only for short periods of times, e.g., one month. Based on other projects, 14 it can be assumed that a 0.8 hectare staging area and a 0.4 hectare pulling / tensioning site would be needed every 4km. That equates to around an additional 15 hectares of temporary use.

Some access roads may be required where existing access roads cannot be found. Some existing tracks may require limited upgrading to allow vehicle access. Further, there may be some temporary storage / camp and accommodation areas around some substation sites where no room exists at the planned substation permanent footprint area.

The project components will be designed, fabricated, tested, and installed following national and international electricity regulations, guidelines, standards, and best practices. This includes the Bureau of Indian Standards (BIS), Central Board of Irrigation and Power (CBIP), International Energy Commission (IEC), and Institute of Electrical and Electronics Engineers (IEEE) guidelines.

Design

High voltage powerline towers will be constructed following CEA standards.¹⁵ Some important elements of the design which are incorporated into this Project (and included in the Project EMP) include:

The line routing should avoid large habitations, densely populated areas, scheduled areas, forest/national park/wildlife infringement/GRI area/Animal/Bird sanctuary, infringement of endangered species habitat, vicinity to civil and defense Airports, major river/sea crossings & coal/mineral mining areas, oil pipeline/underground pipe line and slide prone areas, firing range, coastal regulation zones, inflammable pipe line etc., to the extent possible. In case it is not possible to avoid the forests or areas having large trees completely, then keeping in view of the overall economy, the route should be aligned in such a way that cutting of trees is minimum.

The route should have minimum crossings of major river, railway lines, National/State highways, overhead EHV power line and communication lines.

14 Grand Coulee Bell 500 kV Transmission Line Project, Environmental Impact Statement, US Department of Energy, 2002

15 Standard Technical Specification for Steel Monopole Structure for AC Transmission Line, CEA, July 2002

The number of angle points shall be kept to minimum.

Marshy and low-lying areas, riverbeds and earth slip zones shall be avoided to minimize risk to the foundations.

The areas requiring special foundations and those prone to flooding should be avoided.

It would be preferable to utilize level ground for the alignment.

Crossing of power lines shall be minimum. Alignment of a Power line with respect to existing line shall be kept considering ROW and pole falling distance.

Crossing of communication line shall be minimized and it shall be preferably at right angle. Proximity and parallelism with telecom lines shall be eliminated to avoid danger of induction to them.

Areas subjected to flooding such as ~~nahal~~ shall be avoided.

All alignment should be easily accessible both in dry and rainy seasons to enable maintenance throughout the year.

Certain areas such as quarry sites, tea, tobacco & saffron fields, rich plantations, gardens & nurseries which may present the Purchaser problems in acquisition of right of way and way leave clearance during construction and maintenance, should be avoided.

According to the preliminary alignments provided by PTCUL none of the PTCUL OHL lines are located in Forest areas. However, should the alignments be changed, the Contractor shall identify any forest areas involved duly authenticated by concerned authorities and shall provide following details:

A statement of forest areas with survey/compartments Nos. (all type of forest RFFF/Acquired Forest/Revenue Forest/Private Forest/Forest as per dictionary meaning of forest etc.)

A statement of non-forest areas with survey/compartments nos.

Tree cutting details (Girth wise & species wise)

Marking of forest areas with category on topo sheets 1:250000 showing complete line route, boundaries of various forest divisions and their areas involved.

Village forest maps of affected line and affected forest area and marking of the same.

Forest division map showing line and affected forest area.

The Contractor shall finalize the forest clearance proposal on the prescribed format, as per requirements of the state/MOE&CC, duly completed in all respects for submission by the Purchaser to the Forest Department.

For river crossings or power line crossings (66kV or above), railways or road crossings (express way, national highway & state highway) minimum two sets of long rod insulators or two sets of disc insulator strings per phase shall be used.

Approval from Railway Authorities shall be obtained before proceeding with work of railway crossing.

Barbed wire or spike type anti-climbing device shall be provided and installed by the Contractor for all pole structures. The height of the anti-climbing device shall be provided approximately 3 m above ground level.

Each pole shall be fitted with a number plate, danger plate and a set of phase plates per circuit.

To prevent birds perching immediately above the suspension insulator strings (J-Type/V-Type) and fouling the same with droppings, suitable bird guards shall be provided at cross-arm tips of all suspension poles. Saw type bird guard conforming to IS. 5013 or other bird guard as approved by the Purchaser shall be provided. The bird guard arrangement shall be such that it shall either prevent bird from perching in position where they are liable to cause damages or ensure that if birds do perch, droppings will fall clear of the insulator string. Suitable provision of cleat/plate to be provided on all suspension poles facilitating installation of bird guard after stringing.

The day and/or night visual aids and markers for denoting Power line or structures as per requirements of Directorate of Flight Safety or International Civil Aviation Organization shall be provided.

Where rock is encountered, the holes for pole footings shall preferably be drilled, but where blasting is to be resorted to as an economy measure, it shall be done with the utmost care to minimize the use of concrete for filling the blasted area.

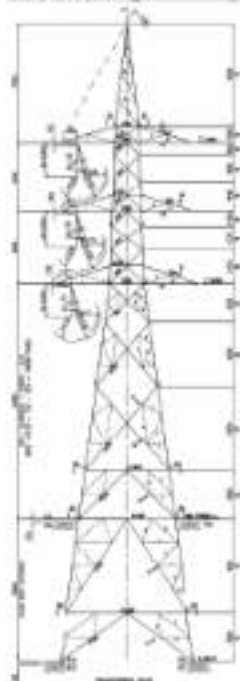
Unnecessarily large quantities of excavation/blasting resulting in placement of large volumes of concrete, payment of concrete should be avoided.

For Power lines in areas where RCVL constraint is encountered, appropriate technology options such as use of steel pole structure, narrow based lattice towers, multi-circuit & multi-voltage towers, lattice / steel pole structure with one side stringing, XLPE cable or Gas Insulated Line, compact towers with insulated cross arm, and Voltage Source Converter based HVDC power lines on overhead line or underground cable shall be adopted. 16 The following figures provide design specifications for high voltage Power line currently used by PTCCL.

400 Tower Design



1CS Tower Design



Source: PTCUL

Construction

The following is a sequential description of the potential activities associated with the construction of the Project.

Land Acquisition - A Draft Resettlement Plan (RP) has been prepared according to Indian Law, the ADB SPS (2009). PTCUL/UPCL will be responsible for the timely implementation of the RP prior to the start of construction.

Surveying the Power Line Centerline, Other Project Features and Work Areas - Ground survey and staking will be performed to locate tower centers, right-of-way boundaries, new access roads, spur roads to tower sites, overhead access, and temporary work areas. Flagging will be maintained until final cleanup and/or reclamation is completed, after which they will be removed.

The right of way of the alignment and any additional temporary workspaces will be surveyed and set-out (i.e., marked out and, where necessary, fenced off). The EPC Contractor will be required to keep within the designated footprint.

Sensitive receptors that need to be avoided during construction will be marked.

A record will be made of the condition of access roads, construction camps, laydown areas and rail offloading areas and any special features in the Project alignment before construction to inform the reinstatement works.

Upgrading or Construction of Temporary and Permanent Access Roads - Existing paved and unpaved roads will be used for the initial transportation of materials and equipment from the staging and storage areas to locations where they will be needed along the Power line right-of-way.

If any new access roads are required the EPC Contractor shall do what is necessary to make the access suitable for his use and shall take all reasonable precautions to avoid damage, including, if required the erection of temporary fences or gates where permanent fences, hedges or gates have been removed.

Access roads shall not be cut into a hillside immediately below a tower unless there are no other options. Plans for access roads in steep terrain will be submitted to PTCULUPCL PMUs (UPMU/UPMU) and Project Management Consultant (PMC – the Engineer) for approval. Stability of slopes over 30% shall be checked and approved by the UPMU/UPMU & PMC prior to selection of foundation to be used. Access roads will be graded and sloped to prevent unnecessary flow of water across the tower sites and to minimize soil erosion.

New earth access tracks shall be suitably compacted. The final surface level shall be at least 0.5 m above the existing ground level and shall be constructed in such a way as to be adequately drained to prevent washouts and flooding impacts to adjacent properties. Junctions between new tracks and existing roads shall not impede or damage the latter nor any associated drainage channels, irrigation infrastructure, etc.

During construction, dust control measures will be implemented on all roads within 250m of residential / sensitive receptors.

Clearing and Grading Activities for the Right-of-Way, Tower Sites and Camps - Clearing of vegetation may be required for construction purposes. Vegetation will be selectively removed under or near the towers to provide adequate electrical clearance as required by National Standards. Camp sites shall be selected to avoid the cutting of mature vegetation.

Excavating and Installing Foundations - Tower sites will be sloped as necessary to prevent erosion. Natural flows will be diverted around the site and the site protected by grading, placing rip-rap, or other erosion control measures.

Vertical excavations for foundations will be made with power drilling equipment. Where soils permit, a vehicle-mounted power auger or backhoe will be used. In rocky areas, the foundation holes will be excavated by drilling or installing special rock anchors. Pre-cast footings will be installed.

Assembling and Erecting Towers with Temporary and Permanent Pad Sites - Bundles of steel members and associated hardware (insulators, hardware and stringing shaves) will be transported to each tower site by truck. Wood blocking is hauled to each location and laid out, then the tower steel bundles are opened and laid out for assembly by sections and assembled into subsections of convenient size and weight.

Typically, the leg extensions for the structures are assembled and erected by separate crews with smaller cranes to make ready for setting of the main structure assembly. The assembled subsections are then hoisted into place by means of a large crane and fastened together to form a complete tower. A follow-up crew then tightens all the bolts in the required joints.

Foundation Installation, Tower Assembly, and Tower Erection



Typical Construction Zone for Installation of New Towers



Source: Consultants own photo. Stockholm, March 2020.

Final selection of tower design to be made by the EPC Contractor during design.

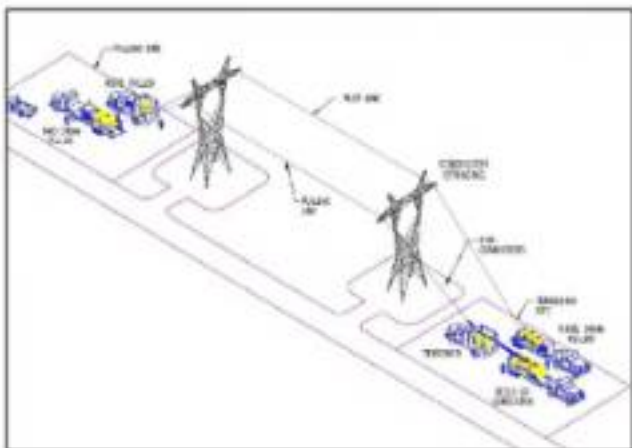
String Conductors, Ground Wires, and Fiber Optic Cable - Insulators, hardware, and stringing sheaves will be delivered to each tower site. The towers will be rigged with insulator strings and stringing sheaves at each ground wire and conductor position. For protection of the public during wire installation, guard structures will be erected over highways, railroads, power lines, structures, and other barriers according to national standards.

Guard structures will consist of H-frame wood poles placed on either side of the barriers or by using boom trucks raising a guard cross beam. These structures will prevent ground wires, conductors, or equipment from falling across obstacles. Equipment for erecting guard structures will include augers, backhoes, line trucks, boom trucks, pole trailers, and cranes. Guard structures may not be required for small roads. In such cases other safety measures such as barriers, flagmen, or other traffic control will be used.

Following stringing and tensioning of all conductors, the guard structures will be removed, and the area restored.

Pilot lines will be pulled (strung) from tower to tower by land operated equipment and threaded through the stringing sheaves at each tower. Following pilot lines, a stronger, larger diameter line will be attached to conductors to pull them onto towers. This process will be repeated until the ground wire or conductor is pulled through all sheaves.

Wire Hanging



Ground wires, fiber optic cable and conductors will be strung using powered pulling equipment at one end and powered braking or tensioning equipment at the other end of a conductor segment.

Sites for tensioning equipment and pulling equipment will be approximately two to three kilometers apart as determined by the EPC Contractor. Tensioners, pullers, line trucks, wire trailers, dozers, pickups and tractors needed for stringing and anchoring the ground wire or conductor will be located at these sites. The tensioner, in concert with the puller, will maintain tension on the ground wire or conductor while they are fastened to the towers. Tension will be maintained on all insulator assemblies to assure positive contact between insulators, thereby avoiding sparking. Caution also will be exercised during construction to avoid scratching or nicking the conductor surface, which may provide points for corona to occur.

Installing Counterpoise (Tower Grounds) When Needed - Part of standard construction practices prior to conductor installation will involve measuring the resistance of the ground to electrical current near the tower structures. If the measurements indicate a high resistance, counterpoise will be installed, which will consist of trenching in-ground wire to a depth of 12 inches in non-cultivated land and 18 inches in cultivated land, with a ground rod driven at the end. The counterpoise will be contained within the limits of the right-of-way and may be altered or doubled back-and-forth to meet the requirements of the projects.

Schedule and Staffing - Construction of each power line will take place simultaneously and each sub-activity will engage multiple construction crews working in parallel along the alignment. The

size of each construction crew depends upon site conditions and techniques used, but typically 5-10 (2-3 skilled and remaining unskilled) workers will be employed and around 3-4 weeks of construction activity will be needed to construct 1 km of power line.

Construction and Operation

Construction at each substation will take place simultaneously with each substation site employing around 20-30 (5-10 skilled and remaining unskilled) workers; it will take approximately 9 months for each new substation to be constructed; upgrades will require less input.

All equipment except transformers and reactors, if any, shall be housed in the switchyard. When the design of the substations is finalized and approved, the construction activities commence with the clearing of obstructions and vegetation. The boundary wall of the substation property is fenced to avoid unauthorized entry into the site. Post award the EPC contractor shall set up temporary construction facilities including material storage areas and camps for workers as laid out in the Environment Management Plan.

Second Circuit Stringing of an Existing Power Line

Stringing of one additional conductor to an existing line nearing completion of construction (according to PTCUL currently one span is left to be completed (as of March 2023)) is also required. All compensation payments for the current works are completed and all payments for forestry clearance finalized. Reforestation will be completed by the Forestry Department. The line connects to an existing Power Grid Corporation of India (PGCIL) substation.

Second Circuit Stringing Lines

#	Line	Length	Package
1	132 kV D/C Power line on Panther conductor from Pithoragarh (PGCIL) – Champawat (Lohaghat)	39.33	3

An additional conductor will be fitted to an existing Power line. The sub-activity footprint is limited to the areas required for access to towers and locations to complete the stringing works. Stringing locations can be located at each angle tower.

Stringing will be undertaken using the tension method. Using this method, the conductor is kept under tension during the stringing process. The tension method of stringing is applicable where it is desired to keep the conductor off the ground to minimize surface damage or in areas where frequent crossings are encountered. The amount of right-of-way travel by heavy equipment is also reduced.

It requires the pulling of a light pilot line into the travelers, which in turn is used to pull in a heavier pulling line. The pulling line is then used to pull in the conductors from the reel stands using specially designed tensioners and pulleys. Usually, this method provides the most economical means of stringing conductor. Major equipment required for tension stringing includes reel stands, tensioner, puller, reel winder, pilot line winder & splicing cart. All pulling to create tension in the line will be completed manually.

Underground ULO cabling

Two high voltage underground (UG) LLOs will be constructed as part of Component 1 as below. For information relating to underground cabling footprint and construction, refer to the general procedures for UG cabling for distribution.

UG LLO

#	LLO	Connecting Substation	Length	Package
1	220 kV Khodri-Jhaja Line	at proposed 220 kV Substation Dehradun Selaqui	0.7km	4
2	132 kV Maja-Latapoor Line	at proposed 132 kV Substation Dehradun Araghar	3.6km	4

Component 2: Distribution

Construction of New Underground Cables

This sub-component will be undertaken in its entirety within Dehradun. 11kV and 33kV cables will be placed below ground replacing the existing above ground distribution network in Dehradun and its suburbs. The Figure below provides a map showing the locations of the cables in Dehradun. The following table provides details of the cables to be laid and their associated components (Compact Substations (CSS) and Ring Main Units (RMUs)) by Lot.

Underground Cables

Type Cable	of	Length to be Constructed (km)	OHL Length to be dismantled (km)*	Number of CSS	Number of RMUs	Lot
11kV	73	28	46	166	1 North & Central	
33kV	57	-	-	-	1 North & Central	
11kV	106	62	20	117	2 South	
33kV	32	-	-	-	2 South	
11kV	52	31	33	71	3	
33kV	61	-	-	-	-	

* Not part of the Project scope. Works will be completed by UPCL independently.

Underground Cabling

Route Survey and Site Preparation - while laying underground cables, every precaution has to be made to prevent damages to the cable as such damages may lead to breakdown which causes disturbances to the supply. Unlike overhead lines, it is difficult to repair such damages immediately and hence zero damages to the cable while laying are essential. The proposed cable routes have to be carefully surveyed to identify every possible above and below ground obstacle prior to the excavations.

As a part of the route survey work, trial pits (dimensions 600mm by 600 mm by 1000mm) have to be made at an interval of 15-20 m in the proposed cable route so that the soil condition and any buried utility services can be identified. However, it is first essential to contact relevant utility organizations (gas, water, sewers, telephone) and undertake underground utility scans using a cable avoidance tool or equivalent to identify the existing known and unknown buried service network. Informed by the results the trial pits can then be placed to avoid them, or if it is not possible to avoid, then the relevant permits and/or clearances can be obtained in advance.

Locally available materials will be purchased from existing licensed local suppliers, while cables and others material which are not locally available will be purchased from licensed manufacturers or suppliers.

Methods - Two methods for underground cabling may be employed. However, observations of works currently undertaken in Dehradun indicate that open trench method will be the most used method. The Project Bill of Materials (BoM) indicates that approximately 70% of UG works will be open trench.

Open Trench. Most commonly, a backhoe is used to dig the open trench. The excavation starts with the removal of the topsoil in unpaved areas or the concrete/asphalt in paved areas such as roadways. Encountered rock will be broken-up by pneumatic drill or by hand tools. Trucks will haul away excavated topsoil or subsoil materials to an approved off-site location for disposal, or if appropriate, storage for re-use. For health and safety purposes, trenches that may be unstable require shoring. Trench size will vary depending on the cable type and voltage. The depth and width of the trench are depending on the type of cable laid in the trench. If groundwater is encountered it will be pumped from the excavation to a suitable adjacent area for sedimentation and infiltration to ground or more likely in the urban area, pumped directly into a tanker truck for transport to a suitable location for treatment before disposal since it will be sediment laden. Inspectors of current UG works in Dehradun showed that two methods of open trench works were being used by UPCL, 1) open trench with the cables laid within buried HDPE pipes and an open trench, and 2) open trench with a covered chamber which can be accessed for cable inspection. Several potential issues relating to the construction methods were identified during site visits.

Open Trench & Covered Pipes, Dehradun



Source: Consultants own photo, 2023

Chamber, Dehradun



Source: Consultants own photo, 2023

Open Trench with Buried Cables - Once the trench excavation is completed, the bottom of the trench has to be prepared for cable laying. Once the cable is laid, a sand layer of 100 mm is applied

above the conductor as a back-filling layer. The cable has to be protected from damage in case of any excavations by unknown parties. For that, concrete cable ties have to be laid on the sand layer to cover the cable from impacts.

For laying the cable, the cable drum has to be placed in a suitable place at the end of the trench and has to be supported by jacks such that the drum can be easily rotated to pull the cable out. The cable has to be pulled out from the top of the drum and not from the bottom as follows. Once the trench is prepared for cable laying with spreading of sand at the bottom, the cable can be pulled along the trench. To prevent any damages to the cable and also for the ease of pulling, rollers have to be placed along the route within a gap of 5 m. The correct method of pulling is to use a winch (usually diesel powered, to be mounted on a drip tray) and apply suitable tension which is below the maximum pulling tension specified by the manufacturer. As most of the damages to the sheath occur during the pulling of the cable, the activity has to be completed with extreme care. If multiple cables are laid on the same trench, cables have to be laid in the trench first and each cable has to be adequately separated from each other manually before the backfilling with sand. Generally, it takes some time for completing the end terminations and hence both ends of the cable have to be protected from moisture by properly sealing with end caps. Once completed, the trench is back-filled.

Horizontal Direct Drilling (HDD) - Instead of open trenching a drilling rig is setup at one end and entry and exit pits excavated; this minimizes the amount of surface level disturbance. First a small diameter (25 to 125 mm) drill penetrates the ground at the entry point at a predetermined angle and drills a hole beneath the above land until it reaches the exit point. Then the duct/cable is pulled through the hole with water used as a drilling fluid to reduce noise and vibration and lubricate the sides of the drill hole. Residual cuttings will need to be disposed and entry and exit points backfilled as with open trench method. The length of cable that can be fed in one go depends on the terrain and alignment.

Spoil Disposal and Site Restoration: open trenching will generate spoil. HDD will also generate some excess spoil. While most of the spoil will be reused in backfilling the remaining excavated spoil which is not suitable for reuse in construction will need to be disposed of off-site to a suitable licensed waste management facility as inert waste.

Site restoration for underground cable installation will need to be undertaken on a rolling basis to minimize disturbance. Once construction is completed, all roadways, landscaped areas, and other areas will be restored to their original condition with roadways restored to take running traffic again and landscaped and other areas restored with topsoil that was previously stripped and stockpiled or with new topsoil. Any infrastructure impacted by the construction such as driveways, curbs, and other utilities are restored to their previous function.

The physical construction footprint is much smaller for HDD, as shown in the photos of ongoing HDD works for UPCL in Dehradun. However, a number of potential issues relating to the use of HDD were identified during site visits.

Entry point for HDD, Dehradun

HDD Drilling Machine, Dehradun



Source: Consultants own photo, 2023



Source: Consultants own photo, 2023

Compact Substations – CSS will be located around the city – but only located on public land on main roads. These small boxes, approximately 3 meters long, two meters wide and two meters high house the following components:

HT Switchgear (comprising Vacuum Circuit Breaker in SF6 insulated enclosure) – no oil insulated transformers will be used.

Cast Resin, Dry Type Transformer

433V LT indoor panel with Aluminum Bus bars of suitable size.

Interconnection Between HT switchgear & Transformer

Example of Compact Substations



New CSS, Dehradun



New RMU, Dehradun



Source: Consultants own photo, 2023



Source: Consultants own photo, 2023

CSS are prefabricated units and will be delivered to their required locations for installation on concrete pads. Specific requirements relating to environmental, health and safety included in technical specifications used for bidding include:

The prefabricated-package substation shall be designed for a) Compactness, b) fast installation, c) maintenance free operation, d) safety for worker/operator & public.

Labels for warning, manufacturer's operating instructions etc. shall be durable & clearly legible.

Ring Main Units - RMUs will also be located across the city. These units are also small, prefabricated units that are located on concrete pads. Specific measures relating to environmental, health and safety included in technical specifications include:

The SF₆ insulating medium shall be constantly monitored via a temperature compensating gas pressure indicator offering a simple go, no-go indication.

The RMU should have provision of Gas filling at site in case there is some leakage of the gas.

The RMU shall be designed in accordance with Specification for technical grade Sulphur hexafluoride (SF₆) for use in electrical equipment - IEC 60376

Example of an RMU



Source: Consultants own photo, 2023

Any accidental overpressure inside the sealed SPB chamber shall be limited by the opening of a pressure-limiting device in the enclosure so that the gas will be released away from the operator and to the rear top of the tank without endangering the operator or anyone else in the vicinity of the RMU.

Design of RMU shall be tamper & arc proof.

The RMU design shall be such that access to live parts shall not be possible without the use of tools.

Construction of New Substations

Three new substations will be constructed. The following table provides a summary of their types and locations. The location of these substations is shown in figure below and Table below.

New Distribution Component Substations

#	SS Name	Division/Sub-Division	Type of SS	Approximate Area (hectares)
	District	US Nagar		
1	Near Coledonide	Rudrapur	2X12MVA, 33/11kV	0.11
2	Bharouni	Skarpani	2X5MVA, 33/11kV	0.15
	District	Rainital		
3	Kanysa	Rannagar	2X5MVA, 33/11kV	0.14
Total				0.34 hectares

Footprint

The approximate area of each substation is on average 0.15 hectares in size (1,500m²) – approximately a quarter of the size of a football pitch.

Design

Design of the SS shall follow the Draft Central Electricity Authority (Technical Standards for Construction of Electrical Plants and Electric Lines) Regulations, 2021. Relevant environmental considerations from the regulations are as follows:

Selection of Site - The selection of the site of the sub-station shall be done based on the following:

The site shall take into consideration the capacity and location of the feeding grid sub-station, load in the area, spatial load forecast, demographic factors, the existing network configuration, etc. and the economic, and environmental considerations.

The site shall be near the load center.

The site shall be such that it is convenient for terminating extra high voltage (EHV)/or high voltage (HV) lines or cables.

The site shall not be in a low-lying area to avoid flooding during the rains.

The site for air-insulated sub-station shall be away from garbage dumping ground to avoid vulture faults.

The land shall be reasonably leveled and shall not have any open drain or nullah or road crossing it.

Batteries - The 24V, 30V, 48V, 110V, 220V DC batteries shall be stationary lead acid or nickel cadmium or lithium-ion type. The batteries shall conform to relevant IS. A separate room for Substation Batteries shall be provided with ventilation and exhaust fan for taking out fume gases and provision of remote monitoring of sub-station batteries and exhaust fan shall also be made.

Oil and SPG - Oil and SPG filling, evacuation, filtering and testing plants with adequate storage facilities along with requisite operation and maintenance (O&M) tools and plants shall be provided for a cluster of sub-stations as per requirement. Transformer will comprise a sump pit and oil collecting pit per the specifications above for PTCL substations.

Safety and Security - Fencing or boundary wall shall be provided around the sub-station as per CEA (Measures relating to Safety and Electric Supply) Regulations, 2010 as amended from time to time.

Fire Fighting System - The firefighting system at Sub stations shall be as per Central Electricity Authority (Measures relating to Safety and Electricity Supply) Regulations, 2010 as amended from time to time. Fire extinguisher used in the firefighting system shall conform to relevant IS.

Circuit Breakers - Circuit breakers (CBs) shall comply with the relevant IS and shall be SPG or vacuum type.

Lighting - Designs will ensure all lighting is of energy efficient LED type with solar powered LED lighting where practical. Use of fluorescent/HPSV lamps will be avoided since they are less energy efficient/classed as hazardous waste for purposes of disposal. Outdoor lighting to be installed will be of low intensity with little or no blue wavelength and operated using passive infrared (PIR) technology movement sensors set at person height so as not to be kept permanently on overnight. It must be directional and shielded, so light does not fall outside substation boundaries.

Construction and Operation

Construction at each substation will take place simultaneously with each substation site employing around 20-30 (5-10 skilled and remaining unskilled) workers. It will take approximately 9 months for each new substation to be constructed, upgrades will require less input.

All equipment except transformers shall be housed in the switchyard. When the design of the substations is finalized and approved, the construction activities commence with the clearing of obstructions and vegetation. The boundary wall of the substation property is fenced to avoid unauthorized entry into the site. Post award the EPC contractor shall set up temporary construction facilities including material storage areas and camps for workers as laid out in the Environment Management Plan.

Some substations may require cutting and backfilling to create a level construction platform or elevate the site; soil is graded and compacted.¹⁷ The foundation for the substation structures, transformer pads, cable trenches, rails, and other equipment will be constructed in accordance with the approved detailed design. Once all civil works are completed, the installation, erection, testing and commissioning of equipment follows in accordance with the prescribed specifications.

Construction of Associated 33/11 kV Overhead and Underground Distribution Lines

Two additional overhead and one underground distribution lines are planned under the distribution component. The 33/11 kV overhead lines are typically pole structures as shown in figure below. The UG line will be constructed per the UG distribution works in Detachment.

33/11 kV Overhead / UG Lines

#	Connecting Substation	Route	Length (mi)	Type
1	33/11 kV, (2 X 10 MVA), Near Coletoforte	U.S. Nagar	4	OHL
2	33/11 kV, (2 X 5 MVA), Bharsuni	U.S. Nagar	10	OHL
3	33/11 kV, (2 X 5 MVA), Kaniya	Narital	10	UG
Total			24	

Typical 33/11 kV Poles and Conductor Arrangement



Construction activities for this type of line are much less intrusive than for high voltage overhead Power lines. The following items are typically required for the construction of 33/11 kV lines:

Concrete Poles

Support of cross arms

¹⁷ EPC contractor shall determine the requirement based on detailed design for each substation site.

Cross arms 18

Post insulators 19

3 Phase disconnecter and surge arresters 20

Fuses

Conductor and cable

Polyvinyl Chloride (PVC) Pipe

Anchors²¹ and guy wires 22 / push guys 23

The following equipment is required for the construction phase:

Truck mounted Auger

Aerial Work Platform 'cherry picker'

Truck

Mobile Crane with Claw Arm

Survey Equipment

Mobile compactors

18 A cross-arm is secured to a pole and used to mount various types of circuit protection devices and support distribution conductors.

19 An insulator is a material that prevents the flow of an electric current and can be used to support electrical conductors. The function of an insulator is to separate the line conductors from the pole. Insulators are fabricated from porcelain, glass, and fiber glass, treated with epoxy resins and rubberlike compounds.

20 Transformers and other equipment on pole lines are very expensive to purchase and very time-consuming to install. To keep them in good working order, you must protect them from overcurrent and overvoltage conditions. You do this by installing protective devices.

21 The anchor is the foundation of the pole line, and its purpose is to take the strain of all the weight of the equipment installed on a pole line. For example, on a straight pole line the strain of equipment, hardware and conductor support devices is distributed evenly along all the poles through the conductors. At the end of a pole line, or whenever the pole line changes direction, the strain is borne by only one pole. If left unsupported, this one pole will slowly be pulled toward the rest of the pole line until it collapses. To prevent this, a guy wire and anchor are installed. The guy wire transfers the strain from the pole to an anchor that is firmly imbedded in the earth.

22 A guy is a brace or wire fastened to the pole to strengthen it and keep it in position.

23 A push guy, or a push brace, is used when it is impossible to use down guys. When it is impossible to obtain sufficient right-of-way for a pole guy, the push brace can usually be installed.

The key tasks involved in the construction works include:

Inform local community in advance of works and any potential electricity disruptions.

Move equipment to site using trucks.

Prepare worksite, including erection of warning signs and safety fences.

Drill / dig new footings for poles.

Erect new poles.

String lines using cherry pickers.

Remove any waste materials, such as packaging waste, scrap wires, etc.

Upgrading of Existing Substations

25 existing UPCL substations will be upgraded. The locations of the substations can be found in the associated environmental audit completed for this activity.

Substations to be Upgraded

#	SD Name	Division/District	Type of SD
	District	Dehradun	
1	Sahastachari	Sahastachari, Dehradun (N)	33/11 kV GIS
2	Hathbarkala	Hathbarkala, Dehradun (N)	33/11 kV GIS
3	Sahiya	Sahiya, Vikasnagar, Dehradun Rural	33/11 AIS
4	Sawa	Sawa, Vikasnagar, Dehradun Rural	33/11 AIS
5	Rudrapur	Rudrapur, Vikasnagar, Dehradun Rural	33/11 GIS
6	Ramnagar Danda	Ramnagar Danda, Dikwala, Dehradun Rural	33/11 AIS
7	La Tapper	La Tapper, Dikwala, Dehradun Rural	33/11 AIS
	District	Almora	
8	Tarkhet	Tarkhet, Ranikhet, Almora	33/11 AIS
9	Bajo	Bajo, Ranikhet, Almora	33/11 AIS
10	Langarsh	Langarsh, Almora, Ranikhet	33/11 GIS
11	Saraghat	Saraghat, Almora, Ranikhet	33/11 GIS
	District	Nainital	
12	Kamalbagiya	Kamalbagiya, Haldwani Rural	33/11 AIS
13	Transport Nagar	Transport Nagar, Haldwani Rural	33/11 AIS
14	Phodchaur	Phodchaur, Haldwani Rural	33/11 AIS
15	Garampani	Garampani, Nainital, Haldwani	33/11 AIS
16	Tata Rampani	Tata Rampani, Nainital, Haldwani	33/11 GIS
17	Sarghatket	Sarghatket, Mukteswar, Nainital, Haldwani	33/11 AIS

#	SS Name	Division/Sub-Division	Type of SS
18	Pinas	Pinas, Nakhai, Haidward	33/11 GIS
	District	US Nagar	
19	Melkote	Melkote, Rudraur-I	33/11 AIS
20	Bhadsipuri	Bhadsipuri, Rudraur-I	33/11 AIS
21	Lajpur	Lajpur, Rudraur-I	33/11 AIS
22	Staraganj	Staraganj, Rudraur	33/11 AIS
23	Jharkat	Jharkat, Khatina, Rudraur	33/11 AIS
24	Kashipur	Kashipur	33/11 AIS
25	Gorha	Gorha, Raipur	33/11 AIS

Footprint

All works will be undertaken with existing substations.

Design

The design of the substation upgrades will be in accordance with Government of India requirements and international good practice regarding technical and environmental, health and safety performance standards as set out in the IFC EHS Guidelines. Use of PCBs and all asbestos containing materials will be prohibited. Any temporary labor camps will be setup within the substation boundaries. Time to be taken for construction will be about 6 months for electrical and mechanical upgrading and 12 months with civil works involved requiring about 7 skilled and 12 unskilled workers.

Designs will ensure all lighting is of energy efficient LED type with solar powered LED lighting where practical. Use of fluorescent/HPSV lamps will be avoided since they are less energy efficient/classed as hazardous waste for purposes of disposal. Outdoor lighting to be installed will be of low intensity with little or no blue wavelength and operated using passive infrared (PIR) technology movement sensors set at person height so as not to be kept permanently on overnight, it must be directional and shielded, so light does not fall outside substation boundaries.

Although all the 25 substations are in the zone IV. New equipment installed in the substations shall be installed on foundations having proper seismic design conforming to IS 1893 for seismic analysis, IS 1893-84 for seismic zone and IS 224 for seismic acceleration.

Construction and Operation

The substations shall be upgraded with completely new equipment involving the following construction activities within the existing boundary of the substations and on land owned by UPCL:

Selection of contractor following International Competitive Bidding tender process.

Site survey and design.

Establishment of construction site, storage area, labor camp.

Sourcing and transportation of material and equipment.

Site clearance including dismantling of old foundations and equipment (if required).

Site leveling and earthworks (if required),

Foundations with concrete (if required),

Installation of steel structures and substation gantries,

Installation of transformers and electrical equipment,

Upgradation and modernization of existing control rooms at substations including for staff sanitation and welfare,

First aid, PPE, and firefighting arrangements,

Testing and commissioning prior to operation.

Key Features		Particulars
Land ownership and footprint	Permanent works	UPCL land, within existing substations and sub-division office areas, no civil and electrical works are required to take place outside of the existing UPCL boundaries. No land acquisition involved
	Temporary works e.g., construction camp, material storage site	UPCL land within the existing substations areas, except (< 10% available space) for Halibarakata, Talikhet, Langarah, Sawra, Sairaghat, Pines, Transport Nagar, and Garampani substations which will need to find land outside. Halibarakata is located with the Survey of India, Gol compound and will need permission as well as additional space elsewhere within or outside the premises. There is not much space outside the substation. Talikhet, Langarah, Pines, Sawra and Sairaghat are located on elevated terrain and constrained by space. They will have to set up work camps below the substations mostly. Except for Sawra and Sairaghat, the others have abandoned staff quarters attached to control rooms, which can be utilised after repair and renovations.
Construction	Construction method	Per the construction method statement of works contractor Manual construction with the involvement of powered mechanical equipment. Piling and blasting is not envisaged
Access	Access for construction	Existing road network available at most of the substations, but entry to the Langarah substation needs to be repaired and connected to the access road in front for entry of vehicles. Substations on high altitudes like Pines, Bajol, Sairaghat, Langarah, have elevated and sloping pathways, without steps to enter substation from the

Key Features		Particulars
Transportation of materials and equipment		access/main road. Vehicle movement will not be possible for Pines substation as it is narrow, very steep and with sharp bends.
		By existing roads, highways, railways, or combination as per the logistics plan of Works contractor High altitude, not well maintained, with sharp bends and turns, and landslide prone roads needs to be covered to reach Sahiya, Sazara, Pines, Tankhet, Bajal, Lamgarah substations.
Construction	Batching Plants etc.	Unlikely to be required given small scale of construction works, although it will be for final determination of contractor if they wish to utilize. CTE and CTO required from UPCL.
	Equipment	Contractor would bring their own construction equipment and machineries including transport vehicles for workers and equipment, heavy materials handling facilities like mobile crane, forklift, (specially for high altitude substations) etc.
Materials	Cement and steel	Direct from cement and steel plants (bulk quantity) with valid environmental clearance, CTE and CTO or (if the quantity is less) wholesale distributors in the nearest settlement, source/brand shall be approved by UPCL. Multiple cement plants are operational in Uttarakhand, and can be transported through road to the substation sites.
	Sand	Direct from local approved quarries with valid EC, CTE and CTO
	Stone Aggregates	Direct from suppliers with valid EC, CTE and CTO for crusher, stone aggregates located in Uttarakhand. Brick aggregates from brick kiln with valid environmental clearance, CTE and CTO may be used if laboratory tests are passed, and their use is approved by UPCL.
	Electrical, Mechanical and Instrumentation Parts	Direct from Original Equipment Manufacturers (OEM) or authorized distributors as per the Technical Specifications and as approved by UPCL. Transformers to be installed will all be certified as PCB free.
Other Resources	Power	Temporary diesel generator (DG) set will be required during substation renovation works.
	Water	Works contractor will determine if they source earned drinking water from an existing supplier (as

Key Features		Particulars
		the preferred option) or provide treated water for workers; all drinking water provided will be regularly tested and confirmed to meet Government of India drinking water standards, if the contractor provides their own supply permissions shall be obtained from authorities (PWD) with the agreement of local communities/village councils. Other construction water to be obtained from existing local ground / surface water sources depending on site conditions to be determined by the contractor, permissions for which shall be obtained from authorities with agreement of local communities/village council. For new bore wells for operational water supply at substations, (if required) approvals shall be obtained from authorities before they are installed. Treatment system will be provided to ensure all drinking water meets Government of India drinking water standards
Labor	Workers camps	Construction labor camps/existing vacant staff quarters, within substations / UPCL land to be determined by contractor (if such land is not available then the contractor to submit all necessary documents demonstrating agreement for temporary land use with a private landowner to UPCL, including land ownership papers etc.) Per design approved by UPCL and to contain all basic requirements (beds and beddings, mosquito nets, artificial lights, natural lights, windows and ventilation, fans, emergency exits, firefighting equipment, kitchen and dining halls, mobile charging points, toilets and washing facilities, potable drinking water, recreational space). Design of labor camps shall conform to IFC EHS guidelines, ILO's guidance on worker accommodation²⁴ and regulations of Government of India.
	Construction staffing	Most of the works required are manual labour intensive with the involvement of powered mechanical equipment

²⁴ https://www.ilo.org/emporg/Groups/public/@set_employment_and%20discrimination/publications/wcms_110344.pdf

Key Features	Participants
	The exact size of the workforce including the number of unskilled, semiskilled, and skilled shall be determined by the works contractor based on the project scheduling which shall be approved by UPCL. For working with electricity and at height only suitably qualified and experience labor will be used. Both local and external laborer shall be utilized for which the contractor shall obtain labor licenses and Workmen Compensation Insurances.
Wastes	Specific type of waste generated Non-hazardous waste includes all domestic and kitchen waste, packaging wastes including plastics, paper, cardboard, wood, etc. construction waste such as concrete, brick, rubble, iron scrap etc. E-waste: broken or used electrical equipment Hazardous waste: used transformer oil, empty metal or plastic fuel/oil/chemical containers, transformer oil or solvent-soaked rags, used batteries etc. Removed electrical and mechanical equipment will be handed over to UPCL or transported to designated UPCL Zonal/Divisional warehouse as per the direction of UPCL. UPCL will reuse or recycle using UPCL authorized vendors as per the condition of the equipment, if fit for use they will be stored for reuse by UPCL or they will be auctioned off as scrap material. Disposal of old transformers and other hazardous wastes shall be as per the Hazardous and Other Wastes (management and transboundary movement) Rules, 2016, Government of India. Other wastes will be recycled using UPCL authorized vendors or suitably engineered and licensed waste management facilities for inert or solid waste.

CTE = Consent to Establish, CTO = Consent to Operate, EHS = environmental, health and safety, IFC = International Finance Corporation, OEM = Original Equipment Manufacturers, UPCL = Uttarakhand pollution control board, UPCL = Uttarakhand Power Corporation Limited

Source: ADB UPCL EHS Audit

Component 3 – Harnessing Renewable Energy for Sustainable Rural Development

This component involves installation of roof-top solar in hill districts. No significant negative impacts are anticipated from this activity. However, an EMP for this Component has been prepared

specifically relating to management of waste and health and safety during installation of the equipment.

Construction Camps

Construction camps (including equipment and materials storage areas) will be established for some of the Project sub-components. The location of the camps will be determined by the EPC Contractor and no specific location for any camp site has been provided to date by PTCUL/UPCL, or any specific plans for the number of camps to cover the Project. However, siting of any camp will consider the sensitive site restrictions provided in this IEE, e.g., not locating within 200m of a water course or within 500m of residential areas.

In rural areas LILO, Second Circuit Stringing and new PTCUL substations will need to be established. Camps will generally be no bigger than two hectares in size and will probably be arranged to group several sub-activities within the camp. For example, Khatima-II SS and Khatima-Sitarganj LILO are essentially the same project, so only one camp will be needed for this site. Sub-activities in towns, such as UG LILO and UG distribution, will not require camp sites with accommodation, as workers can be accommodated in existing housing. However, areas for storage of materials will be required for these works at existing PTCUL / UPCL sites.

As noted above, some locations will need to carefully consider the topography of the sites and the potential to be affected by landslides. These issues and the requirements for the preparation of camp management plans prior to the start of construction are discussed further in the impact assessment section of this IEE.

Manpower and Equipment

Construction and installation works will be undertaken by dedicated teams consisting of specialized units recommended by the technological centre/scheme operating in power engineering. Several crews of up to approximately 10 workers each will be required at each construction area, each crew responsible for a specific construction assignment including laying the foundations for the towers, assembling the towers on the ground, raising the towers, installing the wires, etc. These crews will be engaged sequentially at each construction area as the construction of each length of Power line proceeds. No blasting is foreseen by PTCUL. However, it may be possible that some piling works will be required in locations close to rivers and marshy areas (cast in-site concrete). The following tables provide the estimate manpower and equipment requirements for the various stages of Power line construction, UG cabling and substation construction.

#	Activity	Equipment	Manpower	Timescale
1	Surveying the power line centre line	2 Pick up trucks	4 people	4 weeks
2	Upgrading or development of temporary and permanent access roads	Grader Bulldozer (20t) Pick-up truck	4-8 people	2 days per tower
3	Cleaning and grading activities	Grader Bulldozer (20t) Pick-up truck	4-8 people	2 days per tower
4	Transporting materials to the tower site	2 Pick-up truck 4 Lorry (4 axle)	8-10 people	2 days

#	Activity	Equipment	Manpower	Timescale
5	Excavating and installing foundations	Excavator (20t) Bulldozer (20t) 2 Backhoe (8t) 2 pick up trucks 2 lorries (4 axle) Pneumatic Tools Piling equipment (if necessary)	6-8 people	4 day per tower
6	Assembling tower	2 pick-up trucks 1 mobile crane 2 lorries (4 axle)	10 people	10 days per tower
7	Erecting Tower by crane	1 crane 2 pick-up trucks 2 lorries (4 axle)	6-9 people	2 days per tower
8	Stringing conductors (including layout of equipment, unfolding of wires and raising and stringing)	1 crane 2 pick-up trucks 2 lorries (4 axle) Mobile Bull wheel tensioners Mobile Winch	10 people	2 to 3 days per tower
9	Earthing Tower	1 pick-up trucks 1 Backhoe (8t) Auger drill	4 people	2 days per tower
10	Cleanup and reclamation of affected areas	Bulldozer (20t) Backhoe (8t)	6 people	2 days per tower

132 kV D/C Power line on Panther conductor from Pitlagari (PGCL) – Champawat (Lohaghat) will use manual labour to string the second circuit. Discussions with PTCUL have indicated that between 100-200 people will be required for this activity.

Estimated Manpower and Equipment – Substations (Construction)

#	Activity	Equipment	Manpower	Timescale
1	Surveying the site	2 Pick-up trucks	4 people	2 week
2	Upgrading or development of temporary and permanent access roads	Grader Bulldozer (20t) Pick-up truck	4-8 people	2 weeks
3	Clearing and grading activities	Grader Bulldozer (20t) Pick-up truck	4-8 people	3 weeks
4	Transporting materials to the site	2 Pick-up truck 2 Lorry (4 axle)	6-10 people	3 weeks
5	Construction of substation buildings	2 pick up trucks 2 lorries (4 axle)	10-15 people	6 months

#	Activity	Equipment	Manpower	Timescale
		1 mobile crane Pneumatic Tools		
6	Installation of electrical equipment	2 pick-up trucks 1 mobile crane 2 lorries (4 axle)	10 people	4 months
7	Cleanup and reclamation of affected areas	Bulldozer (20t) Backhoe (8t)	6 people	1 month

Estimated Manpower and Equipment – UG cabling

#	Activity	Equipment	Manpower	Timescale
1	Surveying the site	2 Pick-up trucks	10 people	4 weeks
2	Clearing for trench excavation, CSS and RMUs	Excavators Lorries (4 axle)	20 people	Throughout construction phase
3	Excavating and installing foundations	Excavator Backhoe Pick-up trucks Lorries (4 axle) Pneumatic Tools	20-30 people	Throughout construction phase
4	Pipelaying and installation of electrical equipment	Backhoe Pick-up trucks Lorries (4 axle) HDD Machine	15 people	Throughout construction phase
5	Clean-up of affected areas	Bulldozer (20t) Backhoe (8t)	6 people	1 month

Cost and Schedule

The total investment cost of the project is estimated at US\$ 201 million (of which US\$109 million will be funded by ADB), including physical and non-physical components. The cost of the grid component is expected to be approximately US\$ 136 million and the distribution component US\$ 113 million. Component 3 is estimated to cost US\$ 2 million. The actual completion of the project is expected to be completed within 5 years of project commencement.

Associated Facilities

There are no associated facilities for the Project. Components 1 & 2 will only provide system strengthening for the grid & distribution system in India. New Power and distribution lines and substations will be connected to the existing power grid system. PTCUL/UPCL is not constructing any dedicated high voltage power line / distribution line/substation for a new power generation plant, and Component 1 is not dependent on any other projects going ahead. Further Component 2 will only provide system strengthening for UPCL with underground cables connected to the existing distribution system.

Prohibited Items & Activities

The following items will be prohibited within the framework of the Project:

PCBs will not be permitted for use in any equipment in substations. Equipment purchased for use on the Project to be accompanied by letter from the manufacturer and material safety data sheet for insulating oil used confirming that it is guaranteed PCB free and labeled as PCB free.

Processes, equipment, and systems not to use chlorofluorocarbons (CFCs), including halon.

No asbestos containing materials of any type will be used in the design and construction of project facilities.

Use of herbicides or burning to clear vegetation is strictly prohibited.

No forced or child labor to be employed in construction with the minimum age for employment on construction site to be 18 given hazardous nature of works involved.

Further, the Project shall not engage in any activities described on the ADB Prohibited Investment Activities List in Appendix 5 of ADB's 8PB (2008).

Appendix 2: Project and Subproject Footprints

Introduction:

The project footprint constitutes the physical area where the project is located. The strengthening of the electricity transmission and distribution network under this project is spread across a wide area within the state of Uttarakhand. In order to provide a more relevant socio-economic profiling of the project area, it was required to identify the smaller administrative units and use available secondary socio-economic data pertaining to them. The governance structure in India has three tiers, i.e., Central Government at the country level, State Government at each State, and Local Governance Bodies. Citizens elect their representatives for these three levels through a democratic process. The administrative structure of a state is further sub-divided into Districts, Sub-districts, and Gram Panchayat in rural areas and Municipalities/Notified Area Councils for urban areas. The Gram Panchayat may comprise of one or multiple revenue or census villages depending on their population size and comprise of wards. Similarly, each Municipality is further divided into wards. The relevant administrative units for various sub-components of the proposed project was identified by two methods. First, the GPS location of some of the project components, particularly for sub-stations were obtained from UPCL or PTCUL and mapped and location name and administrative unit name was later verified during field visit. Second, mostly for linear sub-components of the project (power lines and distribution line), available GPS points for the route alignment was obtained from UPCL and PTCUL. The administrative layer data obtained from the Survey of India was superimposed on the route to identify relevant administrative units (revenue villages). The social expert identified the concerned Gram Panchayat or Ward within which these revenue villages are located during field visit and consultation with elected representatives. The socio-economic information available for these administrative units in Census of India database was searched and compiled. The socio-economic profile of the 'Study Area' is prepared based on this compiled secondary information and qualitative information obtained from the field visit and consultations.

Sub-Component Wise Administrative Units

The study area at the macro-level is considered to include the districts where different project sub-components are located. At the micro-level, the study area is conceived to cover the village (for rural areas) and ward (for urban areas) as the lowest administrative unit. The direct impacts of the project will be within the villages and wards identified. The project benefits will be experienced beyond the local administrative units and may reach out to other parts of the districts. The project interventions are spread across 7 districts of Uttarakhand, namely, (i) Dehradun, (ii) Pithoragarh, (iii) Nainital, (iv) Udhm Singh (US) Nagar, (v) Haridwar, (vi) Champawat, and (vii) Almora. The project interventions will cover 191 villages/wards spread across these seven districts of Uttarakhand. Following Table provides the name of the district and the number of villages/wards each project sub-component covers.

Districts and number of villages/wards covered in Study Area

Project Sub-component	Name of District(s)	Number of Villages/ Wards
Underground cable distribution network	Dehradun	48
Overhead low voltage lines	Nainital, US Nagar,	13
Overhead high voltage Power lines	Haridwar, Nainital, US Nagar, Pithoragarh, Chamoli	68
Sub-stations (New and Existing)	Nainital, US Nagar, Dehradun, Chamoli, Haridwar, Pithoragarh, Dehradun, Almora	36
Total		165

List of Wards in Dehradun City for Distribution Network

Following Table provides the list of wards (as the smallest administrative unit in urban area of Dehradun City) and villages (as smallest administrative unit for rural areas). The wards and villages where the proposed underground cable network will be put were identified in consultation with the implementation agency.

The list of Wards and GPs where underground cable work to be carried out

#	Ward No/ GP Name	Ward Name	No. of 33 KV Lines (UG)	No. of 11 KV Lines (UG)
Wards in Dehradun Municipality				
1	1	Melahi	1	0
2	6	Doon Vihar	0	1
3	7	Jeehan	0	2
4	8	Solowala	1	1
5	9	Arya Nagar	1	2
6	11	Vijay Colony	1	0
7	12	Kishan Nagar	0	1
8	15	Karanpur	1	0
9	16	Bakawali	1	0
10	17	Chuknowala	0	1
11	18	Ghanta Ghar Kaha Mandir Marg	0	1

#	Ward No. & GP Name	Ward Name	No. of 33 KV Lines (UG)	No. of 11 KV Lines (UG)
12	21	M.K.P.	3	2
13	22	Tilik Road	0	1
14	23	Indrsh Nagar	0	3
15	24	Dhanawala	0	2
16	25	Dolanwala (North)	0	1
17	26	Dolanwala (South)	0	2
18	34	Gavind Ghar	0	1
19	35	Shri Dev Suman	0	1
20	36	Vijay Park	0	1
21	37	Basant Vihar	0	2
22	38	Pandwara	0	2
23	41	Indrapuram	0	1
24	42	Kareli	0	1
25	43	Dwanpuri/Dronpuri	0	1
26	44	Patel Nagar (West)	1	2
27	45	Apholwala	0	2
28	56	Dhanampur	1	10
29	57	Nehru Colony	1	10
30	71	Patel Nagar (East)	1	1
31	73	Vijaya Vihar	1	1
32	74	Bhrampuri	0	1
33	77	Majra	1	2
34	79	Bhanuwala Grant	0	3
35	87	Pithuwala	0	2
36	90	Mohobiwala	0	1
The list of EDD Rajpur Rural				
37	5	Dhoran	0	1
38	47	Chander Road MDDA colony	0	1
39	50	Rajiv Nagar	0	1
40	58	Defence colony	0	1
41	59	Gujara Mansingh	0	2
42	60	Danda Lakhtoud	0	2
43	61	Asmwa Tari	0	1
44	62	Nutan Khara	0	1
45	63	Ladpur	0	1
EDD Moharpur Rural				
46	Rampur GP	Rampur, Setaqui	1	0
47	Shankarpur GP	Shankarpur, Setaqui	1	0
48	SIDOLA	SIDOLA Area	3	0

Source:

List of Villages/Wards for overhead low voltage lines

Following Table provides the list of villages and Gram Panchayats where the overhead low voltage Power lines are located.

The list of villages and wards where overhead low voltage lines are located

#	District	Block	Villages	Gram Panchayat	Associated Line Connecting SS
1	Nainital	Ramnagar	Shivapuri Pandey	Shivapuri Pandey	Kanika SS
2	Nainital	Ramnagar	Chapani	Chapani	Kanika SS
3	Nainital	Ramnagar	Goujan	Goujan	Kanika SS
4	Nainital	Ramnagar	Kanika	Kanika	Kanika SS
5	Nainital	Ramnagar	Himmatpur Doliya	Himmatpur Doliya	Kanika SS
6	Nainital	Ramnagar	Sawal Khaliya	Sawaldey	Kanika SS
7	U.S. Nagar	Rudrapur	Rudrapur Collectorate	Rudrapur Collectorate	Collectorate SS
8	U.S. Nagar	Stariganj	Bharauli	Bharauli	Bharauli SS
9	U.S. Nagar	Stariganj	Audala	Bharauli	Bharauli SS
10	U.S. Nagar	Stariganj	Dohar	Sisakhara	Bharauli SS
11	U.S. Nagar	Stariganj	Dohra	Sisakhara	Bharauli SS
12	U.S. Nagar	Stariganj	Chikaghat	Chikaghat	Bharauli SS
13	U.S. Nagar	Stariganj	Tarka Tisor		Bharauli SS

List of villages for overhead high voltage power lines

Following Table provides the list of villages which are located along the overhead high voltage powerline corridor. The names of these villages were compiled from the coordinates of the tower locations and line routes provided by the implementation agency.

List of villages along the overhead high voltage Line corridors

#	District	Block	Gram Panchayat	Villages
1	Haridwar	Manglora	Jhabin	Jhabin
2	Haridwar	Manglora	Nagla Ahmad	Nagla Ahmad
3	Haridwar	Manglora	Thasoka	Thasoka

#	District	Block	Gram Panchayat	Villages
4	Hardwar	Manglora	Mundet	Mundet
5	Hardwar	Roonkee	Libbamed	Kuchand
6	Hardwar	Roonkee	Libbamed	Kundi
7	Hardwar	Roonkee	Libbamed	Libbamed
8	Hardwar	Manglora	Nagala Cheena	Nagala Cheena
9	Hardwar	Manglora	Mundolana	Mundolana
10	Hardwar	Manglora	Aamkheri	Aamkheri
11	Hardwar	Manglora	Nagapur Ghospura	Nagapur Ghospura
12	Hardwar	Manglora	Gopapur	Bhaskar Gopur
13	Hardwar	Manglora	Gopapur	Sekar
14	Hardwar	Manglora	Gopapur	Gopapur
15	Hardwar	Manglora	Bukarpur	Bukarpur
16	Hardwar	Manglora	Bukarpur	Abdul Hasanpur Urf Ghosarpad M
17	Hardwar	Roonkee	Mohd Pur Bazurg Ah	Mohd Pur Bazurg Ah
18	Hardwar	Manglora	Khempur	Khempur
19	Hardwar	Manglora	Khempur	Maji Raktarpur
20	Hardwar	Manglora	Shikarpur	Hazzarpur Ah
21	Hardwar	Manglora	Shikarpur	Shikarpur
22	Hardwar	Roonkee	Zaursi Jabardastpur	Zaursi Mu
23	Hardwar	Roonkee	Zaursi Jabardastpur	Jabardast Pur
24	Hardwar	Roonkee	Sundhar	Sundhar
25	Hardwar	Roonkee	Sundhar	Sundhar
26	Hardwar	Roonkee	Zaursi Jabardastpur	Bhansamed Ah
27	Hardwar	Roonkee	Zaursi Jabardastpur	Bhansamed Mu
28	Hardwar	Roonkee	Zaursi Jabardastpur	Udhar
29	Hardwar	Manglora	Jhabiran	Jhabiran
30	Hardwar	Manglora	Gadar Judda	Gadar Judda

#	District	Block	Gram Panchayat	Villages
31	Hardwar	Manglora	Jhabiran	Jhabiran
32	Nainital	Haldeewali	Japur Khama	Bochipur
33	U.S. Nagar	Khatma	Ward No. 10	Jhan Katiya
34	U.S. Nagar	Khatma	Unchi Mahuwar	Unchi Mahuwar
35	U.S. Nagar	Kashipur	Katiya	Katiya
36	U.S. Nagar	Kashipur	Barkhara Pandey	Barkhara Pandey
37	U.S. Nagar	Kashipur	Baghelwala	Gir Dhyai
38	U.S. Nagar	Kashipur	Banskhara Khurd	Banskhara Khurd
39	U.S. Nagar	Kashipur	Gulana	Gulana
40	U.S. Nagar	Kashipur	Islam Nagar (Basai)	Besai
41	U.S. Nagar	Saharanpur (UP)	Fard Nagar	Fard Nagar MST
42	U.S. Nagar	Saharanpur (UP)	Fard Nagar	Mohammad Gang
43	U.S. Nagar	Saharanpur (UP)	Ramnawala	Ramnawala
44	U.S. Nagar	Jaspur	Malspura Lakshampur	Malspura Lakshampur
45	U.S. Nagar	Jaspur	Jagatpur Pati	Gaura
46	U.S. Nagar	Jaspur	Jagatpur Pati	Jagatpur Pati
47	U.S. Nagar	Jaspur	Bhawanipur	Bhawanipur
48	U.S. Nagar	Jaspur	Narsipur	Narsipur
49	U.S. Nagar	Jaspur	Bhawanipur	Gauri Husan
50	U.S. Nagar	Kashipur	Katiya	Katiya
51	U.S. Nagar	Kashipur	Barkhara Pandey	Barkhara Pandey
52	U.S. Nagar	Kashipur	Baghelwala	Gir Dhyai
53	U.S. Nagar	Kashipur	Banskhara Khurd	Banskhara Khurd
54	U.S. Nagar	Kashipur	Gulana	Gulana
55	U.S. Nagar	Kashipur	Islam Nagar (Basai)	Besai
56	U.S. Nagar	Kashipur	Shahganj	Shahganj
57	U.S. Nagar	Kashipur	Harnawala	Harnawala
58	Pithoragarh	Pithoragarh	Dhari Joshi	Dhari Joshi

#	District	Block	Gram Panchayat	Villages
59	Pithoragarh	Pithoragarh	Bisar	Bisar
60	Pithoragarh	Pithoragarh	Mossai	Kinragawn (Mossai)
61	Pithoragarh	Pithoragarh	Balakot	Balakot
62	Pithoragarh	Pithoragarh	Egyar	Egyar
63	Pithoragarh	Pithoragarh	Gurina	Gurina
64	Pithoragarh	Pithoragarh	Gogana	Gogana
65	Pithoragarh	Pithoragarh	Jamrai	Jamrai
66	Pithoragarh	Pithoragarh	Nishani	Nishani
67	Pithoragarh	Pithoragarh	Chunga Bhul	Chunga Bhul
68	Pithoragarh	Pithoragarh	Sinchauna	Sintoi (Sinchauna)
69	Pithoragarh	Pithoragarh	Kantai	Kantoi
70	Champawat	Barakot	Natra Saran	Natra Saran
71	Champawat	Barakot	Sheel	Sheel Barun
72	Champawat	Barakot	Chamrol	Chamrol
73	Champawat	Barakot	Mau	Mau
74	Champawat	Barakot	Chani	Chani
75	Champawat	Lahaghat	Gangraula	Gangraula
76	Champawat	Lahaghat	Koyat	Koyat
77	Champawat	Lahaghat	Mangoli	Mangoli

List of villages/wards for substations (new and upstation)

Following Table provides the list of villages or Wards (in urban area) where these sub-stations are located. The names of these villages were compiled from the coordinates provided by the implementation agency.

List of villages/Wards where new and existing sub-stations are located

#	District	Block	Gram Panchayat	Village	Substation
1	Almora	Ranikhet		Tankhet	Tankhet SS
2	Almora	Ranikhet		Bajor	Bajor SS
3	Almora	Ranikhet		Langarai	Langarai SS

#	District	Block	Gram Panchayat	Village	Substation
4	Amroha	Ranishat		Saraghat	Saraghat SS
5	Champani	Lohaghat	Bakoli	Bakoli	Lohaghat SS
6	Dehradun	Selaqui	SIDCUL	SIDCUL	Selaqui SS Dehradun
7	Dehradun	Araghar	Araghar	UPCL Premises	Araghar SS
8	Dehradun	Dehradun		Sahasrathara	Sahasrathara SS
9	Dehradun	Dehradun		Hathbarkala	Hathbarkala SS
10	Dehradun	Vikasnagar		Sahiya	Sahiya SS
11	Dehradun	Vikasnagar		Saera	Saera SS
12	Dehradun	Vikasnagar		Rudrapur	Rudrapur SS
13	Dehradun	Dohela		Ramnagar Danda	Ramnagar Danda SS
14	Dehradun	Dohela		Lai Tapper	Lai Tapper SS
15	Haridwar	Roorkee	Sundhari	Sundhari	Landhora SS
16	Haridwar	Mangora	Gadar Jutta	Gadar Jutta	Mangora SS
17	Nainital	Haldwari	Japur Khema	Bachpur	Chaukhara SS
18	Nainital	Haldwari		Kamalgaganja	Kamalgaganja SS
19	Nainital	Haldwari		Transport Nagar	Transport Nagar SS
20	Nainital	Haldwari		Phool chaur	Phoolchaur SS
21	Nainital	Haldwari		Garampati	Garampati SS
22	Nainital	Haldwari		Tala Ramgarh	Tala Ramgarh SS
23	Nainital	Mukteshwar		Sargakhel Mukteshwar	Sargakhel Mukteshwar SS
24	Nainital	Haldwari		Pines	Pines SS
25	Nainital	Ramnagar	Kaniya	Kaniya	Kaniya SS
26	U.S. Nagar	Kashipur	Sarwar Khara	Sarwar Khara	Sarwar Khara SS
27	U.S. Nagar	Khatima	Ward No. 10	Jhankalya	Khatima-II SS
28	U.S. Nagar	Rudrapur	Collectorate, Rudrapur	Collectorate, Rudrapur	Rudrapur Collectorate SS
29	U.S. Nagar	Sitarganj	Bherauni	Lamkhara	Bherauni SS

#	District	Block	Gram Panchayat	Village	Substation
1	U.S. Nagar	Rudraur-I		Malkota	Malkota SS
2	U.S. Nagar	Rudraur-I		Bhodapura	Bhodapuri SS
3	U.S. Nagar	Rudraur-I		Labur	Labur SS
4	U.S. Nagar	Sitargan		Sitargan	Sitargan SS
5	U.S. Nagar	Khalima		Jhankal	Jhankal SS
6	U.S. Nagar	Kashipur		Kashipur	Kashipur Ramnagar SS
7	U.S. Nagar	Bazpur		Doraha	Doraha SS

Summary

Consolidation of the administrative units within which the footprint of the project sub-components and their associated components allows to identify the administrative units where the project impacts will be experienced. The direct and adverse project impacts will be experienced in a small area within these administrative units. The indirect and project benefits however may exceed these boundaries and experienced over a broader area as contemplated in the project objectives.

Administrative units where project footprint is located

District	Gram Panchayat/Municipality	Village/Ward	Type of located	Sub-Component
Dehradun	Dehradun Municipality	Ward No-1, 6, 7, 8, 9, 10, 11, 12, 15, 16, 17, 19, 21, 22, 22, 25, 26, 28, 30, 34, 35, 36, 37, 38, 41, 42, 43, 44, 46, 56, 57, 58, 60, 61, 71, 73, 74, 77, 79, 87, 90.	UG cable distribution Associated voltage line	(33 and 11 kv) network Overhead low-voltage line
	Chandoli	Guriyal	UG cable distribution Associated voltage Sub-station (New)	(33 and 11 kv) network Overhead low-voltage line
		Rampur	UG cable distribution network	(33 and 11 kv) network
		Shankarpur	UG cable distribution network	(33 and 11 kv) network
		Suwakholi	Associated voltage Sub-station (New)	Overhead low-voltage line
	Selaoli	SIDCU, Anagar	Sub-station (New)	Sub-station (New)

District	Gram Panchayat/Municipality	Village/Vard	Type of	Sub-Component	Isolated
Pithoragarh		Saustadhara	Sub-station	Existing	
		Hathirakola	Sub-station	Existing	
		Sahiya	Sub-station	Existing	
		Sawra	Sub-station	Existing	
		Rudrapur	Sub-station	Existing	
		Ramnagar Danda	Sub-station	Existing	
		Lai Tapper	Sub-station	Existing	
	Gogana	Kantheon (Gogana)	Associated voltage line	Overhead	low
	Bera	Bera	Associated voltage line	Overhead	low
	Baraway	road garh (Gyapari)	Associated voltage line	Overhead	low
	Barway	Barway	Associated voltage line	Overhead	low
	Tala	Lalam	Associated voltage line	Overhead	low
	Badal Tala	Badal Tala	Associated voltage line	Overhead	low
	Naya Sapok	Naya Sapok	Associated voltage line	Overhead	low
	Saner	Saner	Associated voltage line	Overhead	low
	Payo Lagga	Payo Lagga	Associated voltage line	Overhead	low
	Masuriya	Masuriya	Associated voltage line	Overhead	low
	Kotgar	Kotgar	Associated voltage line	Overhead	low
	Dhaseuli	Parkhi (Dhaseuli) R.F.	Associated voltage line	Overhead	low
	Dhan Joshi	Dhan Joshi	High-voltage Stringing	Power	Line
	Bisar	Bisar	High-voltage Stringing	Power	Line
	Masso	Roragaon (Masso)	High-voltage Stringing	Power	Line
	Balakot	Balakot	High-voltage Stringing	Power	Line
	Egyar	Egyar	High-voltage Stringing	Power	Line
	Guraha	Guraha	High-voltage Stringing	Power	Line
	Gogana	Gogana	High-voltage Stringing	Power	Line
	Janrai	Janrai	High-voltage Stringing	Power	Line

District	Gram Panchayat/ Municipality	Village/Ward	Type of located	Sub-Component	
Nainital	Nahani	Nahani	High-voltage Stringing	Power	Line-
	Chunga Bhui	Chunga Bhui	High-voltage Stringing	Power	Line-
	Sinchaurs	Sinai (Sinchaurs)	High-voltage Stringing	Power	Line-
	Kantai	Kantai	High-voltage Stringing	Power	Line-
	Badave	Badave	Sub-station (New)		
	Pankhi	Pankhi	Sub-station (New)		
		Kamawaganja	Sub-station (Existing)		
		Transport Nagar	Sub-station (Existing)		
		Phoolchaur	Sub-station (Existing)		
		Ganjamani	Sub-station (Existing)		
		Tata Kangarh	Sub-station (Existing)		
		Singhaihat Mukdeshwar	Sub-station (Existing)		
		Pines	Sub-station (Existing)		
	Shivajipur Pandey	Shivajipur Pandey	Associated voltage line	Overhead	low-
	Chorpani	Chorpani	Associated voltage line	Overhead	low-
	Goujani	Goujani	Associated voltage line	Overhead	low-
U.S. Nagar	Kariya	Kariya	Associated voltage line	Overhead	low-
	Hinnatpur Dobyal	Hinnatpur Dobyal	Associated voltage line	Overhead	low-
	Sawal	Sawal Khaliya	Associated voltage line	Overhead	low-
	Jampur Khasma	Bachpur	High-voltage Power Line		
	Jampur Khasma	Bachpur	Sub-station (New)		
	Kariya	Kariya	Sub-station (New)		
	Rudrapur Collectorate	Rudrapur Collectorate	Associated voltage line	Overhead	low-
	Bharsuni	Bharsuni	Associated voltage line	Overhead	low-
	Bharsuni	Audala	Associated voltage line	Overhead	low-
	Sisalbhara	Dohari	Associated voltage line	Overhead	low-
	Sisalbhara	Dohra	Associated voltage line	Overhead	low-
	Chikaghat	Chikaghat	Associated voltage line	Overhead	low-
		Turka Tiar	Associated voltage line	Overhead	low-
	Ward No. 10	Jhan Kariya	High-voltage Power Line		

District	Gram Panchayat/Municipality	Village/Vard	Type of Sub-Component Isolated
	Unchi Mahwar	Unchi Mahwar	High-voltage Power Line
	Katalya	Katalya	High-voltage Power Line
	Barkhara Pandey	Barkhara Pandey	High-voltage Power Line
	Baghelwala	Gr Dhye	High-voltage Power Line
	Banskhara Khurd	Banskhara Khurd	High-voltage Power Line
	Gulana	Gulana	High-voltage Power Line
	Islam Nagar (Batali)	Batali	High-voltage Power Line
	Fard Nagar	Fard Nagar MST	High-voltage Power Line
	Fard Nagar	Mohammad Gang	High-voltage Power Line
	Ramnawala	Ramnawala	High-voltage Power Line
		Malpura Lakshimpur	High-voltage Power Line
	Jagatpur Patti	Gauna	High-voltage Power Line
	Jagatpur Patti	Jagatpur Patti	High-voltage Power Line
	Bhawanipur	Bhawanipur	High-voltage Power Line
	Narainpur	Narainpur	High-voltage Power Line
	Bhawanipur	Gafo Hussain	High-voltage Power Line
	Katalya	Katalya	High-voltage Power Line
	Barkhara Pandey	Barkhara Pandey	High-voltage Power Line
	Baghelwala	Gr Dhye	High-voltage Power Line
	Banskhara Khurd	Banskhara Khurd	High-voltage Power Line
	Gulana	Gulana	High-voltage Power Line
	Islam Nagar (Batali)	Batali	High-voltage Power Line
	Fard Nagar	Fard Nagar MST	High-voltage Power Line
	Shahganj	Shahganj	High-voltage Power Line
		Jhankalya	Sub-station (New)
	Rudrapur	Colebrata, Rudrapur	Sub-station (New)
	Bheraun	Lamkhara	Sub-station (New)
		Makota	Sub-station (Existing)
		Bhadrapura	Sub-station (Existing)
		Labur	Sub-station (Existing)
		Shaganj	Sub-station (Existing)
		Jhankal	Sub-station (Existing)
		Kashipur	Sub-station (Existing)
		Doraha	Sub-station (Existing)
Hardwar	Sundhar	Sundhar	Sub-station (New)
	Gadar Judda	Gadar Judda	Sub-station (New)
	Jhapran	Jhapran	High-voltage Power Line
	Nagla Ahmad	Nagla Ahmad	High-voltage Power Line
	Thasaka	Thasaka	High-voltage Power Line
	Mundat	Mundat	High-voltage Power Line
	Litbarhed	Kuchand	High-voltage Power Line
	Uttarhed	Kuthi	High-voltage Power Line
	Litbarhed	Litbarhed	High-voltage Power Line
	Nagla Cheema	Nagla Cheema	High-voltage Power Line
	Mundolana	Mundolana	High-voltage Power Line

District	Gram Panchayat/ Municipality	Village/Ward	Type of Sub-Component located
	Aamkheri	Aamkheri	High-voltage Power Line
	Nagbaur Ghospura	Nagbaur Ghospura	High-voltage Power Line
	Gospapur	Bhekar Gospur	High-voltage Power Line
	Gospapur	Sikhar	High-voltage Power Line
	Gospapur	Gospapur	High-voltage Power Line
	Bukarpur	Bukarpur	High-voltage Power Line
	Bukarpur	Abdul Hasanpur Uf Ghisapad M	High-voltage Power Line
	Mohd Pur Bazurg Ah	Mohd Pur Bazurg Ah	High-voltage Power Line
	Khempur	Khempur	High-voltage Power Line
	Khempur	Mojn Asarpur	High-voltage Power Line
	Shikarpur	Hazzarpur Ah	High-voltage Power Line
	Shikarpur	Shikarpur	High-voltage Power Line
	Zaurai		High-voltage Power Line
	Jabardapur	Zaurai Mu	
	Zaurai		High-voltage Power Line
	Jabardapur	Zabardast Pur	
	Sundhar	Sundhar	High-voltage Power Line
	Sundhar	Sundhar	High-voltage Power Line
	Zaurai		High-voltage Power Line
	Jabardapur	Bhainsarhed Ah	High-voltage Power Line
	Zaurai		High-voltage Power Line
	Jabardapur	Bhainsarhed Mu	
	Zaurai		High-voltage Power Line
	Jabardapur	Udhar	
	Jhabran	Jhabran	High-voltage Power Line
	Qadar Judda	Qadar Judda	High-voltage Power Line
	Jhabran	Jhabran	High-voltage Power Line
Champanwadi	Natra Salan	Natra Salan	High-voltage Power Line-Stringing
	Sheel	Sheel Borut	High-voltage Power Line-Stringing
	Chamrat	Chamrat	High-voltage Power Line-Stringing
	Mau	Mau	High-voltage Power Line-Stringing
	Cham	Cham	High-voltage Power Line-Stringing
	Ganghauk	Ganghauk	High-voltage Power Line-Stringing
	Koyat	Koyat	High-voltage Power Line-Stringing
	Mangol	Mangol	High-voltage Power Line-Stringing
		Devali	Sub-station (New)

District	Gram Panchayat/ Municipality	Village/Vard	Type of Sub-Component Isolated
Amroha		Tankhal	Sub-station (Existing)
		Bao	Sub-station (Existing)
		Lamgarah	Sub-station (Existing)
		Saraghat	Sub-station (Existing)

Appendix 2: Land Possession Status and Records for PTCUL Substations

Table
 Details of Land Acquisition and Procurement Process for 8 New Sub-Stations (M&F&S) Govt. Lower District (Departmental Letter)

#	Substation Project details	Name of Caretaker Land	Name of Land Procurement*	Revenue Record (Rural) Caretaker Plot No.	Existing Area of Any (in Ha)	Area Allocated for New Sub- Station	Cost of Land (Purchase/ Lease)	Status	Remarks/Status
1	132 KV, RV, 2240 MVA, CBO Substation, Choudhary	UPCL	M&F	Revenue S 12 & 11, Khet No. 30, 36, 39 and 38	0.2790 Ha with UPCL	0.2725 Ha	Nil	Land has yet acquired.	M&F has been signed with UPCL to transfer 0.2725 Ha Land of total UPCL 0.2790 Ha land for the construction of only 132 KV Substation. Did as on 30. Jan 2023 land has not been transferred to PTCL. Attachment: 1 M&F Choudhary
2	132 KV, Q360 MVA, 405 Substation, Sarvathane	Private Land Owner	NA	NA	NA	NA	NA	Land yet to purchase	Land for Sarvathane is located within an industrial area and belongs to an industry. Channel interception. The price negotiation is under process and PTCL is in process to sign the Sale Deed
3	Construction of 220 KV, Q360 MVA, QPS Substation, Gawal, Choudhary	GOCLL	Transfer order	Plot No Q12	0.8176 Ha 7.8576 Sq m.	0.2255 Ha	Nil	Land has been transferred to PTCL by GOCLL	GOCLL has transferred the 0.2255 Ha of land from Plot Number Q12 (Q360) area 0.8176 Ha to PTCL for the construction of 220 KV QPS substation on 12th January 2018. Area 2204 x 54 mtrs.

3	Substation Project Details	Name of Owner of Land	Nature of Land Measurement	Revenue Record (State/ District/ Sub-division) (Yr. No.)	Existing Area of Acquisition	Area Allotment to New SLD Station	Cost of Land (State/ District/ Sub-division)	Status	Remarks/Status
									Attachment 2: Revenue Certificate
4	Construction of 132/33 KV, 2000 MVA, GIS Substation, Annapurna	Revenue Department, Govt.	Lease Land	Patta Number No. 144, Khat No. 80/1, 80/11, 80/12	NA	0.002 Ha	Rs. 22,07,021	Land in possession	By District Magistrate Channarayana Letter Number: 616/2015, dated 07th September 2015, Government of Karnataka, Revenue Department issued 0.002 Ha. of government lease land to PFCL. Attachment 3: Lease Deed copy
5	Construction of 132/33 KV, 2000 MVA, GIS Substation, Annapurna	PFCL	Transfer (PFCL issued decision only) process not initiated yet	Khat 12 Khat 26/2, 26/3, 26/4, 24/1, 25/1, 25/2, 25/3 Khat 4/7 Khat 24/3 & 25/1	0.000 Ha	0.400 Ha (Khat 5a, 5b)	Rs. (Yr. PFCL has not started the normal transfer of with own transfer)	Land not yet transferred	PFCL issued two principles decided transfer 200 Ha of Land to PFCL for construction of 132 KV GIS substation. 18 days process has not been initiated to transfer the land. Attachment 4a: In principle Govt. Decision-Annapurna Attachment 4b: PFCL Land Possession

#	Schedule Project details	Name of Owner of Land	Name of Land Measurement	Revenue Record (Khata/ Gata/ Fis No.)	Existing Area of Any/On/In	Area Allocated to New Sub- Station	Cost of Land (Purchased Land)	Status	Remarks/Notes
6	600020 - 60 Substation Land use and to allocated time	Revenue Department, Guzh,	Lesser Deed	Khata No. 202 & 203 Khata No. 1, Fis. 188, 32	4.395	3.845	Rs. 38,50,043	Land is Possession	Lesser deed signed between PTCL and Government of Jammu&Kash on 1st June 2021. Land was site of agriculture and forests. Attachment: 6 Lesser Deed, Landfile
7	22913210 - W, Mangrove Substation	Private Land Owner	Gata Deed	Khata No.25, Khata No. 101, 102, Khata No.26, Khata No. 05, 06, Khata No.28, Khata No. 103	0.5052	2.545	Rs. 2,94,27,302	Land is Possession	Private Land already possessed by PTCL. Private land purchased from 8 private land owners on 30th December 2018 with four different Gata deeds Gata No: 1.3702 No.25 No. 87,36,882 Rajpal: 1.8702 No.26 No. 1,15,04,753 Santol Devendra, 0.5507 No. 28 No. 1,21,35,125. Santol Devendra, Ashok Kumar, Ranjay Kumar, and Shanwer 1.4423 No.28 No. 03,09,485. Attachment: 7a Mangrove Gata Deed- Gata No.

ID	Substation Project Details	Name of Owner of Land	Name of Land Measurement	Revenue Record (State/Union/No.)	Existing Area (sq. ft.)	Area Allotted to New SLD Station	Cost of Land (Rs./Sq. Feet)	Status	Remarks/Status
									Attachment To Mangalore State Govt. Hospital Attachment To Mangalore State Govt. Dispensary Attachment To Mangalore State Govt. Dispensary and others
8	12213 RVV, 2240 MW, Kollamall Substation (To be Finalised)	To be Finalised	To be Finalised	To be Finalised	To be Finalised	To be Finalised	To be Finalised	To be Finalised	To be Finalised

REPORT

Subject : Regarding Status of Land of proposed 3200 KV Substation Bhadrakholi

1. The plan of land measuring 0.775 hectares is available at 33 CV 8/5 UPCL, Bhadrakholi Campus, Bhadrakholi and under UPCL possession.
2. Recently on 26.02.2022 a meeting was arranged regarding transfer of land from UPCL to PPTCL at 33 (Distribution) CV No. Bhadrakholi and in the meeting PPTCL was agreed in principle to transfer land but also informed that first the land transfer proposal shall be approved by competent authority and then only it shall be transferred to PPTCL.
3. PPTCL requested to expedite the process in writing and till date land transfer proposal is available from UPCL.

Date : 14.03.2022

Digitally signed by Shashi Kumar
 Shashi Kumar's E-mail address is shashikumar@pptcl.co.in
 Location of Shashi Kumar's Private Key
 shashikumar@pptcl.co.in
 Date: 2022.03.14 14:05:00 +05'30'
 (Valid till Indefinite)
Executive Engineer
Project (C&D)
PPTCL, Bhadrakholi

Construction of 220 Kv, (2X50 MVA), GIS Substation, Selaqui, Dohradun

Coordinates for Proposed 220Kv GIS Substation Selaqui, Dohradun

The coordinates for the proposed 220Kv GIS substation Selaqui are mentioned for recorder or marked on the possession letter attached:-

- A. 30.3631961° N, 77.8461554° E
- B. 30.3631210° N, 77.8468120° E
- C. 30.3634036° N, 77.8460010° E
- D. 30.3631607° N, 77.8460710° E
- E. 30.3631007° N, 77.846421° E (within the boundary)

Handwritten signature
 14-03-2023

Handwritten signature
 14-03-2023
 DE (Civil)



उत्तराखण्ड राज्य अवस्थापना एवं औद्योगिक विकास
निगम लिमिटेड (सिडकुल)
फार्मासिटी सेलाकुई, देहरादून।
वेबसाइट www.sildcul.com

दिनांक 02/01/22

साथ सचिव, डी.डी./बिल/सिडकुल/क

प्रति,

✓ राष्ट्रीय अतिरिक्त अधिकार
विभाग, विमान मार्ग (सिडकुल)
22/11 सेलुईड एअरपोर्ट, सेलाकुई

विषय- 22/11 सेलुईड एअरपोर्ट सेलाकुई से सीमा में स्थिति 22 सेलुईड सीमांत एअरपोर्ट सेलाकुई से
संलग्न है। पूर्ण सिडकुल को संलग्न के संलग्न है।

संलग्न

राष्ट्रीय अतिरिक्त अधिकार वाले सचिव सचिव (डी.डी./बिल/सिडकुल/क) सेलाकुई/सचिव विभाग 11.11.2021 को
संलग्न प्राप्त करने का सचिव को विभाग द्वारा सचिव सेलाकुई विभाग सचिव सचिव (डी.डी./बिल/सिडकुल/क) से संलग्न है।
पूर्व 22 सेलुईड सीमांत एअरपोर्ट सेलाकुई से सिडकुल को संलग्न करने का संलग्न सिडकुल है।

उक्त संलग्न से सिडकुल संलग्न है। संलग्न सचिव से से संलग्न है। पूर्ण 22 सेलुईड सीमांत एअरपोर्ट
संलग्न है। सिडकुल को संलग्न करने की सीमांत सचिव को सचिव से संलग्न सचिव सचिव का संलग्न
संलग्न सचिव से संलग्न है।

संलग्न- संलग्न/सचिव

(सचिव विभाग)
सेलुईड एअरपोर्ट

STATE INFRASTRUCTURE & INDUSTRIAL DEVELOPMENT CORPORATION OF UTTARAKHAND LTD.

Pharmacy Sector, Dehra Dun

Web site : www.sidcol.com

Possession Certificate

Certified that a Plot no. C/12 (Part) situated in Designated Industrial Area at Dehra Dun, details of which are given below, has been measured today 14.06.2010 at 4.10 P.M. by the SIDCOL, to M/s PTCUL, after precise demarcation.

Dimensions and boundaries of the Plot No. C/12 Part.



North - Plot No. A-1
South - Plot No. C/12 Part
East - Plot No. A1
West - Plot No. A/1

Area of Plot 1574.20 Sq. mtrs

Possession taken over for and on behalf
of M/s PTCUL.

(Sign) _____
(Name/Designation) _____
Authorized _____
Head Office, SIDCOL, Dehra Dun

Dated _____
Witness Sign _____
Name _____
Address _____

Possession handed over for and on
behalf of SIDCOL.

(Sign) _____
(Name/Designation) _____
Registered Manager

Sign _____
Name _____
Address _____

Copy forwarded for information and necessary action to: Assistant Manager SIDCOL, Dehra Dun.

Construction of 132/33 KV, (2X40 MVA), GIS Substation, Anaghar

Page No. 10/11



GOVERNMENT OF INDIA
MINISTRY OF POWER

These minutes are written for the purpose of the work done at the site of the 132/33 KV GIS Substation project at Anaghar by the project team and the client.

These minutes are written for the purpose of the work done at the site of the 132/33 KV GIS Substation project at Anaghar by the project team and the client.

These minutes are written for the purpose of the work done at the site of the 132/33 KV GIS Substation project at Anaghar by the project team and the client.

These minutes are written for the purpose of the work done at the site of the 132/33 KV GIS Substation project at Anaghar by the project team and the client.

These minutes are written for the purpose of the work done at the site of the 132/33 KV GIS Substation project at Anaghar by the project team and the client.


 Project Manager
 Date: 10/11


 (Client Representative)
 LPO


 (Managing Director)
 LPO


 (Chairman)
 LPO

Page No. 10/11

स्वातंत्र्य दिनांक २०२३/०६/२०

स्वातंत्र्य दिनांक २०२३/०६/२०

२०२३-२४/२०२३-२४

२०२३-२४

२०२३-२४

२०२३-२४

स्वातंत्र्य दिनांक २०२३/०६/२०

२०२३

२०२३/०६/२०

स्वातंत्र्य दिनांक २०२३/०६/२०

२०२३/०६/२०

Chief of the Executive Engineer
(Urban Distribution Division (Control))
Maharashtra Power Corporation Ltd.
18 E.C. Road, Dehruwad 400001
Phone - 022-24770441 Fax -



अधीनस्थ अधिकारी (अधीनस्थ)
शहरी विद्युत वितरण विभाग (नियंत्रण)
महाराष्ट्र विद्युत निगम लि.
18-ई.सी. रोड, देह्रुवाड-400001
फोन - 022-24770441 फैक्स -

संकेत : 75-45-महानिगम/वि.वित./देह्रुवाड/समाप्त

दिनांक: 12/06/2021

विषय :- अतिरिक्त (अधीनस्थ) शहरी विद्युत वितरण विभाग (नियंत्रण) मध्ये कार्यरत असलेल्या शि. वी. अग्रवाल यांना, सहायक वि. वी. अधिकारी म्हणून नियुक्त करून देणे.

अतिरिक्त अधिकारी (अधीनस्थ) शि. वी. अग्रवाल यांना, सहायक वि. वी. अधिकारी म्हणून नियुक्त करून देणे.

अधीनस्थ अधिकारी (अधीनस्थ) शि. वी. अग्रवाल यांना, सहायक वि. वी. अधिकारी म्हणून नियुक्त करून देणे. अतिरिक्त अधिकारी (अधीनस्थ) शि. वी. अग्रवाल यांना, सहायक वि. वी. अधिकारी म्हणून नियुक्त करून देणे.

अधीनस्थ अधिकारी (अधीनस्थ) शि. वी. अग्रवाल यांना, सहायक वि. वी. अधिकारी म्हणून नियुक्त करून देणे.

अधीनस्थ अधिकारी (अधीनस्थ) शि. वी. अग्रवाल यांना, सहायक वि. वी. अधिकारी म्हणून नियुक्त करून देणे.

अधीनस्थ अधिकारी (अधीनस्थ) शि. वी. अग्रवाल यांना, सहायक वि. वी. अधिकारी म्हणून नियुक्त करून देणे.

अधीनस्थ अधिकारी (अधीनस्थ)
शि. वी. अग्रवाल यांना, सहायक वि. वी. अधिकारी म्हणून नियुक्त करून देणे.

अधीनस्थ अधिकारी (अधीनस्थ) शि. वी. अग्रवाल यांना, सहायक वि. वी. अधिकारी म्हणून नियुक्त करून देणे.

अधीनस्थ अधिकारी (अधीनस्थ) शि. वी. अग्रवाल यांना, सहायक वि. वी. अधिकारी म्हणून नियुक्त करून देणे.

अधीनस्थ अधिकारी (अधीनस्थ)
शि. वी. अग्रवाल यांना, सहायक वि. वी. अधिकारी म्हणून नियुक्त करून देणे.



Handwritten text at the top of the page, possibly a title or header.

Handwritten text in the upper left quadrant, possibly a date or reference.

Handwritten text in the upper middle quadrant, possibly a name or title.

Handwritten text in the upper right quadrant, possibly a name or title.

Handwritten text in the lower left quadrant, possibly a date or reference.

Handwritten text in the lower right quadrant, possibly a date or reference.

Handwritten text at the bottom right corner, possibly a date or reference.

400/220 KV Substation Landhora



ਸਰਕਾਰੀ ਆਰਡਰ ਨੰਬਰ: 400/220 KV Substation Landhora

ਸੰਦਰਭ: 10/10/2019

ਸਰਕਾਰੀ ਆਰਡਰ ਨੰਬਰ: 400/220 KV Substation Landhora

ਸੰਦਰਭ: 10/10/2019

ਸੰਦਰਭ: 10/10/2019

ਸੰਦਰਭ: 10/10/2019

ਸੰਦਰਭ: 10/10/2019

ਸੰਦਰਭ: 10/10/2019

ਸੰਦਰਭ: 10/10/2019

ਸੰਦਰਭ: 10/10/2019

ਸੰਦਰਭ: 10/10/2019

ਸੰਦਰਭ: 10/10/2019

ਸੰਦਰਭ: 10/10/2019

ਸੰਦਰਭ: 10/10/2019

ਸੰਦਰਭ: 10/10/2019

ਸੰਦਰਭ: 10/10/2019

ਸੰਦਰਭ: 10/10/2019

ਸੰਦਰਭ: 10/10/2019

ਸੰਦਰਭ: 10/10/2019

ਸੰਦਰਭ: 10/10/2019

SICIL



BA07117-1000
Executive Engineer
(Civil) Project
PCCOL, HQ-Suzhou

Warning

"The contents of this certificate are valid and authentic and shall not be used by any members of the public at www.china-bidding.com or at any authorized collection center address displayed at www.china-bidding.com."*

"Any alteration to this certificate will be considered as an altered certificate without effect and shall be treated as a criminal offense."

"This document contains sensitive information and shall be handled with Extra Caution. Please protect it from unauthorized access. Contains unclassified design details, full-scale drawings, and other sensitive information, artificial intelligence and other data."



202202100



वर्ग संख्या : गणितीयशास्त्र संख्या 5428 वर्ष 2021



॥ श्रीगणेशाय नमः ॥
 ॥ श्रीगणेशाय नमः ॥
 ॥ श्रीगणेशाय नमः ॥

सुख-दुःखविनाश
सर्वविनाश-पराजय
विनाश-पराजय-विनाश

Have you tried

000000



उत्तमिक एवं मायावीर्यमयः सः प्रतीतिः भवति । अस्मिन् चित्रे चन्द्रः विद्यमानः भवति ।

01 Jun 2021

01 20 000



Online Public Data Entry Summary

ukode2021075210382

Software used: after 2002: not

11-Jun-2021

12:26:52

Applicant Name:

Applicant Name:

Applicant Name:

Applicant Name: [redacted]

Applicant Name: [redacted]

Applicant Name: [redacted]

Applicant Name: [redacted]

Applicant Name:

Applicant Name:

Applicant Name: [redacted]

Applicant Name:

Applicant Name: [redacted]

Applicant Name:

Applicant Name: [redacted]

Applicant Name: [redacted]

Applicant Name: [redacted]

Applicant Name: [redacted]

Applicant Name: [redacted]

Applicant Name: [redacted]

Applicant Name: [redacted]

Applicant Name: [redacted]

Applicant Name: [redacted]

Applicant Name: [redacted]

Applicant Name: [redacted]

Applicant Name: [redacted]

Applicant Name: [redacted]

Applicant Name: [redacted]

Applicant Name: [redacted]

Applicant Name: [redacted]

Applicant Name: [redacted]

Applicant Name: [redacted]

Applicant Name: [redacted]

Applicant Name: [redacted]

Applicant Name: [redacted]

Applicant Name: [redacted]

Applicant Name: [redacted]

Applicant Name: [redacted]

Applicant Name: [redacted]

Applicant Name: [redacted]

Applicant Name: [redacted]

Applicant Name: [redacted]

Applicant Name: [redacted]

Applicant Name: [redacted]

Applicant Name: [redacted]

Applicant Name: [redacted]

Applicant Name: [redacted]

Applicant Name: [redacted]

Applicant Name: [redacted]

Applicant Name: [redacted]

Applicant Name: [redacted]

Applicant Name: [redacted]

Applicant Name: [redacted]

Applicant Name: [redacted]

STATE OF NEW YORK
DEPARTMENT OF TAXATION
INCOME TAX RETURN



NAME		RESIDENCE	
SINGLE		MARRIED	
WIDOW		DIVORCED	
GROSS INCOME			
DEDUCTIONS			
NET INCOME			
TAX			
REFUND			
BALANCE DUE			
PAID			
TOTAL			



Name of the person		Address		Occupation		Date of birth		Date of issue	
1									
2									
3									
4									
5									
6									
7									
8									
9									
10									



THE HONOURABLE THE CHIEF JUSTICE OF THE SUPREME COURT OF INDIA

CHIEF JUSTICE OF THE SUPREME COURT OF INDIA

CHIEF JUSTICE OF THE SUPREME COURT OF INDIA

CHIEF JUSTICE OF THE SUPREME COURT OF INDIA

CHIEF JUSTICE OF THE SUPREME COURT OF INDIA

CHIEF JUSTICE OF THE SUPREME COURT OF INDIA

CHIEF JUSTICE OF THE SUPREME COURT OF INDIA

CHIEF JUSTICE OF THE SUPREME COURT OF INDIA

CHIEF JUSTICE OF THE SUPREME COURT OF INDIA

CHIEF JUSTICE OF THE SUPREME COURT OF INDIA

CHIEF JUSTICE OF THE SUPREME COURT OF INDIA

CHIEF JUSTICE OF THE SUPREME COURT OF INDIA

CHIEF JUSTICE OF THE SUPREME COURT OF INDIA

CHIEF JUSTICE OF THE SUPREME COURT OF INDIA

CHIEF JUSTICE OF THE SUPREME COURT OF INDIA







04/06/41

EXECUTIVE ENGINEER
Executive Engineer
(Civil) Project
MPCUL, HQ, Bangalore





-2-

सिस्टोला अतिरिक्त एक ही पत्र 20-25 से 30-35 तक रेंग मिले हुए
 एक सदिशानुसार ही एक सदिश प्रतिक्रिया/प्रतिक्रिया/प्रतिक्रिया प्रतिक्रिया
 ही एक (Left Hand) की अनुक्रम में मिले-



सिस्टोला (Right Hand) की अनुक्रम में मिले-



द्वितीय सदिश (Left Hand)
 ही एक (Left Hand) की अनुक्रम में मिले-



सिस्टोला (Right Hand) की अनुक्रम में मिले-



1 2 3 4 5
 12

सिस्टोला (Left Hand)
 सिस्टोला (Right Hand)
 सिस्टोला (Left Hand)
 सिस्टोला (Right Hand)



संज्ञा : वि. 5.325 ४.७४ 279 ४ 422 ए. ४४४ 3408

का अर्थ दिनांक 01 Jun 2021 को एविरोडबाट लिएको हो।

पत्रिकाप्रकाशक / प्रकाशक
मुद्रण-विभाग, पत्रापीठ, रायपुर
01 June 2021



शहीद संकाय १ : विविध संकाय संकाय २१३३ वर्ष २०१३



संजय श्रीवास्तव का संकाय संकाय २१३३ वर्ष २०१३ में संकाय संकाय २१३३ वर्ष २०१३ में

संजय श्रीवास्तव /
संकाय संकाय २१३३ वर्ष २०१३



Chase

Baker

Scanned by CamScanner

5



यहाँ यहाँ लिखें कि जो भी व्यक्ति जिस किसी काम (कार) की, में काम,
 में कार्यरत रहने वाला रहने कि (होता)।

यहाँ यहाँ लिखें कि जो भी व्यक्ति जिस किसी काम (कार) में कार्यरत
 रहने वाला रहने कि (होता)।

DR. SURESH K. SHARMA
 Director
 (Fingerprint Section)
 (Fingerprint Section)
 (Fingerprint Section)

तारीख: 04-12-2018

(प्रमाणित) - यहाँ यहाँ लिखें, यहाँ यहाँ लिखें।

S. 100/100 E



1950/100

INDIA NON JUDICIAL
Government of Uttarakhand

e-Stamp

Certificate No.
Certificate Serial No.
Certificate Holder
Certificate Holder's Address
Certificate Holder's Occupation
Certificate Holder's Date of Birth
Certificate Holder's Date of Marriage
Certificate Holder's Date of Death

Certificate Holder's Photo
Certificate Holder's Signature
Certificate Holder's Seal
Certificate Holder's Stamp

1. The Government of Uttarakhand
2. The Government of Uttarakhand
3. The Government of Uttarakhand
4. The Government of Uttarakhand
5. The Government of Uttarakhand
6. The Government of Uttarakhand
7. The Government of Uttarakhand
8. The Government of Uttarakhand
9. The Government of Uttarakhand
10. The Government of Uttarakhand
11. The Government of Uttarakhand
12. The Government of Uttarakhand
13. The Government of Uttarakhand
14. The Government of Uttarakhand
15. The Government of Uttarakhand
16. The Government of Uttarakhand
17. The Government of Uttarakhand
18. The Government of Uttarakhand
19. The Government of Uttarakhand
20. The Government of Uttarakhand
21. The Government of Uttarakhand
22. The Government of Uttarakhand
23. The Government of Uttarakhand
24. The Government of Uttarakhand
25. The Government of Uttarakhand
26. The Government of Uttarakhand
27. The Government of Uttarakhand
28. The Government of Uttarakhand
29. The Government of Uttarakhand
30. The Government of Uttarakhand
31. The Government of Uttarakhand
32. The Government of Uttarakhand
33. The Government of Uttarakhand
34. The Government of Uttarakhand
35. The Government of Uttarakhand
36. The Government of Uttarakhand
37. The Government of Uttarakhand
38. The Government of Uttarakhand
39. The Government of Uttarakhand
40. The Government of Uttarakhand
41. The Government of Uttarakhand
42. The Government of Uttarakhand
43. The Government of Uttarakhand
44. The Government of Uttarakhand
45. The Government of Uttarakhand
46. The Government of Uttarakhand
47. The Government of Uttarakhand
48. The Government of Uttarakhand
49. The Government of Uttarakhand
50. The Government of Uttarakhand
51. The Government of Uttarakhand
52. The Government of Uttarakhand
53. The Government of Uttarakhand
54. The Government of Uttarakhand
55. The Government of Uttarakhand
56. The Government of Uttarakhand
57. The Government of Uttarakhand
58. The Government of Uttarakhand
59. The Government of Uttarakhand
60. The Government of Uttarakhand
61. The Government of Uttarakhand
62. The Government of Uttarakhand
63. The Government of Uttarakhand
64. The Government of Uttarakhand
65. The Government of Uttarakhand
66. The Government of Uttarakhand
67. The Government of Uttarakhand
68. The Government of Uttarakhand
69. The Government of Uttarakhand
70. The Government of Uttarakhand
71. The Government of Uttarakhand
72. The Government of Uttarakhand
73. The Government of Uttarakhand
74. The Government of Uttarakhand
75. The Government of Uttarakhand
76. The Government of Uttarakhand
77. The Government of Uttarakhand
78. The Government of Uttarakhand
79. The Government of Uttarakhand
80. The Government of Uttarakhand
81. The Government of Uttarakhand
82. The Government of Uttarakhand
83. The Government of Uttarakhand
84. The Government of Uttarakhand
85. The Government of Uttarakhand
86. The Government of Uttarakhand
87. The Government of Uttarakhand
88. The Government of Uttarakhand
89. The Government of Uttarakhand
90. The Government of Uttarakhand
91. The Government of Uttarakhand
92. The Government of Uttarakhand
93. The Government of Uttarakhand
94. The Government of Uttarakhand
95. The Government of Uttarakhand
96. The Government of Uttarakhand
97. The Government of Uttarakhand
98. The Government of Uttarakhand
99. The Government of Uttarakhand
100. The Government of Uttarakhand



VERIFIED
LOCKED

Signature

Print

THE GOVERNMENT OF UTTARAKHAND

है कि वे अधिकतम दूध को पैसा मिले इसकी हमीयत करते
बादकी बात बहुत पैसा मिले नहीं, बहुत ब लागत इसकी मिल
होता इसलिए वह पैसा के साथ में (200-250)

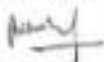
ये कि जिसके दूध मिले वह में अतः में अधिक दूध का पैसा मिले है।
किस बात दूध की लागत बहुत अधिक इसकी मिल होता है। वह बहुत
है।

किस दूध का वह का बहुत है बर, बहुत अतः में दूध का पैसा है,
जिसके अतः में वह बहुत अतः में है। जिसके साथ ही दूध मिले व लागत
किसी का दूध अधिकतम (200 है)।

जिसके ही कि जिसके में दूध मिले इसकी लागत बहुत कम लागत
किसके साथ है वह जिसके दूध में कम लागत लागत जिसके का अधिकतम
किसके जिसके लागत में कम लागत है वह जिसके का लागत अधिकतम
है वह का लागत है।

जिसके में इसकी पैसा जिसके दूध में अधिकतम अधिकतम लागत
जिसके पैसा जिसके दूध में अधिकतम दूध जिसके का अधिकतम
अधिकतम (लागत) जिसके पैसा, 1 जिसके अतः इसकी पैसा
होता (लागत का पैसा लागत 1200) वह का अधिकतम अधिकतम,
लागत, अधिकतम व दूध लागत अधिकतम की वह अधिकतम पैसा है। जो कि
अधिकतम व अधिकतम लागत का जिसके की जिसके दूध में कम है लागत अधिकतम
में दूध की लागत है वह इसकी जिसके में दूध का दूध 1,18,84,150/- इसकी
में दूध की लागत का पैसा में लागत जिसके दूध पैसा लागत में दूध का पैसा
है, जिसके अतः पैसा का अधिकतम अधिकतम इसकी का पैसा अधिकतम में दूध का
पैसा का है।

जिसके का दूध का अधिकतम व पैसा बहुत लागत व लागत पैसा का पैसा का
का पैसा का पैसा में दूध में दूध का दूध जिसके में दूध का दूध अधिकतम व
अधिकतम की का है। पैसा-पैसा में दूध अधिकतम लागत में पैसा 12-15-1500
में दूध में दूध लागत है। जिसके दूध पैसा में दूध दूध में दूध का दूध
अधिकतम पैसा का है।




सर्वोच्च न्यायालय, न्यायाधीशों की सूची, 2018



सर्वोच्च न्यायालय का न्यायाधीश है। न्यायाधीशों की सूची, 2018

न्यायाधीश न्यायाधीश
न्यायाधीश न्यायाधीश
न्यायाधीश न्यायाधीश

Submitted by: Chambers





Downloaded by [University of Cambridge]

GOVT. OF INDIA
MID POWER TRANSMISSION
CORPORATION OF BIRBHANGAL
LIMITED
27052004
PAEC01785F

B
S

University of California

+
3
1

श्री गुरु : श्री 4,320 वेतन 120 रु. 150,20,000 रु. 100

श्री गुरु : 24 Dec 2018 श्री गुरुगुरु श्री गुरु

श्री गुरु श्री गुरु /
श्री गुरु, श्री गुरु,
24 Dec 2018



श्री गुरु : 24 Dec 2018 श्री गुरुगुरु श्री गुरु



1970/1971

INDIA NON JUDICIAL Government of Uttarakhand

e-Stamp

Certificate No.

Certificate Serial No.

Amount Paid (Rs.)

Amount Due (Rs.)

Paid to

Declaration of Document

Property Description

Construction Price (Rs.)

Year Paid

Stamp Duty Paid

Stamp Duty Amount (Rs.)

- 1. 100/10000000000
- 2. 100/10000000000
- 3. 100/10000000000
- 4. 100/10000000000
- 5. 100/10000000000
- 6. 100/10000000000
- 7. 100/10000000000
- 8. 100/10000000000
- 9. 100/10000000000
- 10. 100/10000000000
- 11. 100/10000000000
- 12. 100/10000000000
- 13. 100/10000000000
- 14. 100/10000000000
- 15. 100/10000000000
- 16. 100/10000000000
- 17. 100/10000000000
- 18. 100/10000000000
- 19. 100/10000000000
- 20. 100/10000000000
- 21. 100/10000000000
- 22. 100/10000000000
- 23. 100/10000000000
- 24. 100/10000000000
- 25. 100/10000000000
- 26. 100/10000000000
- 27. 100/10000000000
- 28. 100/10000000000
- 29. 100/10000000000
- 30. 100/10000000000
- 31. 100/10000000000
- 32. 100/10000000000
- 33. 100/10000000000
- 34. 100/10000000000
- 35. 100/10000000000
- 36. 100/10000000000
- 37. 100/10000000000
- 38. 100/10000000000
- 39. 100/10000000000
- 40. 100/10000000000
- 41. 100/10000000000
- 42. 100/10000000000
- 43. 100/10000000000
- 44. 100/10000000000
- 45. 100/10000000000
- 46. 100/10000000000
- 47. 100/10000000000
- 48. 100/10000000000
- 49. 100/10000000000
- 50. 100/10000000000
- 51. 100/10000000000
- 52. 100/10000000000
- 53. 100/10000000000
- 54. 100/10000000000
- 55. 100/10000000000
- 56. 100/10000000000
- 57. 100/10000000000
- 58. 100/10000000000
- 59. 100/10000000000
- 60. 100/10000000000
- 61. 100/10000000000
- 62. 100/10000000000
- 63. 100/10000000000
- 64. 100/10000000000
- 65. 100/10000000000
- 66. 100/10000000000
- 67. 100/10000000000
- 68. 100/10000000000
- 69. 100/10000000000
- 70. 100/10000000000
- 71. 100/10000000000
- 72. 100/10000000000
- 73. 100/10000000000
- 74. 100/10000000000
- 75. 100/10000000000
- 76. 100/10000000000
- 77. 100/10000000000
- 78. 100/10000000000
- 79. 100/10000000000
- 80. 100/10000000000
- 81. 100/10000000000
- 82. 100/10000000000
- 83. 100/10000000000
- 84. 100/10000000000
- 85. 100/10000000000
- 86. 100/10000000000
- 87. 100/10000000000
- 88. 100/10000000000
- 89. 100/10000000000
- 90. 100/10000000000
- 91. 100/10000000000
- 92. 100/10000000000
- 93. 100/10000000000
- 94. 100/10000000000
- 95. 100/10000000000
- 96. 100/10000000000
- 97. 100/10000000000
- 98. 100/10000000000
- 99. 100/10000000000
- 100. 100/10000000000



VERIFIED
J. S. Lohani

Amey

B. S.

UP 0013882184

Stamp Duty Paid

Stamp Duty Amount (Rs.)

Stamp Duty Amount (Rs.)

Stamp Duty Amount (Rs.)

Stamp Duty Amount (Rs.)

सर्वी प्रमाण-1 (सिंहप्रमाण प्रमाण-1) वर्ष 2018



सर्वी प्रमाण-1



सर्वी प्रमाण-1
सर्वी प्रमाण-1
सर्वी प्रमाण-1



सर्वी प्रमाण-1



सर्वी प्रमाण-1



सर्वी प्रमाण-1 सर्व प्रमाण-1 है। सर्व प्रमाण-1 सर्व प्रमाण-1 है।

सर्व प्रमाण-1 /
25-11-2018, 12:41:11
24 Oct 2018







आयकर विभाग
INCOME TAX DEPARTMENT

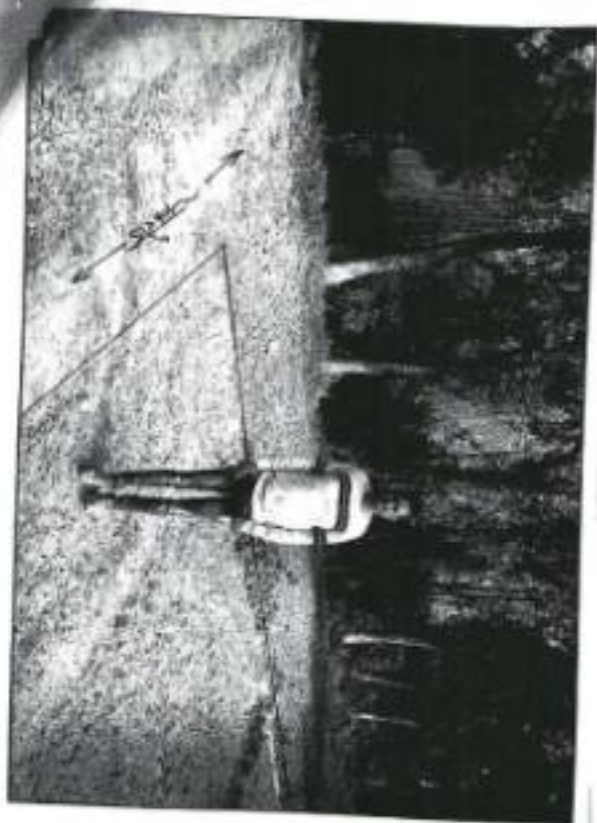


भारत सरकार
GOVT. OF INDIA

M D POWER TRANSMISSION
CORPORATION OF UTTARANCHAL
LIMITED
27/05/2004

भारत सरकार, नई दिल्ली

AAECM1785F

*See**Page*

संज्ञासूची १ दिनांक २४.१२.२०१८ के मुताबिक २४.१२.२०१८

२४.१२.२०१८ - २४.१२.२०१८ २४.१२.२०१८ के मुताबिक २४.१२.२०१८

संज्ञासूची १ दिनांक २४.१२.२०१८ के मुताबिक २४.१२.२०१८



B-100/2518



INDIA NON JUDICIAL
Government of Uttarakhand

e-Stamp

Keywords: child abuse; child sexual abuse; child sexual exploitation

Electrode Placement

Keywords

Intergroup Dissimilarity

Financed by

Endorsing Values of Entrepreneurship

Figure 1. Conceptual Framework

© Cambridge University Press 1999

Steven Shpreley

Standard Error

Strong Early Practice

Source: U.S. Census Bureau, *Current Population Reports*, 1990.

How to Buy the Best Value

[illegible]

THEORY OF THE MIND

Source: *U.S. Census Bureau, Current Population Reports, 1990*

Copyright © 2004 John Wiley & Sons, Inc.

April 18, 1999

© 2004 Blackwell Publishing Ltd, *Journal of Internal Medicine* 255: 103–110

ALFRED S. MARSH, JR., DIST. MANAGER

1.25 ONE COPY

John Green Teases One Last Thing Left: Treasure Chests, Injured and Dying Soldiers

© 2004 Blackwell Publishing Ltd
Journal of Internal Medicine 255: 111–118

© 2004 Blackwell Publishing Ltd
Journal of Internal Medicine 255: 105–112

EXECUTIVE SUMMARY CAN BE FOUND AT <http://www.who.int>

2004-05-01

Twenty-four

VERIFIED
LOCKED

UTP 9003882590

5

पिंजरा के बाएँ हाथ की अंगुली के निशान-



पिंजरा के बाएँ हाथ की अंगुली के निशान-



पिंजरा के बाएँ हाथ की अंगुली के निशान-



पिंजरा के बाएँ हाथ की अंगुली के निशान-



SE "मोडल 321C"

Shankar

पिंजरा

पिंजरा

मोडल

सही संख्या 1 एडिडिगेशन संख्या 3100 अर्ध 2010

सही संख्या 1 एडिडिगेशन संख्या 3100 अर्ध 2010

सही संख्या 1 एडिडिगेशन संख्या 3100 अर्ध 2010

सही संख्या 1 एडिडिगेशन संख्या 3100 अर्ध 2010

सही संख्या 1 एडिडिगेशन संख्या 3100 अर्ध 2010

सही संख्या 1 एडिडिगेशन संख्या 3100 अर्ध 2010

सही संख्या 1 एडिडिगेशन संख्या 3100 अर्ध 2010



सही संख्या 1 एडिडिगेशन संख्या 3100 अर्ध 2010

सही संख्या 1 एडिडिगेशन संख्या 3100 अर्ध 2010

सही संख्या 1 एडिडिगेशन संख्या 3100 अर्ध 2010

सही संख्या 1 एडिडिगेशन संख्या 3100 अर्ध 2010

सही संख्या 1 एडिडिगेशन संख्या 3100 अर्ध 2010

सही संख्या 1 एडिडिगेशन संख्या 3100 अर्ध 2010



निम्न से को एक ही अंगुली के निम्न-

अंगुली तर्जनी मध्य अनामिका अक्षिणी



निम्न से को एक ही अंगुली के निम्न-

अंगुली तर्जनी मध्य अनामिका अक्षिणी



निम्न से को एक ही अंगुली के निम्न-

अंगुली तर्जनी मध्य अनामिका अक्षिणी



निम्न से को एक ही अंगुली के निम्न-

अंगुली तर्जनी मध्य अनामिका अक्षिणी



SE मोहित 3/4/15

समस्त

शक्तिमान

8/2/15

मोहित

परी बसतः १. एलिक्ट्रोनिक संख्या 0160-अर्ग 2018



सुरेश शिंदे



सुरेश शिंदे



सुरेश शिंदे



सुरेश शिंदे



सुरेश शिंदे



सुरेश शिंदे



सुरेश शिंदे



सुरेश शिंदे



उपरोक्त सूची में सूचीबद्ध नाम सूची में दर्शाए गए हैं। सूची के अंतर्गत विद्युत निगरानी के लिए सूची है।

एलिक्ट्रोनिक निगरानी /
उप-निगरानी, सुरक्षा, सेवा
24 जन 2018





भारत विज्ञान अकादमी





msad/





2/10/11



आयकर विभाग
INCOME TAX DEPARTMENT

भारत सरकार
GOVT OF INDIA

M D POWER TRANSMISSION
CORPORATION OF UTTARANCHAL
LIMITED

27/05/2004

AAECM1785F

पैर के दाहिने ओर की अंगुठियों के निशान-

अंगुठ

अंगुठ

अंगुठ

अंगुठ

अंगुठ



पैर के बाएँ ओर की अंगुठियों के निशान-

अंगुठ

अंगुठ

अंगुठ

अंगुठ

अंगुठ



पता नम्बर 1-पुलिस थाना जूरी की गलती से निकली फलान नम्बर 10, वे जमाने की कार्रवाई करने के लिये जारी किया जा रहा है।

पता नम्बर 2-पुलिस थाना जूरी की गलती से निकली फलान नम्बर 10, वे जमाने की कार्रवाई करने के लिये जारी किया जा रहा है।

DR. SURESH K. SHARMA
Advocate
Court No. 10, Sector
10, Con. No. 10, 10/10/10
10/10/10

तारीख 24-12-2010

इतिहास-पुलिस थाना जूरी, जमाने की कार्रवाई जारी किया जा रहा है।

Dr. Suresh K. Sharma

रजिस्ट्रार

(Signature)

मा. 10/10/10

पट्टी संख्या 1 किंग 4,000 के पुर 385 से 340 का समय 2018

पट्टी का दिनांक 24 Dec 2018 को एंटीकॉल्लिजन डिस्क 440


 अभिलेखित अधिकारी /
 ज. विभाग, पट्टी, एयर
 24 Dec 2018

पट्टी नं. 639/1019 से 16-517 को 4/3/19



Appendix-4: Geo Spatial Assessment on High Voltage Power Lines - PTCUL

Methodology

As per consultation held with PTCUL, the area required for the tower base depends on the type of tower and other design features. The EPC contractor will determine the tower design after the detailed survey. In general, the maximum tower base area required is 400sqm for 440 kV line, 400sqm for 220 kV line, and 350sqm for 132 kV line. The ROW width is 46m for 400 kV, 35m for 220 kV, and 27m for 132 kV power line.

These high voltage Power line will acquire easement rights on the land where towers will be constructed and over the power line corridor (or ROW) for operation and maintenance. The imposition of the ROW restrictions is involuntary and causes economic displacement (diminution of land value and partial loss of income from productive assets).

The implementation agencies have identified the Power route through a preliminary route walkover survey, and the detailed planning will be carried out by the EPC contractor. The notification of the ROW in official gazette by competent authority that will establish a cut-off date will be done after the detailed survey by the contractor.

Considering the likelihood of change in the ROW corridor and avoid any opportunistic modifications in existing land-use by land owners, it was decided to carry out the social assessment using google earth imagery and consulting elected representatives and community representatives along the Power line corridor.

The potential tower locations (coordinates) identified by implementation agency during their preliminary route walk over survey were plotted on the google earth image and the center line of the power line route was established. The ROW corridor was drawn as per the voltage level of particular Power line. The study team did a geo-spatial assessment prior to the site visit and community consultations.

The geo-spatial assessment of the google earth imagery included following visible features:

Built up area with visible structures, boundary walls, pump-houses etc.

Water bodies- ponds, river/stream, canals

Land categories- agricultural plots, fallow land or trees/ dense foliage-.

The geospatial assessment was used to get an estimate of number of agricultural plots (proxy for number of land owners), area and type of land within the powerline corridor. It also helped in identifying spots for avoidance of physical displacement.

The geospatial maps were prepared for sections of Power line alignment and used during site-visit for ground truthing. The study team visited the sensitive spots and sections of line where the land use was not clear from the google image or structures were identified within the ROW corridor.

Land-use Google Earth Images of High Voltage Power Line Corridors

400kV Landhara Substation to Kashipur-Puhana Line



Figure 1: Kashipur-Puhana line alignment

Table 1: Summary of geo-spatial analysis of Kashipur-Puhana Line

From Tower No	To Tower No	Span Length in Meters	R/W Width	Total R/W Area in Sqm	Area Covered by Tree	Area under Agricultural Use in Sqm	Area of Fallow Land/River in Sqm	Build-up Area in Sqm	No of Structures	No of Agricultural Plots	No of Fallow Plots	Pole material structure in vicinity (V/M)	Type of Land Tower base (Cut/valley or Fallow)

AP 1	AP 2	347.27 0172	46	10074 4275	0	11529 4275	4048	0	0	10	0	N	Cultiv ated
AP 2	AP 3	321.15 0268	46	14772 3123	0	14772 3123	0	0	0	10	0	N	Cultiv ated
AP 3	AP 4	256.30 7115	46	11817 7273	0	9701 72729	2116	0	0	4	0	N	Cultiv ated
AP 4	AP 5	266.14 7379	46	11782 7794	0	11782 7794	0	0	0	8	0	N	Cultiv ated
AP 5	AP 6	211.33 4042	46	9721 36593	0	9721 36593	0	0	0	5	0	N	Cultiv ated
AP 6	AP 7	177.80 3184	46	8173 88646	0	8173 88646	0	0	0	7	0	N	Cultiv ated
AP 7	AP 8	100.44 6413	46	7794 535	0	7794 535	0	0	0	3	0	N	Cultiv ated
AP 8	AP 9	140.16 7636	46	6447 71121	0	6447 71121	0	0	0	5	0	N	Cultiv ated
AP 9	AP 10	175.83 5976	46	8088 4549	0	8088 4549	0	0	0	5	0	N	Cultiv ated
AP 10	AP 11	241.88 2516	46	11126 5857	0	11126 5857	0	0	0	6	0	N	Cultiv ated
AP 11	AP 12	177.15 5754	46	8149 16468	0	8149 16468	0	0	0	5	0	N	Cultiv ated
AP 12				0	0								Cultiv ated
		2474.9 90454		11384 9.561	0	10768 9.561	6164	0	0	68	0		

220kV Landya Substation to Mangalore-Nara Line



Figure 2: Complete alignment of Mangalore-Nara power line

Table 2. Summary of geo-spatial analysis of Mangalore-Nara high voltage power line

From Tower / No.	To Tower / No.	Span Length in Meters	R/W Width	Total R/W Area in Sqm	Area Covered by Trees	Area under Agricultural Use in Sqm	Area of Fallow Land in Sqm	Build-up Area in Sqm	No of Structures	No of Agricultural Plots	No of Fallow Plots	Potential Cultural Structures in vicinity (V/N)	Type of Land Use / Base Cultivated or Fallow
AP1	AP2	207.51	35	7262.85	1750.86	5512.85	0.00	0	0	7	0	N	Cultivated
AP2	AP3	545.06	35	19077.09	3115.86	15962.09	0.00	0	0	13	0	N	Cultivated
AP3	AP4	325.88	35	11405.67	0.00	11405.67	0.00	0	0	5	0	N	Cultivated
AP4	AP5	661.37	35	23148.00	0.00	23148.00	0.00	0	0	18	0	N	Cultivated
AP5	AP6	723.46	35	25321.13	0.00	25321.13	0.00	0	0	11	0	N	Cultivated
AP6	AP7	249.53	35	8733.49	0.00	8733.49	0.00	0	0	0	0	N	Cultivated
AP7	AP8	496.98	35	17464.37	0.00	17464.37	0.00	0	0	9	0	N	Cultivated
AP8	AP9	344.54	35	8558.76	0.00	8558.76	0.00	0	0	4	0	N	Cultivated
AP9	AP10	330.31	35	11561.00	0.00	11561.00	0.00	272	1	5	0	N	Fallow
AP10	AP11	214.70	35	7514.35	0.00	6744.35	770.00	0	0	7	1	N	Cultivated
AP11	AP12	341.52	35	8453.34	0.00	1313.34	7140.00	0	0	2	2	N	Fallow
AP12	AP13	164.98	35	5774.26	0.00	5774.26	0.00	0	0	0	0	N	Cultivated
AP13	AP14	365.10	35	12776.56	0.00	12776.56	0.00	0	0	14	0	N	Cultivated

From Tower / No	To Tower / No	Span Length in Meters	R/W Width	Total R/W Area in Sq m	Area Covered by Trees	Area under Agricultural Use in Sq m	Area of Fallow Land in Sq m	Build- up Area in Sq m	No of St- ructures	No of Agricultural Plots	No of Fallow Plots	Poten- tial Cultural Structures in vicinity (VIN)	Type of Land Tower bases Cultivated or Fallow
AP14	AP13	543.16	35	15010.43	0.00	15010.43	0.00	0	0	11	0	N	Cultivated
AP15	AP16	432.63	35	15141.50	0.00	15141.50	0.00	0	0	9	0	N	Cultivated
AP16	AP17	126.90	35	4441.60	0.00	4441.60	0.00	0	0	4	0	N	Cultivated
AP17	AP18	493.80	35	17282.57	0.00	14482.57	2800.00	0	0	8	1	N	Cultivated
AP18	AP19	414.87	35	14520.50	0.00	13470.50	1050.00	0	0	9	1	N	Cultivated
AP19	AP20	285.14	35	9975.99	0.00	9975.99	0.00	0	0	7	0	N	Cultivated
AP20	AP21	334.94	35	11722.76	0.00	11722.76	0.00	0	0	8	0	N	Cultivated
AP21	AP22	337.12	35	11799.21	0.00	11799.21	0.00	0	0	8	0	N	Cultivated
AP22	AP23	297.34	35	10406.77	0.00	10406.77	0.00	0	0	7	0	N	Cultivated
AP23	AP24	553.47	35	5721.58	0.00	5721.58	0.00	0	0	4	0	N	Cultivated
AP24	AP25	465.83	35	16303.97	0.00	16303.97	0.00	68	2	11	0	N	Cultivated
AP25	AP26	562.65	35	19682.81	0.00	19682.81	0.00	0	0	17	0	N	Cultivated
AP26	AP27	184.57	35	6458.84	0.00	6458.84	0.00	20	1	8	0	N	Cultivated
AP27	AP28	470.70	35	16474.58	0.00	16474.58	0.00	0	0	12	0	N	Cultivated

From Town + No.	To Town + No.	Span Length in Meters	No W W dth	Total Roof Area in Sq.m	Area Covered by Trees	Area under Agricultural Use in Sq.m	Area of Fallow Land in Sq.m	Built up Area in Sq.m	No of Structures	No of Agricultural Plots	No of Fallow Plots	Potential Cultural Structures in vicinity (Y/N)	Type of Land Towers bases Cultivated or Fallow
AP28	AP29	335.8 6	35	11755 .10	0.00	11755 .10	0.00	0	0	0	0	N	Cultivated
AP29	AP30	433.8 5	35	15184 .00	0.00	15184 .00	0.00	0	0	7	0	N	Cultivated
AP30	AP31	165.5 9	35	5795. 62	0.00	5795. 62	0.00	0	0	3	0	N	Cultivated
AP31	AP32	309.2 8	35	10825 .00	0.00	10825 .00	0.00	0	0	10	0	N	Cultivated
AP32	AP33	331.7 4	35	11610 .76	0.00	11610 .76	0.00	0	0	11	0	N	Cultivated
AP33	AP34	283.8 5	35	9934. 81	0.00	9934. 81	0.00	0	0	7	0	N	Cultivated
AP34	AP35	390.9 2	35	13682 .10	0.00	13682 .10	0.00	24	1	14	0	N	Cultivated
AP35	AP36	506.2 5	35	17718 .91	0.00	17718 .91	0.00	0	0	12	0	N	Cultivated
AP36	AP37	564.8 4	35	19773 .00	4200. 36	15573 .00	0.00	0	0	11	0	N	Cultivated
AP37	AP38	385.4 1	35	13489 .36	0.00	13489 .36	0.00	0	0	12	0	N	Cultivated
AP38	AP39	222.1 5	35	7775. 35	0.00	7775. 35	0.00	0	0	5	0	N	Cultivated
AP39	AP40	301.7 4	35	10560 .90	0.00	10560 .90	0.00	0	0	6	0	N	Cultivated
AP40	AP41	309.6 6	35	10838 .09	0.00	10838 .09	0.00	0	0	8	0	N	Cultivated

From Tower (No)	To Tower (No)	Span Length in Meters	R/W Width	Total R/W Area in Sq m	Area Covered by Trees	Area under Agricultural Use in Sq m	Area of Fallow Land in Sq m	Build- up Area in Sq m	No of Struc- tures	No of Agricultural Plots	No of Fallow Plots	Poten- tial Cultural Structures in vicinity (VIN)	Type of Land Tower bases Cultivated or Fallow
AP41	AP42	627.7 3	35	21970 54	0.00	21970 54	0.00	0	0	13	0	N	Cultivated
AP42	AP43	379.0 4	35	13266 48	0.00	13266 48	0.00	0	0	5	0	N	River
AP43	AP44	323.2 7	35	11314 47	0.00	11314 47	0.00	19	1	7	0	N	Cultivated
AP44	AP45	558.7 7	35	5907. 00	0.00	5907. 00	0.00	0	0	4	0	N	Cultivated
AP45	AP46	587.1 3	35	6549. 45	0.00	6549. 45	0.00	0	0	3	0	N	Cultivated
AP46	AP47	227.3 4	35	7556. 99	0.00	7556. 99	0.00	18	2	0	0	N	Cultivated
AP47	AP48	110.6 0	35	3871. 07	0.00	3871. 07	0.00	0	0	5	0	N	Cultivated
AP48	AP49 EXT	77.80	35	2722. 88	0.00	2722. 88	0.00	0	0	3	0	N	Cultivated
AP49 EXT	AP50 EXT	364.8 1	35	12768 37	0.00	12768 37	0.00	0	0	10	1	N	Cultivated
AP50 EXT	AP51	255.1 0	35	8966. 45	0.00	8966. 45	0.00	0	0	7	0	N	Cultivated
AP51	AP52	501.9 4	35	17567 83	0.00	17567 83	0.00	12	1	13	0	N	Cultivated
AP52	AP53	387.7 7	35	13571 82	0.00	13571 82	0.00	0	0	10	0	N	Cultivated
AP53	AP54	428.2 5	35	14990 07	0.00	14990 07	0.00	0	0	8	0	N	Cultivated
AP54	AP55	477.0 0	35	16654 90	0.00	16654 90	0.00	0	0	10	0	N	Cultivated

From Tower # No.	To Tower # No.	Span Length in Meters	No W W ds	Total Roof Area in Sq.m	Area Covered by Trees	Area under Agricultural Use in Sq.m	Area of Fallow Land in Sq.m	Built up Area in Sq.m	No of Structures	No of Agricultural Plots	No of Fallow Plots	Potential Cultural Structures in vicinity (Y/N)	Type of Land Tower bases Cultivated or Fallow
AP55	AP56	411.2 1	35	14362 .51	0.00	14392 .51	0.00	0	0	8	0	N	Cultivated
AP56	AP57	240.1 0	35	8405. 04	0.00	8405. 04	0.00	0	0	6	0	N	Cultivated
AP57	AP58	264.4 1	35	9254. 52	0.00	9254. 52	0.00	0	0	5	0	N	Cultivated
AP58	AP59	235.7 8	35	8252. 09	0.00	8252. 09	0.00	0	0	5	0	N	Cultivated
AP59	AP60	180.9 4	35	6332. 80	0.00	6332. 80	0.00	0	0	5	0	N	Cultivated
AP60	AP61	327.1 2	35	11449 .28	2100. 00	6209. 28	3080. 00	0	0	7	1	N	Cultivated
AP61	AP62	203.4 2	35	7115. 62	1225. 00	5894. 62	0.00	0	0	5	0	N	Cultivated
AP62	AP63	107.1 9	35	3751. 78	490.0 0	3261. 78	0.00	0	0	4	0	N	Cultivated
AP63	AP64	214.1 3	35	7494. 63	0.00	5814. 63	1680. 00	0	0	6	1	N	Road
AP64	AP65	204.5 6	35	7159. 51	0.00	7159. 51	0.00	0	0	4	0	N	Cultivated
AP65	AP66	130.4 9	35	4567. 16	0.00	4567. 16	0.00	0	0	4	0	N	Cultivated
AP66	AP67	147.1 0	35	5148. 34	0.00	5148. 34	0.00	0	0	4	0	N	Cultivated
AP67	AP68	98.87	35	3460. 48	0.00	3460. 48	0.00	0	0	2	0	N	Cultivated

From Tower / No	To Tower / No	Span Length in Meters	R/W Width	Total R/W Area in Sq m	Area Covered by Trees	Area under Agricu- ltural Use in Sq m	Area of Fallow Land in Sq m	Buil- ding Area in Sq m	No of St- ructures	No of Agricultural Plots	No of Fallow Plots	Poten- tial Cultural Structures in vicinity (Y/N)	Type of Land Tower bases Cultivated or Fallow
AP68	AP69	118.24	35	4138.41	0.00	4138.41	0.00	0	0	3	0	N	Cultivated
AP69	AP70	85.59	35	2995.59	0.00	2995.59	0.00	0	0	3	0	N	Cultivated
AP70	AP71	49.77	35	1742.04	0.00	1742.04	0.00	0	0	1	0	N	Cultivated
AP71	AP72	61.41	35	2149.23	0.00	2149.23	0.00	0	0	3	0	N	Cultivated
AP72	AP73	64.12	35	2244.32	0.00	2244.32	0.00	0	0	3	0	N	Cultivated
AP73	AP74	40.90	35	1431.67	0.00	1431.67	0.00	0	0	1	0	N	Cultivated
AP74	AP75	47.88	35	1675.81	0.00	1675.81	0.00	0	0	1	0	N	Cultivated
AP75	AP76	39.04	35	1366.33	0.00	1366.33	0.00	0	0	2	0	N	Cultivated
AP76	AP77	34.08	35	1192.86	0.00	1192.86	0.00	0	0	1	0	N	Cultivated
AP77	AP78	56.82	35	3388.67	0.00	3388.67	0.00	0	0	4	0	N	Cultivated
AP78	AP79	58.11	35	2033.98	0.00	2033.98	0.00	0	0	1	0	N	Cultivated
AP79	AP80	54.89	35	1914.32	0.00	1914.32	849.00	0	0	1	1	N	Cultivated
AP80													Fallow
Total		2246.104		78613.645	1288.000	75389.645	1738.000	433.000	9.000	542.000	9.000		



Figure 3: Mangalore-Nam Power Line: View of Mangalore-Nam Power Line 220 Kv to 220 Kv



Figure 4. Manglapur-Nara Flyover/Under deck of TCSB between A¹-4 and A¹-5



Figure 5. Mangapur-Narva Power Line- View of Polysilicon Tower AC-4 to AC-10



Figure D: Mangapur-Nara Power Line-View of Horizontal Tower AP-11 to AP-14



Figure 2: Manglapur-Nara Power Line-View of Right of Way Tower AT-13 to AT-17



Figure B. Manglapur-Nara Power Line: View of High Voltage Corridor from 26°58' to 26°20'



0 100 200 300
meters

- Substation
- Power line
- Right of Way - 100m buffer

Mangapur-Nara (220 Kv)

Map is only for reference to locate the project. Data, Maps, Development Data (2010)
Data Source: Power Transmission Corporation of Bangladesh, version (2014)

Mangapur-Nara Flared Loop- View of Right corridor from A1425 to A1426



Monglapur-Narn (220 Kv)

Map created for submission to State Electricity Board, Bihar Development Board (2006)
 Map data by Power Transmission Department of Khabarpur, Bihar (2012)

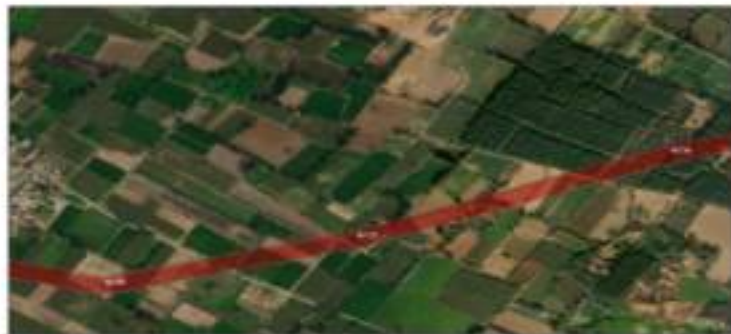
Monglapur-Narn Power Line- View of NWI control Tower A1421 to A1429



Mangalore-Nara (220 Kv)

Map of Mangalore-Nara (220 Kv) power line route, showing the route from Mangalore to Nara (2020).
 Date: 20-10-2020. Project: Mangalore-Nara (220 Kv) power line route (2020).

Mangalore-Nara Power Line- View of North towards Tower A1~00 to A1~03



Mangapur-Nara (220 Kv)

Plan Location: 30° 10' 00" N to 30° 15' 00" N, 76° 00' 00" E to 76° 05' 00" E
 Data Source: Power Transmission Corporation of India (PTCL)

Mangapur-Nara Power Line: West of N.W. corner: Tower M104 to M105



0 0.5 1 1.5 2
Kilometers

- Tower locations
- Center line
- ▬ Right of way (width 40m)

Manglapur-Nara (220 Kv)

Planned 220kv line connecting to Nara-Bhagpur (220kv), Nara-Bhagpur-Nara (220kv)
 (220kv line) - Power Transmission Corporation (Karnataka Power Corporation Ltd.)

Manglapur-Nara Power Line: View of Right of way: Tower A14-01 to A14-03



Mangalore-Narn (220 Kv)

Map of the Mangalore-Narn (220 Kv) power line. The map shows the power line route from Mangalore to Narn. The map is a vector map of the power line route. The map is a vector map of the power line route. The map is a vector map of the power line route.

Mangalore-Narn Power Line: Map of Mangalore-Narn Power Line



Manglapur-Nara (220 Kv)

Map is taken from corridor plan (Manglapur-Nara, Nara Management Board (NMB))
 (Map is by Nara Management Board (NMB) of Manglapur-Nara, Nara)

Manglapur-Nara Power Line: View of HVW corridor from N142 to N143



0 10 20 30 Kilometers



Mangapur-Nara (220 kV)

Map showing the Mangapur-Nara 220 kV transmission line, with Mangapur-Nara 220 kV substation. The map is a satellite image showing the transmission line and surrounding area.

Mangapur-Nara 220 kV Transmission Line View of Mangapur-Nara 220 kV substation



0 10 20 30 40 Kilometers

- Power Substation
- Power Line
- ▬ High Voltage / Ultra High Voltage

Manglapur-Nara (220 Kv)

Map of India showing the location of Manglapur-Nara, Bihar, India. The map is a satellite image showing the surrounding area. The power line route is highlighted in red.

Mangrove Park (Front Lotus View of 100ft concrete Tower 40'48" to 40'40" (5'5"))



Mongla-More (220 Kv)

© 2005 The Authors
Journal compilation © 2005 Blackwell Publishing Ltd

Manuscript to be reviewed



0 10 20 30
Kilometers



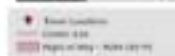
Manglapur-Nara (220 Kv)

Map is taken from satellite data from Google Earth. Study Area is highlighted in red color.
 (Map is not to scale. Please Refer map for more details.)

Manglapur-Nara Power Line View of Right of Way - Study Area



0 10 20 30 40 50
Kilometers



Manglapur-Nara (220 Kv)

Map created by the Government of India, Survey of India, Bangalore and the IIT Bombay
Copyright © 2000. All Rights Reserved. Reproduction of this map is prohibited.

Mangrove Park (Pond Lake) View of Hill opposite Tower 401-40



0 10 20 30 Kilometers



Tower Locations



Power Line



Height of Tower - 60.25 to 65.45

Mangalore-Nero (220 Kv)

This Project is a part of the Mangalore-Nero, 220 kV Transmission Line project. The project is a part of the Mangalore-Nero, 220 kV Transmission Line project.

Mangalore-Nero Project: Aerial View of 220 kV Transmission Line



0 10 20 30 Kilometers



Mangalore-Hara (220 Kv)

Map of India showing the location of Mangalore-Hara (220 Kv) transmission line. The map is a satellite image with a red line indicating the transmission line route. The line starts near Mangalore and runs towards Hara. The map is titled 'Mangalore-Hara (220 Kv)'.

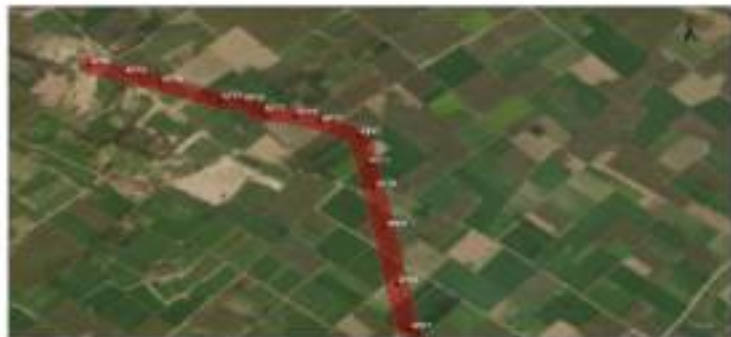
Mangalore-Hara (220 Kv) - View of North central Tower AT-42 to AT-43



Mangalore-Nero (220 Kv)

Map is for the corridor in the Mangalore-Nero Area. Government Data (2000) and Google Earth (2000) are used. Right of Way is 200m Corridor (200m Corridor).

Mangalore-Nero Power Line View of Right corridor from AP-01 to AP-07



Manglapur-Nara (220 kV)

Map created by the Department of Public Information, Tamil Nadu Government, Chennai
 Data Source: Power Transmission Department, Government of India

Manglapur-Nara Power Line- View of North corner Tower (4145) to (4146)

220 Kv Mangrove Substation to Roorkhee-Nara Line (1-1km)



Roorkhee-Nara (220 Kv)

Map created by the author using Google Earth Pro. The map is not intended to be used for any other purpose. The map is not intended to be used for any other purpose.

Roorkhee-Nara/Power Lines: Map of 11kV location: From 2017 to 2018

Summary of geospatial analysis of Roorkee Nars High Voltage Power Lines

From Tower No	To Tower No	Span Length in Meters	Road Width	Total Road Area in Sq m	Area Covered by Trees/Forest in Sq m	Area under Agriculture Use in Sq m	Area of Fallow Land in Sq m	Build-up Area in Sq m	No of Structures	No of Agricultural Ponds	No of Fallow Ponds	Potential Cultural Structures in vicinity (Y/N)	Type of Land Tower base (Cultivated or Fallow)
LL O T	AP1	110	35	4060	0	4060	0	0	0	2	0	N	Cultivated
AP1	AP2	237	35	8295	0	8295	0	0	0	4	0	N	Cultivated
AP2	AP3	157	35	5455	0	5455	0	0	0	4	0	N	Cultivated
AP3	AP4	137	35	4795	0	4795	0	0	0	4	0	N	Cultivated
AP4	AP5	98	35	3430	0	3430	0	0	0	3	0	N	Cultivated
AP5	AP6	100	35	3500	0	3500	0	0	0	2	0	N	Cultivated
AP6			35										Cultivated
		645		29575	0	29575	0	0	0	19	0		



Summary of geo-spatial analysis of Mangrove Asani Power Line ROW corridor

From Tower No	To Tower No	Span Length in Meters	Row Width	Total Row Area in Sq m	Area Covered by Trees/Forest in Sqm	Area under Agricultural Use in Sqm	Area of Fallow Land in Sqm	Build-up Area in Sqm	No of Structures	No of Agricultural Ponds	No of Fallow Ponds	Potential Cultural Structures in vicinity (Y/N)	Type of Land Tower base (Cultivated or Fallow)
P1	P2	56	27	1512	0	1512	0	0	0	2	0	N	Cultivated
P2			27										Cultivated
K1	K2	70	27	1890	0	1890	0	0	0	2	0	N	Cultivated
K2			27										Cultivated
Total		126		3402	0	3402	0	0	0	4	0		

372

132KV Khatima Substation to Khatima-Sitarganj Line (~2km)



0 10 20 30 Kilometers



Khatima-Sitarganj (132 Kv)

Map created by International & Local NGOs with inputs from various stakeholders. The map is not a legal document. It is for informational purposes only. It is not a legal document. It is for informational purposes only. It is not a legal document. It is for informational purposes only.

Khatima-Sitarganj Power Line- View of 132KV corridor Line-1 to Line-2

Summary of geo-spatial analysis of ROW Corridor of Khatma-Stargen Power Line

From Tower No	To Tower No	Span Length in Meters	Row Width	Total Row Area in Sq m	Area Covered by Tree/Foliage in Sqm	Area under Agricultural Use in Sqm	Area of Fallow Land in Sq m	Build-up Area in Sq m	No. of Structures	No. of Agricultural Plots	No. of Fallow Plots	Potential Cultural Structures in vicinity (Y/N)	Type of Land Tower base (Cultivated or Fallow)
L1	L2	278	27	7290	0	7290	0	0	0	5	0	N	Cultivated
L2	L3	211	27	5697	0	5697	0	0	0	5	0	N	Cultivated
L3	L4	348	27	9342	0	9342	0	0	0	8	0	N	Cultivated
L3												N	Cultivated
L4												N	Cultivated
Total		827		22329	0	22329	0	0	0	18	0		



0 100 200 300 400
Kilometers

- Samakhwara Substation
- Proposed Line
- Right of Way (100m)

Kashipur-Mahuakheraganj (132 kV)

Proposed transmission line from Samakhwara Substation to Kashipur-Mahuakheraganj (132 kV). The line is proposed to be constructed in two stages. The first stage is the construction of the line from Samakhwara Substation to Kashipur-Mahuakheraganj (132 kV). The second stage is the construction of the line from Kashipur-Mahuakheraganj to Samakhwara Substation (132 kV).

Kashipur-Mahuakheraganj (132 kV) Line. Map of India/World

Summary of geo-spatial analysis of ROW Corridor for Keshipur-Mathuskheragaon Power Line

From To Tower No	To Tower No	Section Length in Meters	Row Width	Total ROW Area in Sq.m	Area Covered by Trees Forest in Sq.m	Area under Agricultural Use in Sq.m	Area of Fallow Land in Sq.m	Built- up Area in Sq.m	No of Structures	No of Agricultural Plots	No of Fallow Plots	Presence of Cultural Structures in vicinity (Y/N)	Type of Land Tenure base (Cultivated or Fallow)
Loc 1	Loc 2	354.03	27	9626.86235	0	9626.86	0	0	0	6	0	N	Cultivated
Loc 2	Loc 3	460.81	27	12441.7581	0	12441.76	0	0	0	13	0	N	Cultivated
Loc 3	Loc 4	354.11	27	9560.9555	0	9545.94	0	15	1	8	0	N	Cultivated
Loc 4	Loc 5	386.30	27	10754.0618	0	10754.06	0	0	0	11	0	N	Cultivated
Loc 5	Loc 6	343.30	27	9266.0526	0	9264.06	0	15	1	8	0	N	Cultivated
Loc 6	Loc 7	305.04	27	8236.08248	0	8236.08	0	0	0	10	0	N	Cultivated
Loc 7	Loc 8	280.56	27	7845.17818	0	7845.18	0	0	0	9	0	N	Cultivated
Loc 8	Loc 9	963.41	27	26012.1969	0	22923.20	3024	65	1	23	1	N	Cultivated
Loc 9	Loc 10	2308.15	27	62320.0154	0	60390.02	0	1930	4	46	0	N	Cultivated
Loc 10	Loc 11	180.56	27	5116.09166	0	2283.06	2835	0	0	3	1	N	Cultivated
Loc 11	Loc 12	616.41	27	16643.0482	0	16643.05	0	0	0	14	0	N	Cultivated
Loc 12	Loc 13	2048.24	27	55302.3836	0	55302.38	0	0	0	48	0	N	Cultivated

Loc 13	Loc 14	724. 40	27	19558. 854	0	19558 85	0	0	0	13	0	N	Cultiv ated
Loc 14	Loc 15	274. 58	27	7413.7 5823	0	7413. 76	0	0	0	3	0	N	Cultiv ated
Loc 15	Loc 16	130. 50	27	3767.8 7831	0	3767. 88	0	0	0	2	0	N	Cultiv ated
Loc 16													Cultiv ated
Total		9780 45		26407 2.16	0.00	26408 8.16	5859 .00	2005 .00	7.0 0	211. 00	2.0 0		



0 10 20 30 40 50 60 70 80 90 100
Meters

- Tower locations
- Transmission line route (132 Kv)
- Right of Way (width 30m)

Kashipur-Mahuakhheragaj (132 Kv)

Map created by the Ministry of Power, Government of India, using the data provided by the Ministry of Power, Government of India, for the purpose of the project (FY 2022).

Kashipur-Mahuakhheragaj (132 Kv) Transmission Line: Map of the Project Route (from South to North)



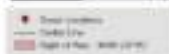
Kashiipur-Mahuakhheragang (132 Kv)

Project funded by Government of Nepal, Department of Power, Nepal Electricity Board (NEB)
 Data provided by Nepal Government Department of Agriculture (2015/16)

Kashiipur-Mahuakhheragang Power Line: View of the Western Section from East to West



0.0 0.1 0.2 0.3 0.4 0.5 Kilometers



Kashipur-Mahuakhheragarh (132 Kv)

Map created by Geomatics Engineering & Survey Technology Centre, Asian Institute of Technology (AIT) (2015-2016). Photo: Transformation of satellite data into GIS data (ITC-ILR).

Kashipur-Mahuakhheragarh Power Lines: View of Mahuakhheragarh Tower Loco T1 to Loco T2



0 10 20 30
Kilometers



Station location

Station location

High voltage line (132 kV)

Kashipur-Mahua/Varanasi (132 kV)

This station is located on the Kashipur-Mahua/Varanasi, India, High Voltage Line (132 kV).
This station is located on the Kashipur-Mahua/Varanasi, India, High Voltage Line (132 kV).



Kashipur-Mahuakheraganj (132 Kv)

This profile is generated by using software by Tecon, India (www.tecon.in) with data collected from the construction site of 132kV line project (PT/222).

Kashipur-Mahuakheraganj Power Line: Study of MW Variation From Line 12 to Line 14



Figure 3B. Natchez-Atlatlachucopos River Line-View of Mid-Cutbank. Tower L20-F3 is L20-F8.

1.224V Statoraufhängung Substation in Japan Substation (Pilot Line)



View of HCMV Control of Mahuakheragan-Jaspur Power Line

Summary of geographical analysis of Mahuakheragan-Jaspur Power Line

From Date at No.	To Date at No.	Open Land in Meters	No. of Plots in	Total Forest Area in Hect.	Area Covered by Forest in Hect.	Area under Agri- cultural Land in Hect.	Area of Fallow Land in Hect.	Stock- up Area in Hect.	No. of Shrub- by Land	No. of Agri- cultural Plots	No. of Fallow Plots	Presence of Cultural Structures in vicinity (Yes)	Type of Land Cover (Cultural and Forest)
11	12	7139	27	2087.389 28	0	2087.389 28	0	0	0	2	0	N	Cultivate d
12	13	2297.58	27	6717.122 36	0	6717.122 36	0	0	0	6	0	N	Cultivate d
13	14	191.10	27	5732.759 97	0	5732.759 97	0	0	0	3	0	N	Cultivate d
14	15	24.33	27	878.088 46	0	878.088 46	0	0	0	2	0	N	Cultivate d
16	18	261.76	27	8770.238 11	0	8670.238 11	0	200	1	6	0	N	Cultivate d
18	17	267.13	27	8777.239 40	0	8777.239 40	0	0	0	6	0	N	Cultivate d
17	18	228.88	27	8725.889 17	0	8725.889 17	0	0	0	4	0	N	Cultivate d
18	19	198.18	27	6707.877 21	0	6707.877 21	0	0	0	8	0	N	Cultivate d
19	110	87.72	27	2622.143 14	0	2622.143 14	0	0	0	2	0	N	Cultivate d

From Line or No	To Line or No	Span Length in Meters	No. of Poles in	Total Height Area in Sqm	Area Covered by Steel Pavement in Sqm	Area under Agro- Forest Use in Sqm	Area of Fallow Land in Sqm	Stall- up Area in Sqm	No. of Stalls in Lane	No. of Agro- Forest Plots	No. of Fallow Plots	Percent of Culture I Stalls are in Village (%)	Type of Land Cover Type (Cultured or Fallow)
V15	V11	246.25	27	8842.883 68	0	8842.883 68	0	0	0	0	0	0	Cultivate d
V11	V12	275.00	27	7572.849 51	0	7572.849 51	0	0	0	7	0	0	Cultivate d
V12	V13	125.00	27	3845.373 71	100.2	2131.373 71	0	0	0	3	0	0	Cultivate d
V13	V14	180.00	27	4588.048 60	102	3882.048 60	0	0	0	3	1	0	Tree Land
V14	V16	225.81	27	8265.888 83	0	8265.888 83	0	0	0	0	0	0	Cultivate d
V16	V18	264.71	27	8877.064 23	0	8877.064 23	0	0	0	4	0	0	Cultivate d
V18	V17	243.08	27	8579.373 81	0	8579.373 81	0	0	0	0	0	0	Cultivate d
V17	V18	238.92	27	8388.838 48	0	8388.838 48	0	0	0	6	0	0	Cultivate d
V18	V16	265.84	27	8865.858 08	0	8865.858 08	0	0	0	4	0	0	Cultivate d
V18	V20	182.04	27	5078.388 88	0	5078.388 88	0	0	0	4	0	0	Cultivate d

From Line or No.	To Line or No.	Span Length in Meters	No. of Poles in	Total Height in Meters	Area Covered by Tree Canopy in Sqm	Area under Agrofor- est in Sqm	Area of Fallow Land in Sqm	Stall- up Area in Sqm	No. of Shrub in Line	No. of Agrofor- est Trees	No. of Fallow in Trees	Presence of Cultural Structure in vicinity (Yes)	Type of Land Cover (Cultural or Fallow)
120	121	283.01	27	8881.381 27	0	8881.381 27	0	0	0	0	0	N	Cultivate d
121	122	288.18	27	6681.828 42	0	6681.828 42	0	0	0	4	0	N	Cultivate d
122	123	344.73	27	8881.831 2	0	8881.831 2	0	0	0	0	0	N	Cultivate d
123	124	228.78	27	8888.148 87	0	8888.148 87	0	0	0	0	0	N	Cultivate d
124	125	282.18	27	7088.767 12	0	7088.767 12	0	0	0	6	0	N	Cultivate d
125	126	231.78	27	6258.188 17	3225	4237.888 17	0	0	0	4	1	N	Cultivate d
126	127	208.08	27	8888.288 72	3223	4815.288 72	0	0	0	0	1	N	Fallow Land
127	128	288.32	27	8888.178 23	0	8888.178 23	0	0	0	6	0	N	Cultivate d
128	129	394.47	27	7138.174 48	0	7138.174 48	0	0	0	4	0	N	Cultivate d

From Line or No	To Line or No	Span Length in Meters	No. of Poles in	Total Height Area in Sqm	Area Covered by Steel Pavement in Sqm	Area under Asphalt Road Lane in Sqm	Area of Paved Land in Sqm	Walk- up Access Sqm	No. of Motor V-Lane	No. of Agri- Cultiv Poles	No. of Poles in Poles	Percent of Cultiv I Motor Lane in Village (%)	Type of Land Cover Base (Cultiv and Paved)
100	101	207.41	27	7225.184 98	0	7225.184 98	0	0	0	4	0	0	Cultivate d
101	102	212.41	27	7366.803 58	0	7366.803 58	0	0	0	4	0	0	Cultivate d
102	103	205.17	27	7100.525 35	0	7100.525 35	0	30	1	0	0	0	Cultivate d
103	104	208.32	27	7244.715 80	0	7244.715 80	0	0	0	0	0	0	Cultivate d
104	105	208.32	27	7244.712	0	7244.712	0	0	0	0	0	0	Cultivate d
105	106	211.21	27	7205.814 81	0	7205.814 81	0	0	0	0	0	0	Cultivate d
106	107	211.31	27	7204.205 32	0	7204.205 32	0	0	0	0	0	0	Cultivate d
107	108	208.36	27	7245.366 68	0	7245.366 68	0	0	0	7	0	0	Cultivate d
108	109	211.17	27	7254.485 72	3430	4824.485 72	0	235	0	0	0	0	Cultivate d
109	110	205.31	27	7190.012 12	1044	6146.012 12	0	0	0	4	1	0	Tree Land

From Line or No.	To Line or No.	Span Length in Meters	No. of Poles in	Total Height Area in Sqm	Area Covered by Steel Framework in Sqm	Area under Agri- cultural Use in Sqm	Area of Fallow Land in Sqm	Stall- up Area in Sqm	No. of Struct- ures	No. of Agri- cultural Plots	No. of Fallow Plots	Presence of Cultural Struct- ures in vicinity (Y/N)	Type of Land Cover Class (Cultural and/or Fallow)
139	140	287.27	27	1216.211 08	4020	2808.211 08	0	0	0	4	2	N	Cultivable of
140	141	277.42	27	7128.270 64	1698	6022.270 64	0	100	2	6	0	N	Cultivable of
141	142	288.25	27	7185.670 01	0	7185.670 01	0	0	0	5	0	N	Cultivable of
142	143	252.08	27	8835.383 23	0	8835.383 23	0	0	0	7	0	N	Cultivable of
143	144	276.25	27	7435.858 14	0	7435.858 14	0	0	0	7	0	N	Cultivable of
144	145	273.25	27	7285.362 14	0	7285.362 14	0	0	0	7	0	N	Cultivable of
145	146	282.08	27	7135.725 6	0	7135.725 6	0	0	0	5	0	N	Cultivable of
146	147	273.75	27	7385.380 23	0	7385.380 23	0	0	0	7	0	N	Cultivable of
147	148	287.18	27	7545.519 27	0	7545.519 27	0	0	0	4	0	N	Cultivable of

From Line or No	To Line or No	Span Length in Meters	No. of Poles in	Total Height Above in Meters	Area Covered by Line From in Meters	Area under Agro- Forest Line in Meters	Area of Fallow Land in Meters	Stall- up Area in Meters	No. of Stems in Line	No. of Agro- Forest Plots	No. of Fallow Plots	Percent of Cultiva- t Stems are in Fallow (%)	Type of Land Cover Type (Cultiva- t or Fallow)
140	140	211.46	27	7302.075 07	0	7302.075 07	0	0	0	0	0	0	Cultiva- t
140	140	201.38	27	7215.660 08	0	7215.660 08	0	0	0	0	0	0	Cultiva- t
150	151	211.39	27	7301.407 08	0	7301.407 08	0	0	0	0	0	0	Cultiva- t
151	152	202.47	27	7215.389 08	0	7215.389 08	0	0	0	7	0	0	Cultiva- t
152	153	211.40	27	7301.689 40	0	7301.689 40	0	0	0	0	0	0	Cultiva- t
153	154	200.28	27	7241.600 10	0	7241.600 10	0	0	0	7	0	0	Cultiva- t
154	155	203.47	27	7215.000 41	0	4035.000 41	2970	0	0	0	4	0	Cultiva- t
155	156	202.67	27	7086.082 42	0	7086.082 42	0	0	0	4	0	0	Cultiva- t
156	157	207.31	27	7217.361 01	0	7217.361 01	0	0	0	0	0	0	Cultiva- t
157	158	241.00	27	8020.040 02	0	8020.040 02	0	0	0	0	0	0	Cultiva- t

From Date at No.	To Date at No.	Open Land in Meters	No. of Plots in	Total Forest Area in Hect.	Area Covered by Forest in Hect.	Area under Agri- cultural Use in Hect.	Area of Fallow Land in Hect.	Stall- up Area in Hect.	No. of Shrub- b- trees	No. of Agri- cultural Plots	No. of Fallow Plots	Presence of Cultural Structures in vicinity (Yes)	Type of Land Cover (Cultural and Forest)
100	101	211.08	27	7218.888 88	0	7218.888 88	0	0	0	0	0	N	Cultivate d
102	103	288.11	27	7238.117 11	0	7238.117 11	0	12	1	7	0	N	Cultivate d
105	107	295.51	27	7245.585 81	0	7245.585 81	0	18	1	5	0	N	Cultivate d
107	108	283.88	27	7287.124 82	0	7287.124 82	0	0	0	0	0	N	Cultivate d
102	103	286.10	27	7196.878 47	0	7196.878 47	0	0	0	6	0	N	Cultivate d
103	104	211.62	27	7308.690 04	0	7308.690 04	0	180	1	4	0	N	Cultivate d
104	105	203.05	27	7287.312 18	0	7287.312 18	0	0	0	4	0	N	Cultivate d
106	108	217.32	27	7326.710 67	0	7326.710 67	0	0	0	6	0	N	Cultivate d
108	107	213.35	27	6255.548 88	0	6255.548 88	1215	0	0	3	1	N	Cultivate d

From Line or No	To Line or No	Span Length in Meters	No. of Poles in	Total Height Area in Sqm	Area Covered by Steel Pavement in Sqm	Area under Agro- Forest Use in Sqm	Area of Fallow Land in Sqm	Stall- up Area in Sqm	No. of Stalls in Lane	No. of Agro- Forest Plots	No. of Fallow Plots	Percent of Cultiva- ble Stress area in Village (%)	Type of Land Cover Class (Cultiva- ble or Fallow)
187	188	201.46	27	7532.324 98	0	5633.324 98	1468	0	0	7	0	0	Fallow
188	189	203.76	27	8311.261 71	0	6311.261 71	0	0	0	4	0	0	Cultivate d
189	190	227.37	27	6435.097 43	0	6435.097 43	0	0	0	5	0	0	Cultivate d
190	191	233.02	27	7295.329 23	0	7295.329 23	0	0	0	6	0	0	Cultivate d
191	192	288.28	27	7188.426 55	0	7188.426 55	0	0	0	4	0	0	Cultivate d
192	193	167.06	27	4540.406 21	0	4540.406 21	0	0	0	4	0	0	Cultivate d
193	194	233.46	27	7333.333 40	0	7333.333 40	0	0	0	3	0	0	Cultivate d
194	195	232.66	27	7386.766 66	0	7386.766 66	0	0	0	4	0	0	Cultivate d
195	196	264.25	27	7264.667 44	0	7264.667 44	0	0	0	5	0	0	Cultivate d
196	197	283.01	27	1253.007 72	0	1253.007 72	0	0	0	3	0	0	Cultivate d

From Date at No.	To Date at No.	Open Land in Meters	No. of Plots in	Total Forest Area in Hect.	Area Covered by Forest in Hect.	Area under Agri- cultural Use in Hect.	Area of Fallow Land in Hect.	Stock- up Area in Hect.	No. of Shrub- by Land	No. of Agri- cultural Plots	No. of Fallow Plots	Presence of Cultural Structures in vicinity (Yes)	Type of Land Cover (Cultural and Forest)
177	178	287.20	27	1251.522 18	0	1251.522 18	0	0	0	0	0	No	Cultivable of
178	179	288.30	27	1198.010 54	0	1198.010 54	0	0	0	6	0	No	Cultivable of
179	180	181.17	27	1292.907 40	0	1292.907 40	0	0	0	7	0	No	Cultivable of
180	181	102.40	27	3088.987 87	0	3088.987 87	0	0	0	2	0	No	Cultivable of
181	182	86.53	27	1790.164 21	0	1790.164 21	0	0	0	2	0	No	Cultivable of
182	183	122.18	27	3296.100 11	0	3296.100 11	0	0	0	2	0	No	Cultivable of
183	184	76.25	27	2112.874 87	0	2112.874 87	0	182	1	1	0	No	Cultivable of
184	186	75.58	27	1977.571 38	0	1977.571 38	0	0	0	2	0	No	Cultivable of
185	186	117.11	27	3162.198 2	0	3162.198 2	0	0	0	2	0	No	Cultivable of

From Line or No.	To Line or No.	Span Length in Meters	No. of Poles	Total Height Area in Sqm	Area Covered by Steel Frame in Sqm	Area under Agro- tree Canopy in Sqm	Area of Fallow Land in Sqm	Stall- top Area in Sqm	No. of Stalls in Line	No. of Agro- tree Plants	No. of Fallow Plants	Percent of Cultiva- tion Area in Vegeta- (%)	Type of Land Cover Data (Cultiva- ted or Fallow)
188		3.20	2	0	0	0	0	0	1	0	0	0	Cultivated
Total		20117.50		641572.4 0	96794.88	617980.4 0	6645.0 0	2088.0 0	17300	11730	120		



0 1 2 3 4 5
km

- Tower location
- Transmission line
- Right of Way - 200m width

Mahuakheragan-Jaspur (132 Kv)

Map created by Environmental Impact Assessment Team, Appleton Development Board (APDB)
Data Source: Power Transmission Corporation of Saskatchewan (PSCS) Ltd.

Figure 10. Multicollinearity Diagnostic: Tolerance Values of Six Variables (Cases: Tumor Size to Tumor Type).



0 0.05 0.1 0.15 0.2

- Water installation
- Road (km)
- High voltage line (km)

Mahuakhernang-Jaspur (132 Kv)

This map shows the transmission line (132 Kv) from the Jaspur substation to the Mahuakhernang substation. The line is highlighted in red. The map also shows the surrounding area, including roads and water bodies.

Figure 10. Multicollinearity Diagnostic Power Law: Mean of Squared Multiple R-squared Values 5/52 to 1/18



Mahakheraganj-Jaspur (132 Kv)

Map created by Government of Nepal Engineering Service - Survey Department, Nepal (2020)
 Data Source: Survey Department, Government of Nepal (2020)

Mathematical Properties of the Power Law: Values of β (all) variation from 0.000 to 0.200



0 1.5 3 4.5 6 km

- Substation
- 132 kV line
- 132 kV line - 132 kV line

Mahualkheraganj-Jaspur (132 Kv)

Map created by the project team for the Mahualkheraganj-Jaspur (132 Kv) project.
Data source: Google Earth, project team, and other sources.

Mathematical Properties of the Power Law: Values of β and α estimated from Source 1.28 to 1.33.



Figure 43: Mahuakhherogari-Jaspur Power Line, View of Mahuakhherogari from Tower 141 to 152



0 100 200 300 400 500 600 700 800 900 1000
meters

● Mahua Kheragani
● Jaspur
■ Right of Way - 40m width

Mahua Kheragani-Jaspur (132 Kv)

Map location: 1000m north of Mahua Kheragani, India (Mahua Kheragani, India) (1000m)
Map location: 1000m north of Mahua Kheragani, India (Mahua Kheragani, India) (1000m)

Figure 66. Multiscale Energy per Length versus Size of SubVascular Space: From 0.62 to 1.00



Figure 45. Mahuakhergang-Jaspur Power Line- View of Right-of-way from tower 145 to 149



0 100 200 300 400
meters

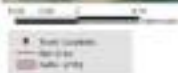
- Tower locations
- Line route
- Right of Way - 30m (100ft)

Mahuakheraganj-Jaspur (132 Kv)

Map provided by the client to the project. The map shows the route of the line from Mahuakheraganj to Jaspur. The route is marked with a red line and red dots indicating tower locations. The map also shows the Right of Way (ROW) for the line.

Figure 46: MutualHergropy-Index of Tissue (km) - Week of Month (month from Tissue 1.00 to 1.20)

120kV Dhawadham Substation to Kathgodam-Rudrapur Line



Kathgodam-Rudrapur (120 kV)

Figure 1.1: Aerial view of the Kathgodam-Rudrapur Line, showing the power line structure and the surrounding landscape.

View of Kathgodam-Rudrapur Power Line RDN Corridor

Summary of geo-spatial assessment of HCRs Control of Anti-gravity/Hydroput Power Lake

From Survey No.	To Survey No.	Open Length in Meters	Flow Width	Total HCR Area in Hm	Area Covered By These Power in Hm	Area under Agricultural Use in Hm	Area of Forest Land in Hm	Subsided Area in Hm	No. of Structures	No. of Agricultural Fields	No. of Forest Fields	Potential Cultural Structures in vicinity (m)	Type of Land Survey Area (Cultivated or Forest)
L1	L2	22	27	594	0	0	594	0	0	0	1	N	Forest
L2	L3	140	27	3810	0	0	3810	200	2	0	2	N	Forest
L3	L4	75	27	2025	0	0	2025	120	1	0	1	N	Forest
L4	L5	17	27	459	0	0	459	56	1	0	1	N	Forest
L5													Forest
Total		260		7289	0	0	6877	366	4	0	4		



View of the Pönnegård-Charpentier folding line alignment (black line)

Appendix 3: Land Possession Status and Records for UPCL Substations

Review of Land Requirement and Procurement Process and Land Records for UPCL Substations

#	Substation Project details	Name of Earlier Owner of Land	Nature of Land Procurement	Revenue Record (Khata/ Gata/ Plot No.)	Area Allocated for New Sub-Station	Possession Status	Cost Land (Purchase/Lease)
1	33/11 KV, (2 X 10 MVA), Near Colledorale, Rudrapur	Government of Uttarakhand	Lease Deed	Khata No. 07, Khaira No.128/2 (Old)	0.056	Not in possession	Nil
2	33/11 KV, (2 X 5 MVA), Bharauli, Sitargan, Rudrapur	Government of Uttarakhand	Lease Deed	Khata No. 155, Khaira: 135/3	0.1824	In possession	3,65,49
3	33/11 KV, (2 X 5 MVA), Kalya, Ramnagar, Haridwar	Government of Uttarakhand	Lease Deed	Khata No. 08, Khaira 72/3	0.2	In possession	Nil
	Total				0.4384		

संज्ञा विवरण संशोधन
 वेब: <https://india.gov.in> वि: 10-10-2024/वि: 10-10-2024
 वि: 10-10-2024/वि: 10-10-2024 वि: 10-10-2024/वि: 10-10-2024
 वि: 10-10-2024/वि: 10-10-2024 वि: 10-10-2024/वि: 10-10-2024
 वि: 10-10-2024/वि: 10-10-2024 वि: 10-10-2024/वि: 10-10-2024

संज्ञा विवरण
 वि: 10-10-2024/वि: 10-10-2024
 संशोधन

संज्ञा विवरण संशोधन वि: 10-10-2024/वि: 10-10-2024
 वि: 10-10-2024/वि: 10-10-2024 वि: 10-10-2024/वि: 10-10-2024
 वि: 10-10-2024/वि: 10-10-2024 वि: 10-10-2024/वि: 10-10-2024
 वि: 10-10-2024/वि: 10-10-2024 वि: 10-10-2024/वि: 10-10-2024
 वि: 10-10-2024/वि: 10-10-2024 वि: 10-10-2024/वि: 10-10-2024

संज्ञा विवरण संशोधन वि: 10-10-2024/वि: 10-10-2024
 वि: 10-10-2024/वि: 10-10-2024 वि: 10-10-2024/वि: 10-10-2024
 वि: 10-10-2024/वि: 10-10-2024 वि: 10-10-2024/वि: 10-10-2024
 वि: 10-10-2024/वि: 10-10-2024 वि: 10-10-2024/वि: 10-10-2024
 वि: 10-10-2024/वि: 10-10-2024 वि: 10-10-2024/वि: 10-10-2024

संज्ञा विवरण
 वि: 10-10-2024/वि: 10-10-2024
 संशोधन

संज्ञा विवरण संशोधन वि: 10-10-2024/वि: 10-10-2024
 वि: 10-10-2024/वि: 10-10-2024 वि: 10-10-2024/वि: 10-10-2024
 वि: 10-10-2024/वि: 10-10-2024 वि: 10-10-2024/वि: 10-10-2024
 वि: 10-10-2024/वि: 10-10-2024 वि: 10-10-2024/वि: 10-10-2024

संज्ञा विवरण
 वि: 10-10-2024/वि: 10-10-2024
 संशोधन

[illegible]

[illegible][illegible]

- [illegible]

Appendix 8: Records of Consultations for PTCUL Components

Introduction:

The high-voltage (>66 Kv) Power lines require to obtain right of way (ROW) to construct towers and string over head conductors. As per provision under Electricity Act 2003, the ROW is notified in the official Gazette of the competent authority and thereby authorize Department of Electricity to construct towers and impose restrictions on use of the land within this power line corridor for the purpose of safety and maintenance.

The Gazette notification of the ROW or power line corridor does not transfer the ownership of the land to the Department of Electricity, it only uses the sovereign power to obtain right to use part of the land to construct towers and impose land use restriction such as construction or growing crops and tall trees which will detriment to safe operation and maintenance of the Power line. Thus, use of sovereign power to impose such restrictions makes it involuntary for the land owners. Although, this rarely causes physical displacement, it results in economic displacement for land owners who experience loss of land area, assets on their affected land parcels, and partial loss of income sources and means of livelihood.

As per the Electricity Act 2003 Section 57 and 58, full compensation to be paid for any damage, detriment or inconvenience caused by him or by anyone employed by him. It has been a standard practice by Department of Electricity (the competent authority under Electricity Act) to pay the owner, in case of any existing trees/structures/ objects/damages to crops which must be removed from the ROW during construction of new high voltage Power lines.

The provisions under the Electricity Act 2003 did not address economic loss, hence remained the reason for dissatisfaction and dissent by land owners affected by high voltage Power lines. The specific economic loss to affected land owners included, (i) severe loss of access to the area under tower that causes income loss, (ii) restriction on construction results in diminution of land value and non-usability causing financial and income loss.

Ministry of Power, Government of India provided remedy to the affected land owners by notifying "Outline on payment of compensation towards damages in regard to right of way for Power lines, 2015" and "Guidelines for payment of Compensation in regard to Row for transmission lines in urban areas, July 2020".

The standard practice by competent authorities in planning and notification of ROW for a Power line using their authority under Electricity Act 2003 does not involve prior consultation with affected persons. The ADB Safeguard Requirement 2 on Involuntary Resettlement (para 18) describes meaningful consultation with the affected persons as an integral part of the social impact assessment and resettlement planning. Hence, a suitable process of information disclosure and consultation with potential affected persons was planned and executed for this project.

Approach and Methodology:

The route map and the tentative tower locations was prepared by the implementing agency of the proposed Power lines (which will be updated after the turnkey contractor is appointed). The route alignment (the center line connecting tower center points) was laid over the google earth imagery and the power line corridor or ROW was marked as per the voltage level of the transmission lines.

The GIS layers of administrative boundaries (revenue village) available from Survey of India was superimposed on the google image and transmission corridor. This allowed identification of revenue villages a particular transmission corridor crosses.

During the field visit, this list of revenue villages, and the route map was shown to revenue officers and the head of the Gram Panchayat (Sarpanch). Information received from them helped in identifying the Gram Panchayat in whose jurisdiction they come.

As the tower locations were tentative and the route alignment may change after detailed survey by the turn key contractor, the consultation was conducted with Sarpanch of the Gram Panchayat and a few members from the community.

The study team shared a copy of the brief project overview (prepared in local language Hindi) with Sarpanch and showed the tentative tower locations and power line corridor in the map. The study team interviewed Sarpanch and community members present there using a structured checklist. The study team explained the potential environment and social impacts during construction and operation phase of the proposed Power lines and sought their view and suggestions.

The discussion over the route alignment confirmed about any presence of cultural sites and new structures which were not visible in google imagery. The study team visited a few isolated structures which were visible on the map for verification and checked their current use. Many of them were sheds temporarily used for agricultural operations.

The consultation and the field visit also screened options for access to tower locations for transporting construction material, temporary use of adjacent land for construction, and potential damage to crops during stringing. The study team informed Sarpanch about possibility of contractor may want to establish temporary labor camps for a small gang of construction workers. Their sensitivity to such temporary construction camps and suggestions on avoiding certain locations was recorded.

अभियान परिचालन अवलोकन

परिचय

गहर दृष्टिमिश्रित बीजोपचार और उल्लेख, सिमिट, इष्टादुल (PTCUL), एलियट्ट सिनार डीन (ADB) व सनलीकी और विनीय अडायल के साथ मिलती की आदुल, कोल्लेज कोल्लेज, एलिय की नम करने और मिलती आडेल अलिय में सुधार करने का उदाहरण है। यह दस्तावेज विचारधारा सुधार गतिविधियों का एक अभियान अवलोकन और अभियान पर्यवेक्षण और आयाजिक प्रकृति की आयाजिक जाल प्रदान करते हैं। इस दस्तावेज में प्रदान की गई जानकारी वांछित देना या क्लिष्टात्मक पायवरी को सुविधाजनक बनाने और पर्यवेक्षण और आयाजिक सुधार दस्तावेजों में आयाजिक सुधारों को शामिल करने के लिए है।

परिचालन का उद्देश्य

गहर दृष्टिमिश्रित बीजोपचार और उल्लेख, सिमिट, इष्टादुल (PTCUL) में इष्टादुल में मिलती की आदुल में सुधार के लिए निम्नलिखित वांछित करते हैं:

प्रस्तावित योजना	स्थान और मूल विवरण					
132/132 Kv डब-इष्टादुली (SS)	इष्टादुली जिला (2): सडोरा, सनलीकी अध्यापिक सनार जिला (2): कालाडेल, इष्टादुली सनीलाल जिला (1): एलियाडेल इष्टादुली जिला (3): डेलकुड, आलार, आडुलकी इष्टादुली एलियाडेल जिला (1): एलियाडेल					
अवरोध हटाने की योजना	जिला	कहाँ से	कहाँ तक	अवरोध अवधि	अनुमानित लागत की योजना	होस्टेज
इष्टादुली	सडोरा SS	सडोरा SS	सडोरा-गुलारा सडुली	3 Km	12	400 Kv
		सडोरा SS	सनलीकी-सनार सडुली	25 Km	80	220 Kv
		सनलीकी SS	सडुली-सनार सडुली	1 Km	6	220 Kv
		सनलीकी SS	सनलीकी-अडोरी सडुली	1 Km	6	132 Kv
गुलारा सनार	इष्टादुली SS	इष्टादुली SS	इष्टादुली-सनीलाल सडुली	2 Km	10	132 Kv
		अलारडेल SS	सडोरा-गुलारा सडुली	5.7 Km	30	132 Kv
		गुलाराडेल SS	अडोरी SS	21.3 Km	80	132 Kv
सनीलाल	एलियाडेल SS (इष्टादुली)	सडोरा-अडोरी सडुली	0.6 Km	4	132 Kv	
Total				64.6 Km	228	

	ପ୍ରକଳ୍ପ (ନିକଟ ସ୍ଥିତି)	ବିଦ୍ୟୁତ୍ ଶକ୍ତି	ନିର୍ମାଣ	41.3 Km	157	132 Kv
--	-----------------------------	----------------	---------	------------	-----	--------

पारंपरिक प्रभाव प्रकृतिगत:

प्रभावित निर्माण कार्य के पर्यावरण और सामाजिक प्रभावों की पारंपरिक जाँच

चुनू / प्रभाव	अवकाश के लिए प्रभावित प्रभाव
प्रभावित भू- प्रक्रियाओं की आवृत्तियों और चुनू-प्रभाव प्रभाव	आवृत्तियों प्रभाव करने की प्रक्रिया के लिए भूमि स्थिति (चौड़ा क्षेत्र और आवृत्तियों चौड़ा क्षेत्र के भीतर) की आवृत्तियों प्रभाव करने पर विद्यमान प्रभाव (प्रभावित) और चौड़ा क्षेत्र के निर्माणों के अनुमानों की अवकाशता होती। चौड़ा क्षेत्र क्षेत्र को कम करने। पारंपरिक निर्माणों निर्माण क्षेत्रों में करने और आवृत्तियों चौड़ा क्षेत्र प्रभावों के प्रभाव को कम करने के लिए।
निर्माण प्रभावों की अवकाशता	प्रभावों प्रभाव के लिए अवकाश भूमि का प्रभाव चर्चा, निर्माण कार्य और अन्य विधि के रूप में उपयोग किया जाता है। सामाजिक और पर्यावरणीय प्रभावों को करने या कम करने के लिए प्रभाव निर्माण कार्य और अन्य विधि प्रभावों का प्रभाव किया जाता है।
चुनू करने और प्रभावों का परीक्षण	निर्माण प्रभावों, अवकाश और अवकाश के परीक्षण के लिए चौड़ा प्रभावों तक चुनू प्रभावों है और प्रभावों निर्माणों या पर्यावरणीय प्रभावों (चौड़ा क्षेत्र प्रभावों, प्रभाव, चर्चा आदि) की नुकसान हो सकता है।
अन्य विधि का प्रभावों प्रभाव	चर्चा और प्रभावों अन्य विधि का उपयोग प्रभावों द्वारा निर्माण प्रभावों को प्रभाव करने और अन्य विधि का अवकाश प्रभाव करने के लिए कार्य प्रभावों पर किया जाता है। अवकाशिक अवकाश के रूप में, उन विधि में प्रभावों प्रभाव नहीं हो सकता है। हालांकि, उन प्रभावों अन्य विधि में निर्माणों प्रभावों प्रभाव प्रभाव करने की अवकाशता है।
प्रभावों प्रभाव	अवकाश प्रभावों प्रभाव प्रभावों की अवकाशता। अवकाशिक अवकाश और प्रभाव प्रभावों पर विद्यमान प्रभावों क्षेत्रों का प्रभाव।

पारंपरिक प्रभाव:

पर्यावरण और सामाजिक निर्माण प्रभावित प्रभावों और अवकाश प्रभावों के प्रभावों की अवकाश करने हुए प्रभाव
प्रभावों (या निर्माण प्रभाव) में निर्माण प्रभावों क्षेत्रों अवकाश करने। उन प्रभावों के प्रभाव प्रभावित प्रभाव और अन्य
प्रभाव प्रभाव। निर्माण प्रभावों और सामाजिक प्रभावों को कम करने के लिए प्रभाव प्रभावित प्रभाव प्रभाव करने और अन्य
प्रभावों और सामाजिक प्रभाव प्रभावों में अवकाश करने।

Coverage of Consultations:

The study team carried out 39 consultations during their field visit and covered 85 participants in total. The Table-1 below provides the coverage of villages along each of the Power line corridors.

Coverage of Consultation along High Voltage Power Lines

#	TL Name	Number of Villages (habitations)	Number of Gram Panchayats (GPs)	Number of GPs Consulted	Total Number of Participants
1	400 KV Kashipur- Puhana	4	2	2	4
2	220 KV Mangapur- Nara	24	16	14	31
3	220 KV Roonkee- Nara	2	2	2	3
4	132 kV Mangalore- Asht	2	2	2	3
5	132 KV Khatima- Sitarganj	2	2	2	4
6	132 KV Kashipur- Mohuskeraganj	7	7	6	15
7	132 KV Mohuskeraganj- Jaspur	15	12	10	23
8	132 KV Kathgodam- Rudrapur	1	1	1	2
Total		57	44	39	85

Details of the Consultation

The documentation of each of these consultations along each of the high voltage Power line corridor is provided in sub-sections below.

400 kV Kashipur-Puhana (from Lanchora Sub-station to Kashipur-Puhana Line)

The map showing the Power line alignment and administrative boundary is provided in Figure-1. The Power line will have 12 towers and crosses 4 (Sundhar, Bhainswahat Ah, Bhainswahat Ma, and Uherat) revenue villages which belong to 2 (Sundhar and Zaurai Jabardaspur) Gram Panchayats in Haridwar District of Uttarakhand State.

The consultation was carried out in both Gram Panchayats and the names of revenue village and their respective Gram Panchayat name is provided below.

Revenue Village Name	Gram Panchayat Name
Bhainsarhed (Ah and Mu)	Zavasi Jabardastpur
Uthari	
Sunchar	Sunchar

Figure 1. Rasthapa-2 (range-400) Kivire and newel on village boundaries



Gram Panchayat - Zaurai, Jalandhar (includes Villages Bhainsarhedi Ah, Bhainsarhedi Mu, Uhenar)

A	Project Title:				
B	Stakeholder Title:				
Important Notice: This document provides a working summary of the main facts captured during the consultation/key informant interview held, and should not be treated as a formal minute. It is therefore deliberately not exhaustive or chronological. Its purpose is to capture significant information/feedbacks and not intended for official review or approval.			Insert photo of consultation capturing as many participants as possible.		
C	Basic details				
	Location	Zaurai, Jalandhar			
	Date:	15th Dec 2022			
D	Attended By	Name	Designation	Contact Number	
(See the copy of the attendance sheet attached at the end)					
E	Purpose of Consultation		Information Disclosure		
	Assessing impact perception	Medium	Oral Display maps/photographs		
	Baseline Information Collection	Disclosure Protocols Used	Project Non-Technical Summary Project food print maps		
Key Questions:			Responses		
Is there any high-voltage Power line existing in the village? If yes, what would be its length and since how many years it is existing?			No		
Has the community ever faced any problem due to the high voltage Power line?			No		
Do you have a designated place for regular and weekly market in the village? If not, name of the nearest village where weekly market is held.			Yes Landhara		

Do you have archaeological and historical monument in and near the village? If yes, provide details.	No	
Which community level religious and cultural events are celebrated at village and their locations?	Peer Mazar Annually	
Do you have street lighting in the village? Is it adequate?	50% of the streets have lights	
What is the percentage of household in the village who have electricity connection?	100% HHs electrified	
Is the electricity supply reliable? How many times in a day the electricity supply is disrupted? Is there any voltage fluctuation? What time of the year, there is more frequent disruption in electricity supply?	Yes, around 22 hours of electricity availability in the village No Voltage Fluctuation Power disruption some time at Evening	
How many households in the village use power for irrigation and agriculture purpose?	Around 350 Households	
Is there any small and medium scale industry in the village? If yes, do they depend on electricity?	No	
If a new Power line needs to pass through your village territory, what suggestions you would like to offer?	No major issues. Community leaders and affected family should be consulted before construction.	
Other Related Photographs or Documents		
Photo Title	Photo Title	Photo Title
Insert Relevant Photo	Insert Relevant Photo	Insert Relevant Photo

Gram Panchayat – Sundhar (includes Revenue Villages Sundhar)

A		Project Title:			
B		Stakeholder Title: Gram Pradhan Consultation			
		Important Notice: This document provides a working summary of the main facts captured during the consultation/key-informant interview held, and should not be treated as a formal minute. It is therefore deliberately not exhaustive or chronological. Its purpose is to capture significant information/feedbacks and not intended for official review or approval.		Insert photo of consultation capturing as many participants as possible.	
C		Basic details			
Location:		Sundhar			
Date:					
D		Attended By	Name	Designation	Contact Number
(See the copy of the attendance sheet attached at the end)					
E		Purpose of Consultation		Information Disclosure	
		Assessing impact perception		Medium	Oral Display maps/photographs
		Baseline information Collection		Disclosure Protocols Used	Project Non-Technical Summary Project foot print maps
		Key Questions:		Responses	
		Is there any high-voltage Power line existing in the village? If yes, what would be its length and since how many years it is existing?		No	
		Has the community ever faced any problem due to the high voltage Power line?		No	
		Do you have a designated place for regular and weekly market in the village? If not, name of the nearest village where weekly market is held.		No	

	Do you have archaeological and historical monument in and near the village? If yes, provide details.	No
	Which community level religious and cultural events are celebrated at village and their locations?	Alaudin Sahat Nora
	Do you have street lighting in the village? Is it adequate?	No, very few solar lights
	What is the percentage of household in the village who have electricity connection?	100% HHs electrified
	Is the electricity supply reliable? How many times in a day the electricity supply is disrupted? Is there any voltage fluctuation? What time of the year, there is more frequent disruption in electricity supply?	Yes, around 24 hours of electricity availability in the village No Voltage Fluctuation
	How many households in the village use power for irrigation and agriculture purpose?	Most of the households use tractor/diesel based tubewell
	Is there any small and medium scale industry in the village? If yes, do they depend on electricity?	No
	If a new Power line needs to pass through your village territory, what suggestions you would like to offer?	No major issues. Compensation is quit less, it should be more than market rate. Community leaders and affected family should be consulted before construction
	Other Related Photographs or Documents	
	Photo Title	Photo Title
	Photo Title	Photo Title
	Insert Relevant Photo	Insert Relevant Photo
	Insert Relevant Photo	Insert Relevant Photo

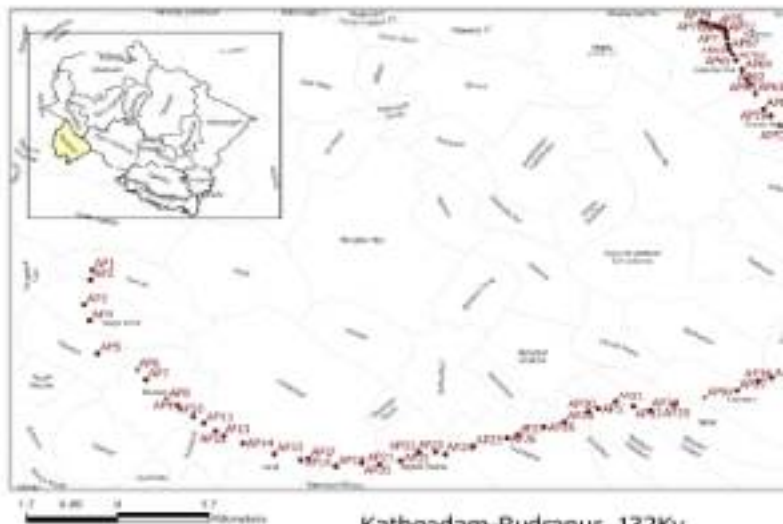
220 kV Manglaur-Nara

The map showing the Power line alignment and administrative boundary is provided in Figure-2. The Power line will have 80 towers and crosses 24 (Jhatiran, Nagla Ahmad, Thosaka, Mundat, Kulchandi, Kundi, Libbaredi, Nagla Cheena, Mundatana, Aamkheri, Nagarpur Ghosipura, Bheekar Gopur, Sikhar, Gopalpur, Bulkanpur, Abdul Hasanpur Urf Ghosarpadi M, Mohd Pur Bazurg Ah, Khampur, Majri Akbarpur, Hazzarpur Ah, Shikarpur, Zaunai Mu, Zuberdaat Pur, Sundhar) revenue villages which belong to 15 Gram Panchayats in Haridwar District of Uttarakhand State.

The consultation was carried out in 13 Gram Panchayats and the names of revenue village and their respective Gram Panchayat name is provided below.

Revenue Village Name	Gram Panchayat Name
Jhatiran	(a) Jhatiran
Nagla Ahmad	(b) Nagla Ahmad
Thosaka	(c) Thosaka
Mundat	(d) Mundat
Libbaredi	(e) Libbaredi
Kulchandi	
Kundi	
Nagla Cheena	(f) Nagla Cheena
Aamkheri	(g) Aamkheri
Bheekar Ghosipur	(h) Gopalpur
Sikhar	
Gopalpur	
Bulkanpur	(i) Bulkanpur
Abdul Hasanpur Urf Ghosarpadi	
Mohd Pur Bazurg Ah	(j) Mohd Pur Bazurg
Khampur	(k) Khampur
Majri Akbarpur	
Shikarpur	(l) Shikarpur
Hazzarpur Ah	
Sundhar	(m) Sundhar

Figure 2: Map of Manglaur-Nara 132 kV line and revenue village boundaries



Kathgodam-Rudrapur_132Kv

Map Credits: Environmental & Social Safeguards Team, Asian Development Bank Ltd.
Data Credits: Power Transmission Corporation of (Uttarakhand Limited) (PTCL) and

Gram Panchayat - Jhabiran (Revenue Village Jhabiran)

A		Project Title:			
B		Stakeholder: Gram Pradhan Consultation			
Title:					
		Important Notice: This document provides a working summary of the main facts captured during the consultation/key-informant interview held, and should not be treated as a formal minute. It is therefore deliberately not exhaustive or chronological. Its purpose is to capture significant information/feedbacks and not intended for official review or approval.		Insert photo of consultation capturing as many participants as possible.	
C		Basic details			
Location:		Jhabiran			
Date:		14th Dec 2022			
D		Attended By	Name	Designation	Contact Number
(See the copy of the attendance sheet attached at the end)					
E		Purpose of Consultation		Information Disclosure	
		Assessing perception	Impact	Medium	Oral Display mass photographs
		Baseline information Collection		Disclosure Protocols Used	Project Non-Technical Summary Project food print maps
Key Questions:				Responses	
Is there any high-voltage Power line existing in the village? If yes, what would be its length and since how many years it is existing?				No	
Has the community ever faced any problem due to the high voltage Power line?				No	
Do you have a designated place for regular and weekly market in the village? If not, name of the nearest village where weekly market is held.				No	
Do you have archaeological and historical monument in and near the village? If yes, provide details.				No	

Which community level religious and cultural events are celebrated at village and their locations?	Jharvi Goga Mahad Mela (August)
Do you have street lighting in the village? Is it adequate?	40% street lights (8 solar & 20 electric)
What is the percentage of household in the village who have electricity connection?	100% HHs electrified
Is the electricity supply reliable? How many times in a day the electricity supply is disrupted?	Yes, around 21/22 hours of electricity availability in the village
Is there any voltage fluctuation?	No Voltage Fluctuation
What time of the year, there is more frequent disruption in electricity supply?	Power disruption at Evening
How many households in the village use power for irrigation and agriculture purpose?	Around 30% Households, rest use diesel
Is there any small and medium scale industry in the village? If yes, do they depend on electricity?	Agriculture Seeds industry and Paper mills industry
If a new Power line needs to pass through your village territory, what suggestions you would like to offer?	No major issues. Communicate with affected people/HHs and community leaders before construction and timely payment as per norms. Compensation is out late; it should be more than market rate.
Other Related Photographs or Documents	
Photo Title	Photo Title
Photo Title	Photo Title
Insert Relevant Photo	Insert Relevant Photo
Insert Relevant Photo	Insert Relevant Photo

Participants List (in English)

PTCUL LILO Line	Name of participant	GP Name	Gender	Contact number
220 kV Manglaur-Nara	Sanka Saini	Jharvi	Female	7017471985

	Aisha Saini	Jhokirani	Male	7017471985
--	-------------	-----------	------	------------

Signed Attendance Sheet

Date: 20/05/2023

Sl. No.	Name of the student	Roll No.	Class	Section	Present	Absent	Remarks
1	Aisha Saini	7017471985	10th	10A	✓		
2	...	...	10th	10A		✓	
3	...	...	10th	10A	✓		
4	...	...	10th	10A		✓	
5	...	...	10th	10A	✓		
6	...	...	10th	10A		✓	
7	...	...	10th	10A	✓		
8	...	...	10th	10A		✓	
9	...	...	10th	10A	✓		
10	...	...	10th	10A		✓	
11	...	...	10th	10A	✓		
12	...	...	10th	10A		✓	
13	...	...	10th	10A	✓		
14	...	...	10th	10A		✓	
15	...	...	10th	10A	✓		

Gram Panchayat - Nagla Ahmad (Revenue Village Nagla Ahmad)

A		Project Title:				
B		Stakeholder Title:	Gram Pradhan Consultation			
		Important Notice: This document provides a working summary of the main facts captured during the consultation/key-informant interview held, and should not be treated as a formal minute. It is therefore deliberately not exhaustive or chronological. Its purpose is to capture significant information/feedbacks and not intended for official review or approval.				Insert photo of consultation capturing as many participants as possible.
C		Basic details				
		Location:	Nagla Ahmad			
		Date:				
D		Attended By	Name	Designation	Contact Number	
		(See the copy of the attendance sheet attached at the end)				
E		Purpose of Consultation	Information Disclosure			
		Assessing impact perception	Medium	Oral		
				Display maps/photographs		
		Baseline Information Collection	Disclosure Protocol Used	Project Non-Technical Summary		
				Project foot print maps		
		Key Questions:			Responses	
		Is there any high-voltage Power line existing in the village? If yes, what would be its length and since how many years it is existing?			No	
		Has the community ever faced any problem due to the high voltage Power line?			No	
		Do you have a designated place for regular and weekly market in the village? If not, name of the nearest village where weekly market is held.			Wednesday	
		Do you have archaeological and historical monument in and near the village? If yes, provide details.			No	

	Which community level religious and cultural events are celebrated at village and their locations?	No
	Do you have street lighting in the village? Is it adequate?	36% street lights (4 solar & 16 electric)
	What is the percentage of household in the village who have electricity connection?	100% HHs electrified
	Is the electricity supply reliable? How many times in a day the electricity supply is disrupted?	Yes, around 2021 hours of electricity availability in the village
	Is there any voltage fluctuation?	No Voltage Fluctuation
	What time of the year, there is more frequent disruption in electricity supply?	Power disruption at Evening
	How many households in the village use power for irrigation and agriculture purpose?	Around 15 Households, rest use diesel
	Is there any small and medium scale industry in the village? If yes, do they depend on electricity?	No
	If a new Power line needs to pass through your village territory, what suggestions you would like to offer?	Habitations/Houses should not be affected. Consultation should be done with affected family.
	Other Related Photographs or Documents	
	Photo Title	Photo Title
	Photo Title	Photo Title
	Insert Relevant Photo	Insert Relevant Photo
	Insert Relevant Photo	Insert Relevant Photo

Participants List (in English)

PTCUL LEO Life	Name of participant	GP Name	Gender	Contact number
220 kV Manglaur-Nara	Smt. Seema	Nagla Amaid	Female	9837050159
	Gajendra Singh	Nagla Amaid	Male	9837050159

Gram Panchayat - Thasaka (Revenue Village Thasaka)

A		Project Title:			
B		Stakeholder: Gram Pradhan Consultation			
Title:					
		Important Notice: This document provides a working summary of the main facts captured during the consultation/key-informant interview held, and should not be treated as a formal minute. It is therefore deliberately not exhaustive or chronological. Its purpose is to capture significant information/feedbacks and not intended for official review or approval.		Insert photo of consultation capturing as many participants as possible.	
C		Basic details			
Location:		Thasaka			
Date:		14th Dec 2022			
D		Attended By		Name	
		Designation		Contact Number	
		(See the copy of the attendance sheet attached at the end)			
E		Purpose of Consultation		Information Disclosure	
		Assessing impact perception		Medium	
		Baseline Information Collection		Disclosure Protocol Used	
				Oral	
				Display maps/photographs	
				Project Non-Technical Summary	
				Project foot print maps	
		Key Questions:		Responses	
		Is there any high-voltage Power line existing in the village? If yes, what would be its length and since how many years it is existing?		No	
		Has the community ever faced any problem due to the high voltage Power line?		No	
		Do you have a designated place for regular and weekly market in the village? If not, name of the nearest village where weekly market is held.		No	
		Do you have archaeological and historical monument in and near the village? If yes, provide details.		No	

	Which community level religious and cultural events are celebrated at village and their locations?	Navratra Mela
	Do you have street lighting in the village? Is it adequate?	10% street lights (10 solar)
	What is the percentage of household in the village who have electricity connection?	100% HHs electrified
	Is the electricity supply reliable? How many times in a day the electricity supply is disrupted?	Yes, around 18/20 hours of electricity availability in the village
	Is there any voltage fluctuation?	No Voltage Fluctuation
	What time of the year, there is more frequent disruption in electricity supply?	Power disruption at Evening
	How many households in the village use power for irrigation and agriculture purpose?	40 diesel tubewell, 5-electric
	Is there any small and medium scale industry in the village? If yes, do they depend on electricity?	No
	If a new Power line needs to pass through your village territory, what suggestions you would like to offer?	No issue, Line is passing through outside the village. Land price should increase
Other Related Photographs or Documents		
	Photo Title	Photo Title
	Photo Title	Photo Title
	Insert Relevant Photo	Insert Relevant Photo
	Insert Relevant Photo	Insert Relevant Photo

Participants List (in English)

PTCUL LILO Line	Name of participant	GP Name	Gender	Contact Number
220 kV Mangrour-Nara	Ajaybeer Singh	Thoska	Male	9868286997
	Gushir Kumar	Thoska	Male	7830038611

Signed Attendance Sheet

सूचना प्रौद्योगिकी और परामर्श

आ. सं. (अनुसूची में)	आ. सं. (अनुसूची में)	विषय (अनुसूची में)	आ. सं. (अनुसूची में)	आ. सं. (अनुसूची में)	आ. सं. (अनुसूची में)	आ. सं. (अनुसूची में)	आ. सं. (अनुसूची में)
1	2	3	4	5	6	7	8
1	1	1	1	1	1	1	1
2	2	2	2	2	2	2	2
3	3	3	3	3	3	3	3
4	4	4	4	4	4	4	4
5	5	5	5	5	5	5	5
6	6	6	6	6	6	6	6
7	7	7	7	7	7	7	7
8	8	8	8	8	8	8	8
9	9	9	9	9	9	9	9
10	10	10	10	10	10	10	10
11	11	11	11	11	11	11	11
12	12	12	12	12	12	12	12
13	13	13	13	13	13	13	13
14	14	14	14	14	14	14	14
15	15	15	15	15	15	15	15
16	16	16	16	16	16	16	16
17	17	17	17	17	17	17	17
18	18	18	18	18	18	18	18
19	19	19	19	19	19	19	19
20	20	20	20	20	20	20	20
21	21	21	21	21	21	21	21
22	22	22	22	22	22	22	22
23	23	23	23	23	23	23	23
24	24	24	24	24	24	24	24
25	25	25	25	25	25	25	25
26	26	26	26	26	26	26	26
27	27	27	27	27	27	27	27
28	28	28	28	28	28	28	28
29	29	29	29	29	29	29	29
30	30	30	30	30	30	30	30
31	31	31	31	31	31	31	31
32	32	32	32	32	32	32	32
33	33	33	33	33	33	33	33
34	34	34	34	34	34	34	34
35	35	35	35	35	35	35	35
36	36	36	36	36	36	36	36
37	37	37	37	37	37	37	37
38	38	38	38	38	38	38	38
39	39	39	39	39	39	39	39
40	40	40	40	40	40	40	40
41	41	41	41	41	41	41	41
42	42	42	42	42	42	42	42
43	43	43	43	43	43	43	43
44	44	44	44	44	44	44	44
45	45	45	45	45	45	45	45
46	46	46	46	46	46	46	46
47	47	47	47	47	47	47	47
48	48	48	48	48	48	48	48
49	49	49	49	49	49	49	49
50	50	50	50	50	50	50	50
51	51	51	51	51	51	51	51
52	52	52	52	52	52	52	52
53	53	53	53	53	53	53	53
54	54	54	54	54	54	54	54
55	55	55	55	55	55	55	55
56	56	56	56	56	56	56	56
57	57	57	57	57	57	57	57
58	58	58	58	58	58	58	58
59	59	59	59	59	59	59	59
60	60	60	60	60	60	60	60
61	61	61	61	61	61	61	61
62	62	62	62	62	62	62	62
63	63	63	63	63	63	63	63
64	64	64	64	64	64	64	64
65	65	65	65	65	65	65	65
66	66	66	66	66	66	66	66
67	67	67	67	67	67	67	67
68	68	68	68	68	68	68	68
69	69	69	69	69	69	69	69
70	70	70	70	70	70	70	70
71	71	71	71	71	71	71	71
72	72	72	72	72	72	72	72
73	73	73	73	73	73	73	73
74	74	74	74	74	74	74	74
75	75	75	75	75	75	75	75
76	76	76	76	76	76	76	76
77	77	77	77	77	77	77	77
78	78	78	78	78	78	78	78
79	79	79	79	79	79	79	79
80	80	80	80	80	80	80	80
81	81	81	81	81	81	81	81
82	82	82	82	82	82	82	82
83	83	83	83	83	83	83	83
84	84	84	84	84	84	84	84
85	85	85	85	85	85	85	85
86	86	86	86	86	86	86	86
87	87	87	87	87	87	87	87
88	88	88	88	88	88	88	88
89	89	89	89	89	89	89	89
90	90	90	90	90	90	90	90
91	91	91	91	91	91	91	91
92	92	92	92	92	92	92	92
93	93	93	93	93	93	93	93
94	94	94	94	94	94	94	94
95	95	95	95	95	95	95	95
96	96	96	96	96	96	96	96
97	97	97	97	97	97	97	97
98	98	98	98	98	98	98	98
99	99	99	99	99	99	99	99
100	100	100	100	100	100	100	100

Gram Panchayat - Mundet (Revenue Village Mundet)

A		Project Title:					
B		Stakeholder Title:		Gram Pradhan Consultation			
		Important Notice: This document provides a working summary of the main facts captured during the consultation/key-informant interview held, and should not be treated as a formal minute. It is therefore deliberately not exhaustive or chronological. Its purpose is to capture significant information/feedbacks and not intended for official review or approval.		Insert photo of consultation capturing as many participants as possible.			
C		Basic details					
		Location:				Mundet	
		Date:		15th Dec 2022			
D		Attended By		Name			
				Designation			
				Contact Number			
		(See the copy of the attendance sheet attached at the end)					
E		Purpose of Consultation		Information Disclosure			
		Assessing impact perception		Medium			
		Baseline Information Collection		Oral			
				Display maps/photographs			
				Disclosure Protocols Used			
				Project Non-Technical Summary			
				Project foot print maps			
		Key Questions:		Responses			
		Is there any high-voltage Power line existing in the village? If yes, what would be its length and since how many years it is existing?		No			
		Has the community ever faced any problem due to the high voltage Power line?		No			
		Do you have a designated place for regular and weekly market in the village? If not, name of the nearest village where weekly market is held.		No			
		Do you have archaeological and historical monument in and near the village? If yes, provide details.		No			

	Which community level religious and cultural events are celebrated at village and their locations?	Jharvi Goga Mahadi Meis (August)
	Do you have street lighting in the village? Is it adequate?	20% street lights (8 solar & 12 electric)
	What is the percentage of household in the village who have electricity connection?	100% HHs electrified
	Is the electricity supply reliable? How many times in a day the electricity supply is disrupted? Is there any voltage fluctuation? What time of the year, there is more frequent disruption in electricity supply?	Yes, around 18/20 hours of electricity availability in the village No Voltage Fluctuation Power disruption at Evening
	How many households in the village use power for irrigation and agriculture purposes?	No
	Is there any small and medium scale industry in the village? If yes, do they depend on electricity?	Uttaranchal Paper mill, Sagar Paper Mill, Gayatri Paper Mill
	If a new Power line needs to pass through your village territory, what suggestions you would like to offer?	No issue, Consultation should be done with affected family.
	Other Related Photographs or Documents	
	Photo Title	Photo Title
	Photo Title	Photo Title
	Insert Relevant Photo	Insert Relevant Photo
	Insert Relevant Photo	Insert Relevant Photo

Participants List (in English)

PTCUL LLO Line	Name of participant	GP Name	Gender	Contact number
220 kV Mangaur-Nara	Manoj Kumar	Mundol	Male	9012650024
	Sonu Kumar	Mundol	Male	9719927416
	Ranish Kumar	Mundol	Male	

Gram Panchayat - Libbarhadi (Includes Revenue Villages Libbarhadi, Kulchandi, Kund)

A		Project Title:			
B		Stakeholder: Gram Pradhan Consultation			
Title:					
		Important Notice: This document provides a working summary of the main facts captured during the consultation/key-informant interview held, and should not be treated as a formal minute. It is therefore deliberately not exhaustive or chronological. Its purpose is to capture significant information/feedbacks and not intended for official review or approval.		Insert photo of consultation capturing as many participants as possible.	
C		Basic details			
Location:		Libbarhadi			
Date:		14th Dec 2022			
D		Attended By	Name	Designation	Contact Number
(See the copy of the attendance sheet attached at the end)					
E		Purpose of Consultation		Information Disclosure	
		Assessing impact perception		Medium	Oral
		Baseline Information Collection		Disclosure: Protocols Used	Project Non-Technical Summary Project foot print maps
		Key Questions:		Responses	
		Is there any high-voltage Power line existing in the village? If yes, what would be its length and since how many years it is existing?			No
		Has the community ever faced any problem due to the high voltage Power line?			No
		Do you have a designated place for regular and weekly market in the village? If not, name of the nearest village where weekly market is held.			Friday
		Do you have archaeological and historical monument in and near the village? If yes, provide details.			No

	Which community level religious and cultural events are celebrated at village and their locations?	Pir Meza, and Ramila
	Do you have street lighting in the village? Is it adequate?	50% street lights (200 electric)
	What is the percentage of household in the village who have electricity connection?	100% HHs electrified
	Is the electricity supply reliable? How many times in a day the electricity supply is disrupted? Is there any voltage fluctuation? What time of the year, there is more frequent disruption in electricity supply?	Yes, around 18/20 hours of electricity availability in the village No Voltage Fluctuation Power disruption at evening rastaar
	How many households in the village use power for irrigation and agriculture purpose?	150 tube well majority (70%) diesel
	Is there any small and medium scale industry in the village? If yes, do they depend on electricity?	No
	If a new Power line needs to pass through your village territory, what suggestions you would like to offer?	No issue on this mat, community should be consulted before construction.
Other Related Photographs or Documents		
	Photo Title	Photo Title
	Photo Title	Photo Title
	Insert Relevant Photo	Insert Relevant Photo
	Insert Relevant Photo	Insert Relevant Photo

Participants List (in English)

PTCUL LLO Line	Name of participant	GP Name	Gender	Contact number
220 KV 25KM	Arshad Malik	Liberated	Male	9837152176
220 KV 25KM	Shabnam	Liberated	Female	9837152176

Signat Attendance Sheet

दस्तावेज प्रमाणीकरण और पाठ्यपत्र

आय-समाधानकर्ता का नाम	आय-समाधानकर्ता का नाम	सीटिंग/आय-समाधानकर्ता का नाम	आय-समाधानकर्ता का नाम	आय-समाधानकर्ता का नाम			आय-समाधानकर्ता का नाम
				आय-समाधानकर्ता का नाम	आय-समाधानकर्ता का नाम	आय-समाधानकर्ता का नाम	
आय-समाधानकर्ता का नाम	आय-समाधानकर्ता का नाम	आय-समाधानकर्ता का नाम	आय-समाधानकर्ता का नाम	आय-समाधानकर्ता का नाम	आय-समाधानकर्ता का नाम	आय-समाधानकर्ता का नाम	आय-समाधानकर्ता का नाम
आय-समाधानकर्ता का नाम	आय-समाधानकर्ता का नाम	आय-समाधानकर्ता का नाम	आय-समाधानकर्ता का नाम	आय-समाधानकर्ता का नाम	आय-समाधानकर्ता का नाम	आय-समाधानकर्ता का नाम	आय-समाधानकर्ता का नाम

Gram Panchayat - Nagala Cheera (Revenue Village Nagala Cheera)

A		Project Title:				
B		Stakeholder:	Gram Pradhan Consultation			
		Title:				
		Important Notice: This document provides a working summary of the main facts captured during the consultation/key-informant interview held, and should not be treated as a formal minute. It is therefore deliberately not exhaustive or chronological. Its purpose is to capture significant information/feedbacks and not intended for official review or approval.				Insert photo of consultation capturing as many participants as possible.
C		Basic details				
		Location:	Nagala Cheera			
		Date:	15th Dec 2022			
D		Attended By	Name	Designation	Contact Number	
		(See the copy of the attendance sheet attached at the end)				
E		Purpose of Consultation		Information Disclosure		
		Assessing impact perception		Medium	Oral	
		Baseline Information Collection		Disclosure: Protocols Used	Display maps/photographs Project Non-Technical Summary Project foot print maps	
		Key Questions:			Responses	
		Is there any high-voltage Power line existing in the village? If yes, what would be its length and since how many years it is existing?			No	
		Has the community ever faced any problem due to the high voltage Power line?			No	
		Do you have a designated place for regular and weekly market in the village? If not, name of the nearest village where weekly market is held.			No	
		Do you have archaeological and historical monument in and near the village? If yes, provide details.			No	

	Which community level religious and cultural events are celebrated at village and their locations?	No
	Do you have street lighting in the village? Is it adequate?	No street light in the village
	What is the percentage of household in the village who have electricity connection?	100% HHs electrified
	Is the electricity supply reliable? How many times in a day the electricity supply is disrupted?	Yes, around 22 hours of electricity availability in the village
	Is there any voltage fluctuation?	No Voltage Fluctuation
	What time of the year, there is more frequent disruption in electricity supply?	Not regular some time
	How many households in the village use power for irrigation and agriculture purpose?	No
	Is there any small and medium scale industry in the village? If yes, do they depend on electricity?	Neelkanth Fertilizer
	If a new Power line needs to pass through your village territory, what suggestions you would like to offer?	Keep LILO line distance from the habitation and do consultation with community before construction.
	Other Related Photographs or Documents	
	Photo Title	Photo Title
	Photo Title	Photo Title
	Insert Relevant Photo	Insert Relevant Photo
	Insert Relevant Photo	Insert Relevant Photo

Participants List (in English)

PTOL LILO Line	Name of participant	GP Name	Gender	Contact number
220 kV Manglaur-Nara	Nitin Kumar	Nagla China	Male	8077780417
	Rani Kumar	Nagla China	Male	
	Vishasha Devi	Nagla China	Female	9526518095

Signat Attendance Sheet

सूचना सफटीकरण और प्रदर्शन

सूचना सफटीकरण का प्रकार	सूचना का स्रोत	सूचना का स्रोत	सूचना का स्रोत	सूचना का स्रोत	सूचना का स्रोत			सूचना का स्रोत
					सूचना	सूचना	सूचना	
सूचना	सूचना	सूचना	सूचना	सूचना	सूचना	सूचना	सूचना	सूचना
सूचना	सूचना	सूचना	सूचना	सूचना	सूचना	सूचना	सूचना	सूचना
सूचना	सूचना	सूचना	सूचना	सूचना	सूचना	सूचना	सूचना	सूचना
सूचना	सूचना	सूचना	सूचना	सूचना	सूचना	सूचना	सूचना	सूचना
सूचना	सूचना	सूचना	सूचना	सूचना	सूचना	सूचना	सूचना	सूचना
सूचना	सूचना	सूचना	सूचना	सूचना	सूचना	सूचना	सूचना	सूचना
सूचना	सूचना	सूचना	सूचना	सूचना	सूचना	सूचना	सूचना	सूचना

Gram Panchayat - Aamkheri (Revenue Village Aamkheri)

A		Project Title:			
B		Stakeholder: Gram Pradhan Consultation			
Title:					
		Important Notice: This document provides a working summary of the main facts captured during the consultation/key-informant interview held, and should not be treated as a formal minute. It is therefore deliberately not exhaustive or chronological. Its purpose is to capture significant information/feedbacks and not intended for official review or approval.		Insert photo of consultation capturing as many participants as possible.	
C		Basic details			
Location:		Aamkheri			
Date:		11th Dec 2022			
D		Attended By	Name	Designation	Contact Number
(See the copy of the attendance sheet attached at the end)					
E		Purpose of Consultation		Information Disclosure	
		Assessing impact perception		Medium	Oral
		Baseline Information Collection		Disclosure: Protocols Used	Display maps/photographs Project Non-Technical Summary Project foot print maps
		Key Questions:		Responses	
		Is there any high-voltage Power line existing in the village? If yes, what would be its length and since how many years it is existing?			No
		Has the community ever faced any problem due to the high voltage Power line?			No
		Do you have a designated place for regular and weekly market in the village? If not, name of the nearest village where weekly market is held.			No
		Do you have archaeological and historical monument in and near the village? If yes, provide details.			No

	Which community level religious and cultural events are celebrated at village and their locations?	No
	Do you have street lighting in the village? Is it adequate?	50% street lights
	What is the percentage of household in the village who have electricity connection?	100% HHs electrified
	Is the electricity supply reliable? How many times in a day the electricity supply is disrupted?	Yes, around 20 hours of electricity availability in the village
	Is there any voltage fluctuation?	No Voltage Fluctuation
	What time of the year, there is more frequent disruption in electricity supply?	Power disruption at Evening due to roaster.
	How many households in the village use power for irrigation and agriculture purpose?	No
	Is there any small and medium scale industry in the village? If yes, do they depend on electricity?	No
	If a new Power line needs to pass through your village territory, what suggestions you would like to offer?	Villagers will get improved electricity. Keep LILO line distance from the habitation and do consultation with community before construction.
	Other Related Photographs or Documents:	
	Photo Title	Photo Title
	Photo Title	Photo Title
	Insert Relevant Photo	Insert Relevant Photo
	Insert Relevant Photo	Insert Relevant Photo

Participants List (in English)

PTCUL LILO Line	Name of participant	G.P Name	Gender	Contact number
220 kV Manglaur-Nara	Ravindra Kumar	Amxhen	Male	9143179335

Signat Attendance Sheet

एकलिंगाचार्यः श्री गुरुभ्यो नमः

[illegible]

Gram Panchayat - Gopalpur (includes Revenue Villages Bheekar Gaspur, Sirhar, Gopalpur)

A	Project Title:				
B	Stakeholder Title:	Gram Pradhan Consultation			
	Important Notice: This document provides a working summary of the main facts captured during the consultation/key-informant interview held, and should not be treated as a formal minute. It is therefore deliberately not exhaustive or chronological. Its purpose is to capture significant information/feedbacks and not intended for official review or approval.		Insert photo of consultation capturing as many participants as possible.		
C	Basic details				
	Location:				Gopalpur
	Date:		14th Dec 2022		
D	Attended By	Name	Designation	Contact number	
	(See the copy of the attendance sheet attached at the end)				
E	Purpose of Consultation	Information Disclosure			
	Assessing impact perception	Medium	Oral		
			Display maps/photographs		
	Baseline Information Collection	Disclosure Protocols Used	Project Non-Technical Summary		
			Project food print maps		
	Key Questions:		Responses		
	Is there any high-voltage Power line existing in the village? If yes, what would be its length and since how many years it is existing?		No, one LT Line		
	Has the community ever faced any problem due to the high voltage Power line?		No		
	Do you have a designated place for regular and weekly market in the village? If not, name of the nearest village where weekly market is held.		No		
	Do you have archaeological and historical monument in and near the village? If yes, provide details.		No		

	Which community level religious and cultural events are celebrated at village and their locations?	No
	Do you have street lighting in the village? Is it adequate?	50% street light (35 solar, 5 electricians)
	What is the percentage of household in the village who have electricity connection?	100% HHs electrified
	Is the electricity supply reliable? How many times in a day the electricity supply is disrupted?	Yes, around 10 hours of electricity availability in the village
	Is there any voltage fluctuation?	No Voltage Fluctuation
	What time of the year, there is more frequent disruption in electricity supply?	Power disruption at Morning and Evening due to monsoon.
	How many households in the village use power for irrigation and agriculture purpose?	200 tubewells, majority diesel
	Is there any small and medium scale industry in the village? If yes, do they depend on electricity?	No
	If a new Power line needs to pass through your village territory, what suggestions you would like to offer?	Keep distance of line from habitation, Proper information to community, grievance redressal system with phonamobile number.
	Other Related Photographs or Documents	
	Photo Title	Photo Title
	Photo Title	Photo Title
	Insert Relevant Photo	Insert Relevant Photo
	Insert Relevant Photo	Insert Relevant Photo

Participants List (in English)

PTCUL LILO Line	Name of participant	GP Name	Gender	Contact number
220 kV Manglaur-Nara	Jagdev Ravi	Gopalpur	Male	8006355148
	Sadhana Nauliyal	Gopalpur	Female	
	Ajay Kumar	Gopalpur	Male	

Signed Attendance Sheet

सुनल पदविभाग की पदवी

पद विभाग का नाम	पद विभाग का नाम	पद विभाग का नाम	पद विभाग का नाम	पद विभाग का नाम			पद विभाग का नाम
				पद	पद	पद	
पद विभाग	पद विभाग	पद विभाग	पद विभाग	✓			पद विभाग
पद विभाग	पद विभाग	पद विभाग	पद विभाग		✓		पद विभाग
पद विभाग	पद विभाग	पद विभाग	पद विभाग	✓			पद विभाग
पद विभाग	पद विभाग	पद विभाग	पद विभाग		✓		पद विभाग
पद विभाग	पद विभाग	पद विभाग	पद विभाग	✓			पद विभाग

Gram Panchayat - Bukkanpur (includes Revenue Villages Bukkanpur, Abdul Hasanpur Urf, Gharpad M)

A	Project Title:				
B	Stakeholder Title:		Gram Pradhan Consultation		
	Important Notice: This document provides a working summary of the main facts captured during the consultation/key-informant interview held, and should not be treated as a formal minute. It is therefore deliberately not exhaustive or chronological. Its purpose is to capture significant information/feedbacks and not intended for official review or approval.		Insert photo of consultation capturing as many participants as possible.		
C	Basic details				
	Location				Bukkanpur
	Date:		16th Dec 2022		
D	Attended By	Name	Designation	Contact Number	
	(See the copy of the attendance sheet attached at the end)				
E	Purpose of Consultation	Information Disclosure			
	Assessing impact	Impact	Medium	Oral	
				Display maps/photographs	
	Baseline Information Collection	Disclosure Protocols Used	Project Non-Technical Summary		
			Project food print maps		
	Key Questions:		Responses		
	Is there any high-voltage Power line existing in the village? If yes, what would be its length and since how many years it is existing?		No		
	Has the community ever faced any problem due to the high voltage Power line?		No		
	Do you have a designated place for regular and weekly market in the village? If not, name of the nearest village where weekly market is held.		Friday (Lanthora 3KM)		

	Do you have archaeological and historical monument in and near the village? If yes, provide details.	No
	Which community level religious and cultural events are celebrated at village and their locations?	Pr. mela
	Do you have street lighting in the village? Is it adequate?	100% street light
	What is the percentage of household in the village who have electricity connection?	100% HHs electrified
	Is the electricity supply reliable? How many times in a day the electricity supply is disrupted?	Yes, around 18/20 hours of electricity availability in the village
	Is there any voltage fluctuation?	No Voltage Fluctuation
	What time of the year, there is more frequent disruption in electricity supply?	Power disruption at Evening due to master.
	How many households in the village use power for irrigation and agriculture purpose?	No
	Is there any small and medium scale industry in the village? If yes, do they depend on electricity?	No
	If a new Power line needs to pass through your village territory, what suggestions you would like to offer?	No issue. Compensation rate should be good.
	Other Related Photographs or Documents	
	Photo Title	Photo Title
	Photo Title	Photo Title
	Insert Relevant Photo	Insert Relevant Photo
	Insert Relevant Photo	Insert Relevant Photo

Participants List (in English)

PTCUL L&D Line	Name of participant	GP Name	Gender	Contact number
220 KV 25 KM	Jafkar Ali	Bukharpur	Male	9084120179

Signat Attendance Sheet

सूचना प्रकटितकरण और पत्राचार

आवक संख्या/दिनांक	आवक का संक्षेप	संबंधित व्यक्ति/संस्था	आवक का दिनांक	आवक के प्रकार			आवक का निष्पत्ति
				सूचना	पत्राचार	अन्य	
1/2/2017	...	...	...	...	...	...	...
...	...	...	...	...	...	...	...
...	...	...	...	...	...	...	...

Gram Panchayat - Mohd Pur Bazurg Aht (Revenue Village Mohd Pur Bazurg Aht)

A	Project Title:				
B	Stakeholder Title:	Gram Pradhan Consultation			
	Important Notice: This document provides a working summary of the main facts captured during the consultation/key-informant interview held, and should not be treated as a formal minute. It is therefore deliberately not exhaustive or chronological. Its purpose is to capture significant information/feedbacks and not intended for official review or approval.		Insert photo of consultation capturing as many participants as possible.		
C	Basic details				
	Location:	Mohd Pur Bazurg Aht			
	Date:	16th Dec 2022			
D	Attended By	Name	Designation	Contact Number	
	(See the copy of the attendance sheet attached at the end)				
E	Purpose of Consultation	Information Disclosure			
	Assessing impact perception	Medium	Oral		
	Baseline information Collection	Disclosure Protocols Used	Project Non-Technical Summary Project food print maps		
	Key Questions:		Responses		
	Is there any high-voltage Power line existing in the village? If yes, what would be its length and since how many years it is existing?		No		
	Has the community ever faced any problem due to the high voltage Power line?		No		
	Do you have a designated place for regular and weekly market in the village? If not, name of the nearest village where weekly market is held.		No		
	Do you have archaeological and historical monument in and near the village? If yes, provide details.		No		

	Which community level religious and cultural events are celebrated at village and their locations?	Ramnavam mela, Shivratri mela
	Do you have street lighting in the village? Is it adequate?	5% street light (4 Solar)
	What is the percentage of household in the village who have electricity connection?	100% HHs electrified
	Is the electricity supply reliable? How many times in a day the electricity supply is disrupted?	Yes, around 20/21 hours of electricity availability in the village
	Is there any voltage fluctuation?	No Voltage Fluctuation
	What time of the year, there is more frequent disruption in electricity supply?	Power disruption during summer and at Evening due to roaster.
	How many households in the village use power for irrigation and agriculture purpose?	7 Electrical and 60 Oxen
	Is there any small and medium scale industry in the village? If yes, do they depend on electricity?	No
	If a new Power line needs to pass through your village territory, what suggestions you would like to offer?	No issue. Compensation rate should be good.
	Other Related Photographs or Documents	
	Photo Title	Photo Title
	Photo Title	Photo Title
	Insert Relevant Photo	Insert Relevant Photo
	Insert Relevant Photo	Insert Relevant Photo

Participants List (in English)

PTCUL LILO Line	Name of participant	GP Name	Gender	Contact number
220 kV Mangrour-Nara	Rajban Singh	Mohummudpur Buzurg	Male	
	Mahipal Singh Diwan	Mohummudpur Buzurg	Male	9760339413
	Sonu Upadhyaya	Mohummudpur Buzurg	Male	9410558072

	Ravindra	Mohummudpur Buzurg	Male	
--	----------	-----------------------	------	--

Signed Attendance Sheet

गुप्त परिवार की यादी

क्र.सं.	गुप्त परिवार का नाम	गुप्त परिवार का पता	गुप्त परिवार का जन्म तिथि	गुप्त परिवार का मृत्यु तिथि	गुप्त परिवार का पता	गुप्त परिवार का पता	गुप्त परिवार का पता	गुप्त परिवार का पता
1	गुप्त परिवार	गुप्त परिवार	गुप्त परिवार	गुप्त परिवार	गुप्त परिवार	गुप्त परिवार	गुप्त परिवार	गुप्त परिवार
2	गुप्त परिवार	गुप्त परिवार	गुप्त परिवार	गुप्त परिवार	गुप्त परिवार	गुप्त परिवार	गुप्त परिवार	गुप्त परिवार
3	गुप्त परिवार	गुप्त परिवार	गुप्त परिवार	गुप्त परिवार	गुप्त परिवार	गुप्त परिवार	गुप्त परिवार	गुप्त परिवार
4	गुप्त परिवार	गुप्त परिवार	गुप्त परिवार	गुप्त परिवार	गुप्त परिवार	गुप्त परिवार	गुप्त परिवार	गुप्त परिवार
5	गुप्त परिवार	गुप्त परिवार	गुप्त परिवार	गुप्त परिवार	गुप्त परिवार	गुप्त परिवार	गुप्त परिवार	गुप्त परिवार

Gram Panchayat - Khempur (Revenue Villages Khempur, Mani Akbarpur)

A	Project Title:				
B	Stakeholder Title:	Gram Pradhan Consultation			
	Important Notice: This document provides a working summary of the main facts captured during the consultation/key-informant interview held, and should not be treated as a formal minutes. It is therefore deliberately not exhaustive or chronological. Its purpose is to capture significant information/feedbacks and not intended for official review or approval.		Insert photo of consultation capturing as many participants as possible.		
C	Basic details				
	Location:				Khempur
	Date:		16th Dec 2022		
D	Attended By	Name	Designation	Contact number	
	(See the copy of the attendance sheet attached at the end)				
E	Purpose of Consultation	Information Disclosure			
		Assessing impact perception	Medium	Oral Display maps/photographs	
		Baseline Information Collection	Disclosure Protocols Used	Project Non-Technical Summary Project food print maps	
	Key Questions:		Responses		
	Is there any high-voltage Power line existing in the village? If yes, what would be its length and since how many years it is existing?		No		
	Has the community ever faced any problem due to the high voltage Power line?		No		
	Do you have a designated place for regular and weekly market in the village? If not, name of the nearest village where weekly market is held.		No		
	Do you have archaeological and historical monument in and near the village? If yes, provide details.		No		

	Which community level religious and cultural events are celebrated at village and their locations?	No
	Do you have street lighting in the village? Is it adequate?	25% street lights (25 electric and 8 Solar)
	What is the percentage of household in the village who have electricity connection?	100% HHs electrified
	Is the electricity supply reliable? How many times in a day the electricity supply is disrupted?	Yes, around 16 hours of electricity availability in the village
	Is there any voltage fluctuation?	No Voltage Fluctuation
	What time of the year, there is more frequent disruption in electricity supply?	Power disruption due to Morning and Evening Roster
	How many households in the village use power for irrigation and agriculture purpose?	6 Electric and 60 Diesel tubewell
	Is there any small and medium scale industry in the village? If yes, do they depend on electricity?	2 Poultry, 1-Interlocking, 1-flea, 1-Piggery
	If a new Power line needs to pass through your village territory, what suggestions you would like to offer?	No issue, Compensation rate should be good.
	Other Related Photographs or Documents	
	Photo Title	Photo Title
	Photo Title	Photo Title
	Insert Relevant Photo	Insert Relevant Photo
	Insert Relevant Photo	Insert Relevant Photo

Participants List (in English)

PTOUL LILO Line	Name of participant	GP Name	Gender	Contact number
220 (V Manglaur-Nara)	Sazid Ali	Khempur thithola	Male	9760017086
	Touhid Ali	Khempur	Male	9634642048

Signat Attendance Sheet

सूचक पद्धतिगत की तालिका

क्र.सं.	सूचक नाम	सूचक की संख्या	सूचक की वर्गीकरण	सूचक की संख्या	सूचक की संख्या			सूचक की संख्या
					सूचक	सूचक	सूचक	
1	सूचक	सूचक	सूचक	सूचक	सूचक	सूचक	सूचक	सूचक
2	सूचक	सूचक	सूचक	सूचक	सूचक	सूचक	सूचक	सूचक
3	सूचक	सूचक	सूचक	सूचक	सूचक	सूचक	सूचक	सूचक
4	सूचक	सूचक	सूचक	सूचक	सूचक	सूचक	सूचक	सूचक
5	सूचक	सूचक	सूचक	सूचक	सूचक	सूचक	सूचक	सूचक
6	सूचक	सूचक	सूचक	सूचक	सूचक	सूचक	सूचक	सूचक
7	सूचक	सूचक	सूचक	सूचक	सूचक	सूचक	सूचक	सूचक
8	सूचक	सूचक	सूचक	सूचक	सूचक	सूचक	सूचक	सूचक
9	सूचक	सूचक	सूचक	सूचक	सूचक	सूचक	सूचक	सूचक
10	सूचक	सूचक	सूचक	सूचक	सूचक	सूचक	सूचक	सूचक
11	सूचक	सूचक	सूचक	सूचक	सूचक	सूचक	सूचक	सूचक
12	सूचक	सूचक	सूचक	सूचक	सूचक	सूचक	सूचक	सूचक
13	सूचक	सूचक	सूचक	सूचक	सूचक	सूचक	सूचक	सूचक
14	सूचक	सूचक	सूचक	सूचक	सूचक	सूचक	सूचक	सूचक
15	सूचक	सूचक	सूचक	सूचक	सूचक	सूचक	सूचक	सूचक
16	सूचक	सूचक	सूचक	सूचक	सूचक	सूचक	सूचक	सूचक
17	सूचक	सूचक	सूचक	सूचक	सूचक	सूचक	सूचक	सूचक
18	सूचक	सूचक	सूचक	सूचक	सूचक	सूचक	सूचक	सूचक
19	सूचक	सूचक	सूचक	सूचक	सूचक	सूचक	सूचक	सूचक
20	सूचक	सूचक	सूचक	सूचक	सूचक	सूचक	सूचक	सूचक

Gram Panchayat - Shikarpur (Revenue Villages Shikarpur, Hazaripur Ah.)

A. Project Title:			
B. Stakeholder Title:		Gram Pradhan Consultation	
Important Notice: This document provides a working summary of the main facts captured during the consultation/key-informant interview held, and should not be treated as a formal minute. It is therefore deliberately not exhaustive or chronological. Its purpose is to capture significant information/feedbacks and not intended for official review or approval.		Insert photo of consultation capturing as many participants as possible.	
C. Basic details			
Location:	Shikarpur		
Date:	16th Dec 2022		
D. Attended By	Name	Designation	Contact number
(See the copy of the attendance sheet attached at the end)			
E. Purpose of Consultation	Information Disclosure		
	Assessing impact perception	Medium	Oral Display maps/photographs
	Baseline Information Collection	Disclosure Protocols Used	Project Non-Technical Summary Project food print maps
	Key Questions:	Responses	
	Is there any high-voltage Power line existing in the village? If yes, what would be its length and since how many years it is existing?	No	
	Has the community ever faced any problem due to the high voltage Power line?	No	
	Do you have a designated place for regular and weekly market in the village? If not, name of the nearest village where weekly market is held.	No	
	Do you have archaeological and historical monument in and near the village? If yes, provide details.	No	

	Which community level religious and cultural events are celebrated at village and their locations?	Pir Gul Mela
	Do you have street lighting in the village? Is it adequate?	No street light
	What is the percentage of household in the village who have electricity connection?	100% HHS electrified
	Is the electricity supply reliable? How many times in a day the electricity supply is disrupted?	Yes, around 18/20 hours of electricity availability in the village
	Is there any voltage fluctuation?	No Voltage Fluctuation
	What time of the year, there is more frequent disruption in electricity supply?	Power disruption at Evening due to roadster.
	How many households in the village use power for irrigation and agriculture purpose?	400 tubewells (both diesel and Electric)
	Is there any small and medium scale industry in the village? If yes, do they depend on electricity?	No
	If a new Power line needs to pass through your village territory, what suggestions you would like to offer?	No specific issue.
	Other Related Photographs or Documents	
	Photo Title	Photo Title
	Photo Title	Photo Title
	Insert Relevant Photo	Insert Relevant Photo
	Insert Relevant Photo	Insert Relevant Photo

Participants List (in English)

PTOUL LLD Line	Name of participant	GP Name	Gender	Contact number
220 KV 25 KM	Saf Gour	Shikarpur/Hazzarpur	Male	8396254449
220 KV 35 KM	Sheld Gir	Shikarpur/Hazzarpur	Male	8077580968

Signed Attendance Sheet

सूचना सारणीकरण और तालिका

सूचना सारणीकरण के लिए	सूचना के लिए सूचना के लिए	सूचना सारणीकरण के लिए	सूचना के लिए	सूचना के लिए सूचना सारणीकरण के लिए			सूचना सारणीकरण के लिए
				सूचना	सूचना	सूचना	
सूचना सारणीकरण के लिए	सूचना के लिए सूचना के लिए	सूचना सारणीकरण के लिए	सूचना के लिए	सूचना	सूचना	सूचना	सूचना सारणीकरण के लिए
सूचना सारणीकरण के लिए	सूचना के लिए सूचना के लिए	सूचना सारणीकरण के लिए	सूचना के लिए	सूचना	सूचना	सूचना	सूचना सारणीकरण के लिए
सूचना सारणीकरण के लिए	सूचना के लिए सूचना के लिए	सूचना सारणीकरण के लिए	सूचना के लिए	सूचना	सूचना	सूचना	सूचना सारणीकरण के लिए

Gram Panchayat – Sundhar (includes Revenue Villages Sundhar)

A		Project Title:				
B		Stakeholder:	Gram Pradhan Consultation			
		Title:				
		Important Notice: This document provides a working summary of the main facts captured during the consultation/key-informant interview held, and should not be treated as a formal minute. It is therefore deliberately not exhaustive or chronological. Its purpose is to capture significant information/feedbacks and not intended for official review or approval.				Insert photo of consultation capturing as many participants as possible.
C		Basic details				
		Location:	Sundhar			
		Date:				
D		Attended By	Name	Designation	Contact Number	
		(See the copy of the attendance sheet attached at the end)				
E		Purpose of Consultation		Information Disclosure		
		Assessing impact perception		Medium	Oral	
		Baseline Information Collection		Disclosure Protocol Used	Display maps/photographs Project Non-Technical Summary Project foot print maps	
		Key Questions:			Responses	
		Is there any high-voltage Power line existing in the village? If yes, what would be its length and since how many years it is existing?			No	
		Has the community ever faced any problem due to the high voltage Power line?			No	
		Do you have a designated place for regular and weekly market in the village? If not, name of the nearest village where weekly market is held.			No	
		Do you have archaeological and historical monument in and near the village? If yes, provide details.			No	

	Which community level religious and cultural events are celebrated at village and their locations?	Alaudin Sonat Nora
	Do you have street lighting in the village? Is it adequate?	No, very few solar lights
	What is the percentage of household in the village who have electricity connection?	100% HHs electrified
	Is the electricity supply reliable? How many times in a day the electricity supply is disrupted?	Yes, around 24 hours of electricity availability in the village
	Is there any voltage fluctuation?	No Voltage Fluctuation
	What time of the year, there is more frequent disruption in electricity supply?	
	How many households in the village use power for irrigation and agriculture purpose?	Most of the households use tractor/diesel based tubewell
	Is there any small and medium scale industry in the village? If yes, do they depend on electricity?	No
	If a new Power line needs to pass through your village territory, what suggestions you would like to offer?	No major issues. Compensation is quit less, it should be more than market rate. Community leaders and affected family should be consulted before construction
	Other Related Photographs or Documents	
	Photo Title	Photo Title
	Photo Title	Photo Title
	Insert Relevant Photo	Insert Relevant Photo
	Insert Relevant Photo	Insert Relevant Photo

Participants List (in English)

PTCUL LLD Line	Name of participant	GP Name	Gender	Contact number
220 KV Manglaur-Nara and 400 KV Kashipur-Puhana	Md. Shakil Ahmad	Sundhar	Male	

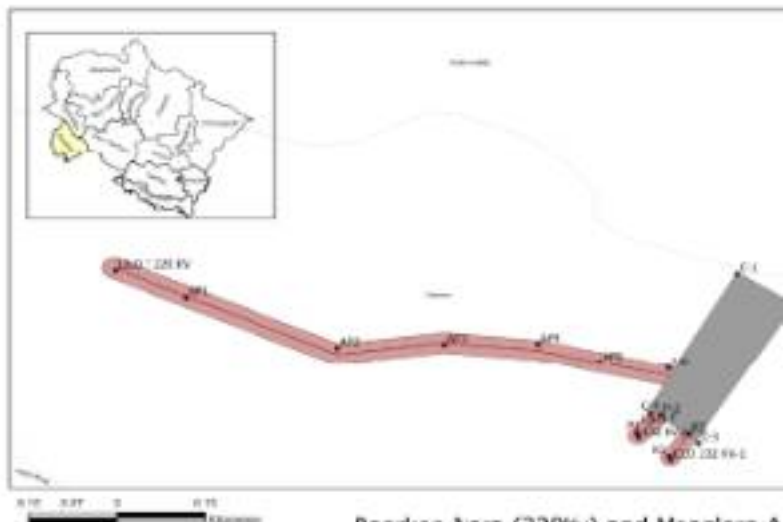
220 kV Roorkee-Nara and Manglaur-Asahi

The map showing these two Power line alignment and administrative boundary is provided in Figure-3. The Power line will have 6 towers and crosses 2 revenue villages which belong to 2 Gram Panchayats (Gadar Judda and Jhabiran) in Haridwar District of Uttarakhand State.

The consultation was carried out in 2 Gram Panchayats and the names of revenue village and their respective Gram Panchayat name is provided below.

Revenue Village Name	Gram Panchayat Name
Gadar Judda	(a) Gadar Judda
Jhabiran	Jhabiran- covered along with 220 kv Manglaur-Nara line and details provided in section 2(a)

Figure 3 Map showing Roorkee-Nara 200 kV and Mangalore-Asht 132 kV lines with revenue boundaries.



Roorkee-Nara (220kv) and Manglore-A

Map Credits: Independent & Social Safeguards Team, Asian Development Bank (ADB)
 Data Courtesy: State Transportation Corporation of Uttarakhand (STTC) and B

Gram Panchayat - Gadar Jutta (Revenue Village Gadar Jutta)

A		Project Title:					
B		Stakeholder: Gram Pradhan Consultation					
B		Title:					
Important Notice: This document provides a working summary of the main facts captured during the consultation/key-informant interview held, and should not be treated as a formal minute. It is therefore deliberately not exhaustive or chronological. Its purpose is to capture significant information/feedbacks and not intended for official review or approval.				Insert photo of consultation capturing as many participants as possible.			
C		Basic details					
		Location:				Gadar Jutta	
		Date:					
D		Attended By		Name			
		Designation		Contact Number			
(See the copy of the attendance sheet attached at the end)							
E		Purpose of Consultation		Information Disclosure			
		Assessing perception impact		Medium			
		Baseline information Collection		Discourse Protocols Used			
				Oral			
				Display mass photographs			
				Project Non-Technical Summary			
				Project food print maps			
Key Questions:				Responses			
Is there any high-voltage Power line existing in the village? If yes, what would be its length and since how many years it is existing?				Yes 200 KV-8KM, 66KV-2 KM			
Has the community ever faced any problem due to the high voltage Power line?				No			
Do you have a designated place for regular and weekly market in the village? If not, name of the nearest village where weekly market is held.				No			
Do you have archaeological and historical monument in and near the village? If yes, provide details.				No			

Which community level religious and cultural events are celebrated at village and their locations?	No
Do you have street lighting in the village? Is it adequate?	Yes but not adequate (few solar)
What is the percentage of household in the village who have electricity connection?	100% households are electrified
Is the electricity supply reliable? How many times in a day the electricity supply is disrupted?	Yes, around 22 hours of electricity availability in the village
Is there any voltage fluctuation?	No Voltage Fluctuation
What time of the year, there is more frequent disruption in electricity supply?	Power disruption around 2 hrs, 1 hr at morning and 1 hour at evening
How many households in the village use power for irrigation and agriculture purpose?	Yes tubewells (both electric and diesel)
Is there any small and medium scale industry in the village? If yes, do they depend on electricity?	Yes, few industries
If a new Power line needs to pass through your village territory, what suggestions you would like to offer?	No major issues. Community leaders and affected family should be consulted before construction, compensation should be good
Other Related Photographs or Documents	
Photo Title	Photo Title
Photo Title	Photo Title
Insert Relevant Photo	Insert Relevant Photo
Insert Relevant Photo	Insert Relevant Photo

Participants List (in English)

PTCUL LILD Line	Name of participant	OP Name	Gender	Contact number
220 KV 1 KM	Sannat Devendra (Mnu)	Gadar Judda	Male	9719411931

Signed Attendance Sheet

132 kV Khatma-Sitarganj

The map showing the Power line alignment and administrative boundary is provided in Figure-4. The Power line will have 6 towers and crosses 2 revenue villages which belong to 2 Gram Panchayats in Udhm Singh Nagar District of Uttarakhand State.

The consultation was carried out in 2 Gram Panchayats and the names of revenue village and their respective Gram Panchayat name is provided below.

Revenue Village Name	Gram Panchayat Name
Jhan Kaleya	Jhan Kaleya
Unchi Mahuwar	Unchi Mahuwar

Figure 4 Map showing 132 kV Khatima-Sitarganj line with Khatima Sub-station



0.00 0.05 0.10 Kilometers

- Tower Locations
- Line Route
- Buffer (200m)

Khatima-Sitarganj (132 Kv)

Pre-Construction Environmental & Social Safeguards Team, Asia
Electricity Power Transmission Corporation of Uttar Pradesh

Gram Panchayat - Jhan Kaleya (Revenue Village Jhan Kaleya, Ward No 10)

A		Project Title:			
B		Stakeholder: Gram Pradhan Consultation			
B		Title:			
		Important Notice: This document provides a working summary of the main facts captured during the consultation/key-informant interview held, and should not be treated as a formal minute. It is therefore deliberately not exhaustive or chronological. Its purpose is to capture significant information/feedbacks and not intended for official review or approval.		Insert photo of consultation capturing as many participants as possible.	
C		Basic details			
		Location: Jhan Kaleya, Ward No. 10			
		Date: 9th Dec 2022			
D		Attended By	Name	Designation	Contact Number
(See the copy of the attendance sheet attached at the end)					
E		Purpose of Consultation		Information Disclosure	
		Assessing impact perception		Medium	Oral Display maps/photographs
		Baseline information Collection		Disclosure Protocols Used	Project Non-Technical Summary Project food print maps
Key Questions:					Responses
Is there any high-voltage Power line existing in the village? If yes, what would be its length and since how many years it is existing?					No
Has the community ever faced any problem due to the high voltage Power line?					No
Do you have a designated place for regular and weekly market in the village? If not, name of the nearest village where weekly market is held.					No
Do you have archaeological and historical monument in and near the village? If yes, provide details.					No

Which community level religious and cultural events are celebrated at village and their locations?	No	
Do you have street lighting in the village? Is it adequate?	Yes entire village (300 lights)	
What is the percentage of household in the village who have electricity connection?	100% HHs electrified	
Is the electricity supply reliable? How many times in a day the electricity supply is disrupted?	Yes, around 24 hours of electricity availability in the village	
Is there any voltage fluctuation?	No Voltage Fluctuation	
What time of the year, there is more frequent disruption in electricity supply?	Sometime power disruption at Evening	
How many households in the village use power for irrigation and agriculture purpose?	Yes 20 tubewells	
Is there any small and medium scale industry in the village? If yes, do they depend on electricity?	Yes, few large industries	
If a new Power line needs to pass through your village territory, what suggestions you would like to offer?	No major issues. Do community and affected household consultation before construction. Create employment opportunities for the local villagers, boundary near structure.	
Other Related Photographs or Documents		
Photo Title	Photo Title	Photo Title
Insert Relevant Photo	Insert Relevant Photo	Insert Relevant Photo

Participants List (in English)

PTCUL LED Line	Name of participant	GP Name	Gender	Contact number
132 KV Khatima-Sitarganj	Mukesh Kumar	Jhan Kalya	Male	9720213203
	Daan Singh Paudel	Jhan Kalya	Male	9756254132

Gram Panchayat - Unchi Mahuwar (Revenue Village Unchi Mahuwar)

A	Project Title:					
B	Stakeholder Title:					
Important Notice: This document provides a working summary of the main facts captured during the consultation/key-informant interview held, and should not be treated as a formal minute. It is therefore deliberately not exhaustive or chronological. Its purpose is to capture significant information/feedbacks and not intended for official review or approval.			Insert photo of consultation capturing as many participants as possible.			
C	Basic details					
	Location:				Unchi Mahuwar	
	Date:				08th Dec 2022	
D	Attended By	Name	Designation	Contact Number		
(See the copy of the attendance sheet attached at the end)						
E	Purpose of Consultation		Information Disclosure			
	Assessing perception	Impact	Medium	Oral		
	Baseline information Collection		Disclosure Protocols Used	Project Non-Technical Summary Project food print maps		
Key Questions:				Responses		
Is there any high-voltage Power line existing in the village? If yes, what would be its length and since how many years it is existing?				No		
Has the community ever faced any problem due to the high voltage Power line?				No		
Do you have a designated place for regular and weekly market in the village? If not, name of the nearest village where weekly market is held.				No		
Do you have archaeological and historical monument in and near the village? If yes, provide details.				No		

Which community level religious and cultural events are celebrated at village and their locations?	No	
Do you have street lighting in the village? Is it adequate?	30% Street light (70 electric and 30 Solar)	
What is the percentage of household in the village who have electricity connection?	100% HHs electrified	
Is the electricity supply reliable? How many times in a day the electricity supply is disrupted?	Yes, around 24 hours of electricity availability in the village	
Is there any voltage fluctuation?	No Voltage Fluctuation	
What time of the year, there is more frequent disruption in electricity supply?	Sometime power disruption at Evening	
How many households in the village use power for irrigation and agriculture purpose?	Yes 20 tubewells	
Is there any small and medium scale industry in the village? If yes, do they depend on electricity?	Yes, Rice mills	
If a new Power line needs to pass through your village territory, what suggestions you would like to offer?	No major issues. Do community and affected household consultation before construction. Create employment opportunities for the local villagers, boundary near structure.	
Other Related Photographs or Documents		
Photo Title	Photo Title	Photo Title
Insert Relevant Photo	Insert Relevant Photo	Insert Relevant Photo

Participants List (in English)

PTCUL LLO Line	Name of participant	GP Name	Gender	Contact number
132 KV 2 KM Khatima	Madhav Chandra	Unchi Mahawar	Male	7251062543

Signed Attendance Sheet

132 kV Kashipur-Mohawalneragar)

The map showing the power line alignment and administrative boundary is provided in Figure-5. The power line will have 16 towers and crosses 7 revenue villages which belong to 7 Gram Panchayats in Udham Singh Nagar District of Uttarakhand State. One revenue village is located within the Uttar Pradesh State.

The consultation was carried out in 8 Gram Panchayats and the names of revenue village and their respective Gram Panchayat name is provided below.

Revenue Village Name	Gram Panchayat Name
Kataliya	Kataliya
Berkhera Pandey	Berkhera Pandey
Gr. Dhyai	Gr. Dhyai
Banskhara Khurd	Banskhara Khurd
Gularia	Gularia
Bassi	Islam Nagar
Fardnagar	Fardnagar (Uttar Pradesh)
Baberkhara	Baberkhara

Figure 5: Map showing 132 kV Kashipur-Mohuskeraganj line along with revenue village boundaries.



Khatima-Sitarganj (132KV)

Map Credit: Environmental & Social Safeguards Team, Asian Development Bank (ADB)
Data Credit: Power Transmission Corporation of Uttar Pradesh Limited (PTCL) and S.

Gram Panchayat - Katoliya (Revenue Village Katoliya)

A	Project Title:				
B	Stakeholder Title:				
Important Notice: This document provides a working summary of the main facts captured during the consultation/key-informant interview held, and should not be treated as a formal minute. It is therefore deliberately not exhaustive or chronological. Its purpose is to capture significant information/feedbacks and not intended for official review or approval.			Insert photo of consultation capturing as many participants as possible.		
C	Basic details				
	Location:	Katoliya			
	Date:	13th Dec 2022			
D	Attended By	Name	Designation	Contact Number	
(See the copy of the attendance sheet attached at the end)					
E	Purpose of Consultation	Information Disclosure			
	Assessing perception impact	Medium	Oral		
	Baseline information Collection	Disclosure Protocols Used	Project Non-Technical Summary Project food print maps		
Key Questions:				Responses	
Is there any high-voltage Power line existing in the village? If yes, what would be its length and since how many years it is existing?				Yes HT Line	
Has the community ever faced any problem due to the high voltage Power line?				Fire in land due to tower and burned crops	
Do you have a designated place for regular and weekly market in the village? If not, name of the nearest village where weekly market is held.				Wednesday	
Do you have archaeological and historical monument in and near the village? If yes, provide details.				No	

Which community level religious and cultural events are celebrated at village and their locations?	No	
Do you have street lighting in the village? Is it adequate?	Yes entire village	
What is the percentage of household in the village who have electricity connection?	96% HHs electrified	
Is the electricity supply reliable? How many times in a day the electricity supply is disrupted?	Yes, around 22 hours of electricity availability in the village	
Is there any voltage fluctuation?	No Voltage Fluctuation	
What time of the year, there is more frequent disruption in electricity supply?	Sometime power disruption around 2 hrs roster a day mostly at evening	
How many households in the village use power for irrigation and agriculture purpose?	Yes 35 tubewells	
Is there any small and medium scale industry in the village? If yes, do they depend on electricity?	Yes, 2 Dairy farms	
If a new Power line needs to pass through your village territory, what suggestions you would like to offer?	No major issues. Need complaint registration system available with community. Establish tower accident reporting and tracking system. Do community and affected household consultation before construction.	
Other Related Photographs or Documents		
Photo Title	Photo Title	Photo Title
Insert Relevant Photo	Insert Relevant Photo	Insert Relevant Photo

Participants List (in English)

PTCUL LLO Line	Name of participant	GP Name	Gender	Contact number
----------------	---------------------	---------	--------	----------------

Kashipur-Mahakshwari 132 KV Line	Saf A)	Katola	Mala	8449151751
-------------------------------------	--------	--------	------	------------

Signed Attendance Sheet

① 132 KV - Saf A) Mahakshwari - Katola

② 132 KV - Katola - Mahakshwari

③ 132 KV - Mahakshwari - Katola

Sl. No.	Att. Name	Att. Date	Att. Time	Att. Status	Att. Signature	Att. Stamp
1	Mr. A. K. Singh	15-12-2019	10:00 AM	✓	[Signature]	[Stamp]
2	Mr. B. K. Singh	15-12-2019	10:00 AM	✓	[Signature]	[Stamp]
3	Mr. C. K. Singh	15-12-2019	10:00 AM	✓	[Signature]	[Stamp]
4	Mr. D. K. Singh	15-12-2019	10:00 AM	✓	[Signature]	[Stamp]
5	Mr. E. K. Singh	15-12-2019	10:00 AM	✓	[Signature]	[Stamp]
6	Mr. F. K. Singh	15-12-2019	10:00 AM	✓	[Signature]	[Stamp]
7	Mr. G. K. Singh	15-12-2019	10:00 AM	✓	[Signature]	[Stamp]
8	Mr. H. K. Singh	15-12-2019	10:00 AM	✓	[Signature]	[Stamp]
9	Mr. I. K. Singh	15-12-2019	10:00 AM	✓	[Signature]	[Stamp]
10	Mr. J. K. Singh	15-12-2019	10:00 AM	✓	[Signature]	[Stamp]

Gram Panchayat - Berkhera Pandey (Revenue Village Berkhera Pandey)

A	Project Title:				
B	Stakeholder Title:	Gram Pradhan Consultation			
	Important Notice: This document provides a working summary of the main facts captured during the consultation/key-informant interview held, and should not be treated as a formal minute. It is therefore deliberately not exhaustive or chronological. Its purpose is to capture significant information/feedbacks and not intended for official review or approval.		Insert photo of consultation capturing as many participants as possible.		
C	Basic details				
	Location:	Berkhera Pandey			
	Date:	13th Dec 2022			
D	Attended By	Name	Designation	Contact Number	
(See the copy of the attendance sheet attached at the end)					
E	Purpose of Consultation	Information Disclosure			
	Assessing perception impact	Medium	Oral		
	Baseline information Collection	Disclosure Protocols Used	Project Non-Technical Summary Project food print maps		
Key Questions:			Responses		
Is there any high-voltage Power line existing in the village? If yes, what would be its length and since how many years it is existing?			No		
Has the community ever faced any problem due to the high voltage Power line?			No		
Do you have a designated place for regular and weekly market in the village? If not, name of the nearest village where weekly market is held.			Tuesday and Friday		
Do you have archaeological and historical monument in and near the village? If yes, provide details.			No		

Which community level religious and cultural events are celebrated at village and their locations?	No	
Do you have street lighting in the village? Is it adequate?	85% of the village	
What is the percentage of household in the village who have electricity connection?	100% HHs electrified	
Is the electricity supply reliable? How many times in a day the electricity supply is disrupted?	Yes, around 22 hours of electricity availability in the village	
Is there any voltage fluctuation?	No Voltage Fluctuation	
What time of the year, there is more frequent disruption in electricity supply?	Sometimes power disruption around 2 hrs rotates a day mostly at evening	
How many households in the village use power for irrigation and agriculture purpose?	Yes 30 Subwells	
Is there any small and medium scale industry in the village? If yes, do they depend on electricity?	Yes, 2 Dairy farms	
If a new Power line needs to pass through your village territory, what suggestions you would like to offer?	No major issues. Need complaint registration system available with community. Establish tower accident reporting and tracing system. Do community and affected household consultation before construction.	
Other Related Photographs or Documents		
Photo Title	Photo Title	Photo Title
Insert Relevant Photo	Insert Relevant Photo	Insert Relevant Photo

Participants List (in English)

PTCUL LILO Line	Name of participant	GP Name	Gender	Contact number

Kashipur-Mahakshigeran] 132 KV Line	Inshad Ali	Barkhad Pande	Note	9012539455
--	------------	------------------	------	------------

Signed Attendance Sheet

132 KV Line - Kashipur-Mahakshigeran]
132 KV Line - Kashipur-Mahakshigeran]
132 KV Line - Kashipur-Mahakshigeran]

Sl. No.	Name of the worker	Designation	From	To	Remarks	Signature	Date
1	Mr. Inshad Ali	Supervisor	10-12-20	10-12-20	✓	Inshad Ali	10-12-20
2	Mr. Barkhad Pande	Supervisor	10-12-20	10-12-20	✓	Barkhad Pande	10-12-20
3	Mr. Inshad Ali	Supervisor	10-12-20	10-12-20	✓	Inshad Ali	10-12-20
4	Mr. Barkhad Pande	Supervisor	10-12-20	10-12-20	✓	Barkhad Pande	10-12-20
5	Mr. Inshad Ali	Supervisor	10-12-20	10-12-20	✓	Inshad Ali	10-12-20
6	Mr. Barkhad Pande	Supervisor	10-12-20	10-12-20	✓	Barkhad Pande	10-12-20
7	Mr. Inshad Ali	Supervisor	10-12-20	10-12-20	✓	Inshad Ali	10-12-20
8	Mr. Barkhad Pande	Supervisor	10-12-20	10-12-20	✓	Barkhad Pande	10-12-20
9	Mr. Inshad Ali	Supervisor	10-12-20	10-12-20	✓	Inshad Ali	10-12-20
10	Mr. Barkhad Pande	Supervisor	10-12-20	10-12-20	✓	Barkhad Pande	10-12-20

Gram Panchayat - Gir Dhya (Revenue Village Gir Dhya)

A		Project Title							
B		Stakeholder: Gram Pradhan Consultation							
Title:									
Important Notice: This document provides a working summary of the main facts captured during the consultation/key-informant interview held, and should not be treated as a formal minute. It is therefore deliberately not exhaustive or chronological. Its purpose is to capture significant information/feedbacks and not intended for official review or approval.		Insert photo of consultation capturing as many participants as possible.							
C						Basic details			
Location:						Gir Dhya			
Date:		11th Dec 2022							
D		Attended By		Name					
		Designation		Contact Number					
(See the copy of the attendance sheet attached at the end)									
E		Purpose of Consultation		Information Disclosure					
		Assessing impact perception		Medium					
		Baseline information Collection		Disclosure Protocols Used					
				Oral					
				Display mass photographs					
				Project Non-Technical Summary					
				Project food print maps					
Key Questions:		Responses							
Is there any high-voltage Power line existing in the village? If yes, what would be its length and since how many years it is existing?		No							
Has the community ever faced any problem due to the high voltage Power line?		No							
Do you have a designated place for regular and weekly market in the village? If not, name of the nearest village where weekly market is held.		No							
Do you have archaeological and historical monument in and near the village? If yes, provide details.		No							

Which community level religious and cultural events are celebrated at village and their locations?	Ram Navam	
Do you have street lighting in the village? Is it adequate?	100% 115 lights (10 solar)	
What is the percentage of household in the village who have electricity connection?	100% HHs electrified	
Is the electricity supply reliable? How many times in a day the electricity supply is disrupted?	Yes, around 22/23 hours of electricity availability in the village	
Is there any voltage fluctuation?	No Voltage Fluctuation	
What time of the year, there is more frequent disruption in electricity supply?	Sometimes power disruption around 1 or 2 hrs. occurs a day mostly at evening	
How many households in the village use power for irrigation and agriculture purpose?	Yes 400 electric Loovers	
Is there any small and medium scale industry in the village? If yes, do they depend on electricity?	Yes, Bawal Paper mill, Profitic Paper Mill, 10 Shops, and 3 Rice Mills	
If a new Power line needs to pass through your village territory, what suggestions you would like to offer?	No major issues. Discuss with farmers and community leaders before construction, Timely and market based Compensation.	
Other Related Photographs or Documents		
Photo Title	Photo Title	Photo Title
Insert Relevant Photo	Insert Relevant Photo	Insert Relevant Photo

Participants List (in English)

PTCUL LLO Line	Name of participant	GP Name	Gender	Contact number
Maheshwari-Jaspur 132 KV Line	Navbhar Singh Yadav	Baghelwala (Or Dhyal)	Male	9149007093

Signed Attendance Sheet

Gram Panchayat - Banskhara Khurd (Revenue Village Banskhara Khurd)

A		Project Title:							
B		Stakeholder: Gram Pradhan Consultation							
Title:									
Important Notice: This document provides a working summary of the main facts captured during the consultation/key-informant interview held, and should not be treated as a formal minute. It is therefore deliberately not exhaustive or chronological. Its purpose is to capture significant information/feedbacks and not intended for official review or approval.		Insert photo of consultation capturing as many participants as possible.							
C						Basic details			
Location:						Banskhara Khurd			
Date:									
D		Attended By		Name					
		Designation		Contact Number					
(See the copy of the attendance sheet attached at the end)									
E		Purpose of Consultation		Information Disclosure					
		Assessing perception impact		Medium					
		Baseline information Collection		Disclosure Protocols Used					
				Oral					
				Display mass photographs					
				Project Non-Technical Summary					
				Project food print maps					
Key Questions:				Responses					
Is there any high-voltage Power line existing in the village? If yes, what would be its length and since how many years it is existing?				No					
Has the community ever faced any problem due to the high voltage Power line?				No					
Do you have a designated place for regular and weekly market in the village? If not, name of the nearest village where weekly market is held.				No					
Do you have archaeological and historical monument in and near the village? If yes, provide details.				No					

Which community level religious and cultural events are celebrated at village and their locations?	No	
Do you have street lighting in the village? Is it adequate?	Yes entire village including 5 big tower lights	
What is the percentage of household in the village who have electricity connection?	100% HHs electrified	
Is the electricity supply reliable? How many times in a day the electricity supply is disrupted?	Yes, around 22/23 hours of electricity availability in the village	
Is there any voltage fluctuation?	No Voltage Fluctuation	
What time of the year, there is more frequent disruption in electricity supply?	Sometime power disruption around 1 or 2 hrs rotates a day mostly at evening	
How many households in the village use power for irrigation and agriculture purpose?	Yes 500 tubewells (80% electric and 20% Solar generator)	
Is there any small and medium scale industry in the village? If yes, do they depend on electricity?	No	
If a new Power line needs to pass through your village territory, what suggestions you would like to offer?	Construct line through near Canal/Nahar. Urban area is expanding and reaching to village, so while planning urbanization of village should also be considered. Also try LLO line parallel to NH 74 Dehradun Khatima Highway.	
Other Related Photographs or Documents		
Photo Title	Photo Title	Photo Title
Insert Relevant Photo	Insert Relevant Photo	Insert Relevant Photo

Participants List (in English)

PTOUL LLO Line	Name of participant	GP Name	Gender	Contact number
	Sushma Dahi	Oulana	Female	8004108827

Kashipur-Mahvakhheraganj 132 KV Line	Sobhit Kumar	Gulana	Male	9548988103
---	--------------	--------	------	------------

Signed Attendance Sheet

132 KV - Gulana - Mahvakhheraganj - 132 KV Line									
Date: 15-11-2024									
Sl. No.	Name of the worker	Designation	Present	Absent	Remarks	Signature	Date	Time	Signature
01	Mr. Sobhit Kumar	Assistant Engineer	✓				15-11-2024	10:30 AM	
02	Mr. Anil Kumar	Assistant Engineer	✓				15-11-2024	10:30 AM	

Gram Panchayat - Gularia (Revenue Village Gularia)

A		Project Title:							
B		Stakeholder: Gram Pradhan Consultation							
Title:									
Important Notice: This document provides a working summary of the main facts captured during the consultation/key-informant interview held, and should not be treated as a formal minute. It is therefore deliberately not exhaustive or chronological. Its purpose is to capture significant information/feedbacks and not intended for official review or approval.		Insert photo of consultation capturing as many participants as possible.							
C						Basic details			
Location:						Gularia			
Date:		13th Dec 2022							
D		Attended By		Name					
		Designation		Contact Number					
(See the copy of the attendance sheet attached at the end)									
E		Purpose of Consultation		Information Disclosure					
		Assessing impact perception		Medium					
		Baseline information Collection		Disclosure Protocols Used					
				Oral					
				Display mass photographs					
				Project Non-Technical Summary					
				Project food print maps					
Key Questions:				Responses					
Is there any high-voltage Power line existing in the village? If yes, what would be its length and since how many years it is existing?				No					
Has the community ever faced any problem due to the high voltage Power line?				No					
Do you have a designated place for regular and weekly market in the village? If not, name of the nearest village where weekly market is held.				Tuesday and Friday					
Do you have archaeological and historical monument in and near the village? If yes, provide details.				No					

Which community level religious and cultural events are celebrated at village and their locations?	Muharram, Urush Mela	
Do you have street lighting in the village? Is it adequate?	85% of the village	
What is the percentage of household in the village who have electricity connection?	99% HHs electrified	
Is the electricity supply reliable? How many times in a day the electricity supply is disrupted?	Yes, around 23 hours of electricity availability in the village	
Is there any voltage fluctuation?	No Voltage Fluctuation	
What time of the year, there is more frequent disruption in electricity supply?	Power disruption around 1 hour occurs a day mostly at evening	
How many households in the village use power for irrigation and agriculture purpose?	Yes around 100 tubewells	
Is there any small and medium scale industry in the village? If yes, do they depend on electricity?	Yes, One Household with plastic plant	
If a new Power line needs to pass through your village territory, what suggestions you would like to offer?	No major issues. We will support.	
Other Related Photographs or Documents		
Photo Title	Photo Title	Photo Title
Insert Relevant Photo	Insert Relevant Photo	Insert Relevant Photo

Participants List (in English)

PTCUL LLO Line	Name of participant	GP Name	Gender	Contact number
Kashipur-Mahukheraganj 132 KV Line	Susma Devi	Gulana	Female	8054166827
	Sobhi Kumar	Gulana	Male	9548988103

Signat Attendance Sheet

[illegible]

Gram Panchayat - Isari Nagar (Bassi) (Revenue Village Bassi)

A		Project Title:					
B		Stakeholder: Gram Pradhan Consultation					
B		Title:					
Important Notice: This document provides a working summary of the main facts captured during the consultation/key-informant interview held, and should not be treated as a formal minute. It is therefore deliberately not exhaustive or chronological. Its purpose is to capture significant information/feedbacks and not intended for official review or approval.				Insert photo of consultation capturing as many participants as possible.			
C		Basic details					
		Location:				Bassi	
		Date:				11th Dec 2022	
D		Attended By		Name			
		Designation		Contact Number			
(See the copy of the attendance sheet attached at the end)							
E		Purpose of Consultation		Information Disclosure			
		Assessing perception impact		Medium			
		Baseline information Collection		Disclosure Protocols Used			
				Oral			
				Display mass photographs			
				Project Non-Technical Summary			
				Project food print maps			
Key Questions:				Responses			
Is there any high-voltage Power line existing in the village? If yes, what would be its length and since how many years it is existing?				No			
Has the community ever faced any problem due to the high voltage Power line?				No			
Do you have a designated place for regular and weekly market in the village? If not, name of the nearest village where weekly market is held.				No			
Do you have archaeological and historical monument in and near the village? If yes, provide details.				No			

Which community level religious and cultural events are celebrated at village and their locations?	Ram Navami, Ursh Mela	
Do you have street lighting in the village? Is it adequate?	Yes, entire village covered (200 solar and 30 electric)	
What is the percentage of household in the village who have electricity connection?	99% HHs electrified	
Is the electricity supply reliable? How many times in a day the electricity supply is disrupted?	Yes, around 24 hours of electricity availability in the village	
Is there any voltage fluctuation?	No Voltage Fluctuation	
What time of the year, there is more frequent disruption in electricity supply?	Sometime power disruption	
How many households in the village use power for irrigation and agriculture purpose?	Yes 100 tubewells	
Is there any small and medium scale industry in the village? If yes, do they depend on electricity?	Yes, Sodhan Paper mill, Big Guard wire Industry, Pashupati Electricals, Surya Electricals, Narmy Paper Mill	
If a new Power line needs to pass through your village territory, what suggestions you would like to offer?	No major issues. Wire sound during winter is an issue, Community meeting and consultation before construction, Plan to take minimum or negligible productive agriculture land.	
Other Related Photographs or Documents		
Photo Title	Photo Title	Photo Title
Insert Relevant Photo	Insert Relevant Photo	Insert Relevant Photo

Participants List (in English)

PTCUL LLD Line	Name of participant	GP Name	Gender	Contact number
	Naim Ahmad	Bassi	Male	9927318006
	Dinesh Pat	Bassi	Male	9917172057

Gram Panchayat - Baberkhara (Revenue Village Baberkhara)

A		Project Title:			
B		Stakeholder: Gram Pradhan Consultation			
Title:					
		Important Notice: This document provides a working summary of the main facts captured during the consultation/key-informant interview held, and should not be treated as a formal minute. It is therefore deliberately not exhaustive or chronological. Its purpose is to capture significant information/feedbacks and not intended for official review or approval.		Insert photo of consultation capturing as many participants as possible.	
C		Basic details			
Location:		Baberkhara			
Date:		13th Dec 2022			
D		Attended By		Name	
		Designation		Contact Number	
(See the copy of the attendance sheet attached at the end)					
E		Purpose of Consultation		Information Disclosure	
		Assessing perception impact		Medium	
		Baseline information Collection		Disclosure Protocols Used	
				Oral	
				Display mass photographs	
				Project Non-Technical Summary	
				Project food print maps	
Key Questions:				Responses	
Is there any high-voltage Power line existing in the village? If yes, what would be its length and since how many years it is existing?				Yes multiple lines various agencies	
Has the community ever faced any problem due to the high voltage Power line?				No	
Do you have a designated place for regular and weekly market in the village? If not, name of the nearest village where weekly market is held.				Tuesday	
Do you have archaeological and historical monument in and near the village? If yes, provide details.				No	

Which community level religious and cultural events are celebrated at village and their locations?	Ursh Mela (September & December)	
Do you have street lighting in the village? Is it adequate?	No, 20% only (40 Solar)	
What is the percentage of household in the village who have electricity connection?	95% HHs electrified	
Is the electricity supply reliable? How many times in a day the electricity supply is disrupted?	Yes, more than 22 hours of electricity availability in the village	
Is there any voltage fluctuation?	No Voltage Fluctuation	
What time of the year, there is more frequent disruption in electricity supply?	Power disruption during sick period of summer and winter particularly at Morning and Evening	
How many households in the village use power for irrigation and agriculture purpose?	Yes both on electric and diesel	
Is there any small and medium scale industry in the village? If yes, do they depend on electricity?	Yes, Handloom, Gadda and Basket manufacturing.	
If a new Power line needs to pass through your village territory, what suggestions you would like to offer?	No major issues. People will support if consultation done with due consultation with community. Market based compensation and should be paid in time. Request to make provision of street lights in the village.	
Other Related Photographs or Documents		
Photo Title	Photo Title	Photo Title
Insert Relevant Photo	Insert Relevant Photo	Insert Relevant Photo

Participants List (in English)

PTCUL LILO Line	Name of participant	GP Name	Gender	Contact number
	Dinesh Kumar	Banerjee	Male	9690935605

132 kV Mohanheragar-Jaspur

The map showing the Power line alignment and administrative boundary is provided in Figure-6. The Power line will have 88 towers and crosses 12 revenue villages which belong to 10 Gram Panchayats in Udhm Singh Nagar District of Uttarakhand State.

The consultation was carried out in 10 Gram Panchayats and the names of revenue village and their respective Gram Panchayat name is provided below.

Revenue Village Name	Gram Panchayat Name
Katalya	5 (a) Katalya
Banshara Pandey	5 (b) Banshara Pandey
Or Dhyal	5 (c) Or Dhyal
Banshara Khurd	5 (d) Banshara Khurd
Gularia	5 (e) Gularia
Basai	5 (f) Islam Nagar
Faridnagar	5 (g) Faridnagar (Uttar Pradesh)
Jagatpur Patti	6 (h) Jagatpur Patti
Daura	
Narainpur	6 (i) Narainpur
Bhawanipur	6 (j) Bhawanipur
Gafni Hussain	

Gram Panchayat - Jagatpur Patli (includes Revenue Villages Jagatpur Patli, Gaurs)

A. Project Title:			
B. Stakeholder Title:		Gram Pradhan Consultation	
Important Notice: This document provides a working summary of the main facts captured during the consultation/key-informant interview held, and should not be treated as a formal minute. It is therefore deliberately not exhaustive or chronological. Its purpose is to capture significant information/feedbacks and not intended for official review or approval.		Insert photo of consultation capturing as many participants as possible.	
C. Basic details			
Location: Jagatpur Patli Date: 11th Dec 2022			
D. Attended By	Name	Designation	Contact Number
(See the copy of the attendance sheet attached at the end)			
E. Purpose of Consultation	Information Disclosure		
	Assessing impact perception	Medium	Oral Display maps/photographs
	Baseline Information Collection	Disclosure: Protocols Used	Project Non-Technical Summary Project foot print maps
	Key Questions:	Responses	
	Is there any high-voltage Power line existing in the village? If yes, what would be its length and since how many years it is existing?	No	
	Has the community ever faced any problem due to the high voltage Power line?	No	
	Do you have a designated place for regular and weekly market in the village? If not, name of the nearest village where weekly market is held.	No	
	Do you have archaeological and historical monument in and near the village? If yes, provide details.	No	

	Which community level religious and cultural events are celebrated at village and their locations?	No
	Do you have street lighting in the village? Is it adequate?	Yes, most of the streets (including 125 Solars)
	What is the percentage of household in the village who have electricity connection?	99% HHs electrified
	Is the electricity supply reliable? How many times in a day the electricity supply is disrupted?	Yes, around 21/22 hours of electricity availability in the village
	Is there any voltage fluctuation?	No Voltage Fluctuation
	What time of the year, there is more frequent disruption in electricity supply?	Power disruption 1 or 2 hrs. roster a day at morning and evening
	How many households in the village use power for irrigation and agriculture purpose?	Yes, around 100 both electric and diesel
	Is there any small and medium scale industry in the village? If yes, do they depend on electricity?	No
	If a new Power line needs to pass through your village territory, what suggestions you would like to offer?	Keep tower distant from habitation. Timely and market-based compensation payment
	Other Related Photographs or Documents:	
	Photo Title	Photo Title
	Photo Title	Photo Title
	Insert Relevant Photo	Insert Relevant Photo
	Insert Relevant Photo	Insert Relevant Photo

Participants List (in English)

PTCUL LLD Line	Name of participant	GP Name	Gender	Contact number
Mahukhergarh-Jaspur 132 KV Line	Kirandeep Kaur	Jagdehri Patti (GP)	Female	7830315256

Signat Attendance Sheet

Gram Panchayat - Bhawanipur (Revenue Villages Bhawanipur, Garhi Husan)

A		Project Title:							
B		Stakeholder: Gram Pradhan Consultation							
Title:									
Important Notice: This document provides a working summary of the main facts captured during the consultation/key-informant interview held, and should not be treated as a formal minute. It is therefore deliberately not exhaustive or chronological. Its purpose is to capture significant information/feedbacks and not intended for official review or approval.		Insert photo of consultation capturing as many participants as possible.							
C						Basic details			
Location:						Bhawanipur			
Date:		10th Dec 2022							
D		Attended By		Name					
		Designation		Contact Number					
(See the copy of the attendance sheet attached at the end)									
E		Purpose of Consultation		Information Disclosure					
		Assessing perception impact		Medium					
		Baseline information Collection		Disclosure Protocols Used					
				Oral					
				Display mass photographs					
				Project Non-Technical Summary					
				Project food print maps					
		Key Questions:		Responses					
		Is there any high-voltage Power line existing in the village? If yes, what would be its length and since how many years it is existing?		Yes multiple lines various agencies					
		Has the community ever faced any problem due to the high voltage Power line?		No					
		Do you have a designated place for regular and weekly market in the village? If not, name of the nearest village where weekly market is held.		No					
		Do you have archaeological and historical monument in and near the village? If yes, provide details.		No					

Which community level religious and cultural events are celebrated at village and their locations?	Gurunank dev Jayanti, Shivrati, Hidimba Devi Mela	
Do you have street lighting in the village? Is it adequate?	Yes, most of the streets (90% Street)	
What is the percentage of household in the village who have electricity connection?	100% HHs electrified	
Is the electricity supply reliable? How many times in a day the electricity supply is disrupted?	Yes, around 23 hours of electricity availability in the village	
Is there any voltage fluctuation?	No Voltage Fluctuation	
What time of the year, there is more frequent disruption in electricity supply?	Some Power disruption during peak period of summer	
How many households in the village use power for irrigation and agriculture purpose?	Yes, around 175 both electric and diesel	
Is there any small and medium scale industry in the village? If yes, do they depend on electricity?	No	
If a new Power line needs to pass through your village territory, what suggestions you would like to offer?	Yes, during construction, and stringing destroys more agriculture crops/loss. Government land price in peri-urban area is quite less. Payment should be more than market rate. Delay in compensation payment. The approach of official dealing should be cordial. Regular stakeholder consultation.	
Other Related Photographs or Documents		
Photo Title	Photo Title	Photo Title
Insert Relevant Photo	Insert Relevant Photo	Insert Relevant Photo

Participants List (in English)

PTCUL LLO Line	Name of participant	GP Name	Gender	Contact number
----------------	---------------------	---------	--------	----------------

Mahadkhergarh- Jaspur 132 KV Line	Ravindra Singh	Garl Hussin/ Bhawarpur	Male	9458132701
	Saurbh Singh	Garl Hussin/ Bhawarpur	Male	7983500100
	Narendra Singh	Garl Hussin/ Bhawarpur	Male	9917751301

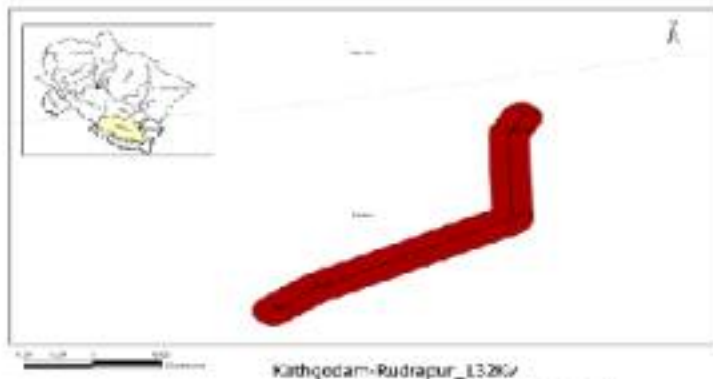
Signed Attendance Sheet

132KV Line - Mahadkhergarh - Jaspur
गुप्त वॉरिंग प्रो. नं.

Date	No. of persons at site	Name of all persons at site	Attendance verified (signature of SO)	Signed by SO	Signed for each person present			Signature of person in charge
					per	all	per	
01/07/2018	02	Garl Hussin/ Bhawarpur	01/07/2018	01/07/2018	✓			01/07/2018
						✓		01/07/2018
					✓			01/07/2018

132 kV Kathgodam-Rudrapur

The map showing the Power line alignment and administrative boundary is provided in Figure-7. The Power line will have 4 towers and crosses 1 revenue village (Bachpur) which belong to Japur Khema Gram Panchayat in Nainital District of Uttarakhand State.



Map created by the author using ArcGIS software. Data source: Survey of India Topographic sheets (Scale: 1:50,000)

Map created by the author using ArcGIS software. Data source: Survey of India Topographic sheets (Scale: 1:50,000)

Gram Panchayat - Jalpur Kheera (Revenue Village Bachpur)

A	Project Title:					
B	Stakeholder Title:					
Important Notice: This document provides a working summary of the main facts captured during the consultation/key-informant interview held, and should not be treated as a formal minute. It is therefore deliberately not exhaustive or chronological. Its purpose is to capture significant information/feedbacks and not intended for official review or approval.			Insert photo of consultation capturing as many participants as possible.			
C	Basic details					
Location		Bachpur Substation			UPCL	
Date:		8th Dec 2022				
D	Attended By	Name	Designation	Contact Number		
(See the copy of the attendance sheet attached at the end)						
E	Purpose of Consultation		Information Disclosure			
	Assessing impact perception	Impact	Medium	Oral Display maps/photographs		
	Baseline information Collection		Disclosure Protocols Used	Project Non-Technical Summary Project food print maps		
Key Questions:				Responses		
Is there any high-voltage Power line existing in the village? If yes, what would be its length and since how many years it is existing?				No		
Has the community ever faced any problem due to the high voltage Power line?				No		
Do you have a designated place for regular and weekly market in the village? If not, name of the nearest village where weekly market is held.				No		
Do you have archaeological and historical monument in and near the village? If yes, provide details.				No		

Which community level religious and cultural events are celebrated at village and their locations?	Janmasimi, Shivratri and Tula Vivah	
Do you have street lighting in the village? Is it adequate?	No	
What is the percentage of household in the village who have electricity connection?	99%, HHs electrified	
Is the electricity supply reliable? How many times in a day the electricity supply is disrupted?	Yes, around 24 hours of electricity availability in the village	
Is there any voltage fluctuation?	No Voltage Fluctuation	
What time of the year, there is more frequent disruption in electricity supply?	Some Power disruption during summer	
How many households in the village use power for irrigation and agriculture purpose?	Yes, 6 tubewells	
Is there any small and medium scale industry in the village? If yes, do they depend on electricity?	Yes 4-stone crusher, 3-mines, 25 industries (Mothersuni, Khatan, etc)	
If a new Power line needs to pass through your village territory, what suggestions you would like to offer?	Discuss with irrigation department to use the canal land to build tower and also made provision for street lights through PTCUL CSM fund in Bachipur village.	
Other Related Photographs or Documents		
Photo Title	Photo Title	Photo Title
Insert Relevant Photo	Insert Relevant Photo	Insert Relevant Photo

Participants List (in English)

PTCUL LLD Line	Name of participant	GP Name	Gender	Contact number
Kahgodam-Rudrapur 132 kV	Mrs. Seema Pathak	Bachchipur	Female	9411553140
	Mr. Kamakant	Bachchipur	Male	9411553140

Signed Attendance Sheet

Appendix 7: Records of Consultations for UPCL Components

Introduction:

Dehradun, the capital city of Uttarakhand State will be a major beneficiary of the proposed project. The proposed strengthening of the distribution network will be carried out by UPCL by appointing a turn key contractor.

The proposed measures for strengthening the distribution network includes (i) establishing two new sub-stations, (ii) two 33kV overhead lines of ~10km connecting these two new sub-stations, (iii) capacity enhancement of 7 existing sub-stations, (iv) laying 22 33kV distribution underground cables of 150 Ckms, (v) laying 66 11kV underground feeder lines of 231kms, and (vi) installation of smart meter (DTR) at critical locations on the distribution network.

The proposed work of laying underground cables is spread across the city of Dehradun. The planned work involves conversion of some of the existing overhead lines to underground lines and some of them will be freshly laid. As a usual practice, the distribution network will use public land (mostly along the road) and will not impose any ROW restrictions.

The laying of underground cables during the construction phase will have a range of environment and social issues, particularly in an urban area with high structural and population density.

The implementation agency has prepared the current project plan and estimates based on a preliminary field assessment and a more detailed planning will be carried out by the turn key contractor. Hence, a digital map of footprint of the proposed under-ground cabling work is not available.

The study team, in absence of a digital map, sought help from the implementation agency to show the locations, contact people's representatives (Ward Members) of these area for on field assessment and community consultations. The details of the approach and methodology followed by the study team is described in Section-5.

The study team carried out a reconnaissance field visit from 8-10th Mar 2022 to Dehradun to get a preliminary understanding of the locations and proposed interventions. The study team understood that most of the underground cable laying will convert the existing over-head lines to underground cables.

Converting the over-head lines to underground cables will have advantage for the public. The private owners who maintain safe distances from these overhead lines can avail additional space for use and will have less safety concerns. The existing trees along these distribution lines which needs to be pruned in regular intervals now can grow freely. The removal of electrical poles will also make the footpaths with lesser hindrances for pedestrians and road users. These benefits are expected to result in greater public acceptance of the proposed works.

Although, there are benefits from converting the overhead Power lines to underground lines, public faces a range of inconveniences during construction phase. The study team identified a range of potential construction phase impacts which needs proper management and mitigation measures.

The Study team prepared a consultation checklist including potential construction stage impacts. As the proposed construction work for underground cabling were scattered and comprised of more than 450 Ckms, the study team adopted a three stage approach (Figure-1).

Figure 1: Steps in Consultation Process



Step 1- Identification of Wards: The study team with the help from Implementation agency identified 28 Wards (out of 102 Wards within Dehradun Municipality) where the proposed works under this project will be carried out.

Step 2- Information Disclosure and Consultation: The study team handed over a copy of the Project Information Summary (see Section-B) during the consultation and briefed them on scope of the project and planned activities to be carried out within their Ward. The Implementation agency representative explained them the key locations and route alignment. The study team interviewed them and noted down their responses. The interview process included identification of sensitive spots where some of these potential impacts would occur and can cause inconvenience to public. The list of elected representatives of the Municipal Wards where underground cabling work will be carried out under this project.

The list of Wards covered in the Consultation

S.N.	Name of Ward Member	Ward No.	Ward Name	Gender	Mobile Number
1	Mr. Sumantra Singh Bohra	1	Maloni	Male	7983058123
2	Mr. Sanjay Nautilyal	6	Doon Vihar	Male	7017208754
3	Mr. Kamal Thapa	7	Jakhan	Male	8057580389
4	Mr. Bhupendra Kothail	8	Solawats	Male	9837091905
5	Mr. Yogesh Kumar	9	Arya Nagar	Male	7417428538
6	Mr. Satyendra Nath	11	Vijay Colony	Male	9827825674

S.N.	Name of Ward Member	Ward No.	Ward Name	Gender	Mobile Number
7	Mrs. Nandini Sharma	12	Kashan Nagar	Female	9997238708
8	Mrs. Pramila Kohla	15	Karanpur	Female	9411570188
9	Dr. Bijendra Pal Singh	16	Bokstewala	Male	9997955564
10	Mr. Arjun Sonkar	17	Chukhaawala	Male	7533677779
11	Mrs. Charanjeev Kaur Nagai	19	Gharla Ghar Katta Mandir Marg	Female	9412955326
12	Mr. Rohan Singh Chandel	21	M.K.P.	Male	8126178737
13	Mrs. Anika Gaig	22	Tisk Road	Female	7983283745
14	Mr. Manoj Jaisv	25	Indrash Nagar	Male	7906958462
15	Mrs. Niru Sahgal	26	Dhamawala	Female	8856444447
16	Mr. Meena Bisti	28	Dolanwala (North)	Female	7017458834
17	Mr. Rakesh Majhola	30	Dolanwala (South)	Male	9750676888
18	Mrs. Mahinder Kaur Kukreja	34	Govind Ghar	Female	9412174252
19	Mrs. Sangeeta Gupta	35	Smt Dev Guman	Female	9758867800
20	Mrs. Anita Singh	36	Vijay Park	Female	9412052434
21	Mr. Anil Agrawal	37	Basant Vihar	Male	9756506815
22	Mr. Ramesh Chandra Kala	38	Panditwala	Male	9897301686
23	Mrs. Asha Bhatt	41	Intrapuram	Female	9557095555
24	Mrs. Archana Pandit	42	Kawali	Female	9634625889
25	Mrs. Rajni	43	Dwarpuri/Orinapur	Female	9634828332
26	Mrs. Anika Singh	44	Patel Nagar (West)	Female	7017071121
27	Mr. Sanjeev Mahotra	46	Athdewala	Male	9997773737
28	Smt. Praveen Tyagi	47	Chander Road MODA colony	Female	9957118860
29	Mr. Mohendra Singh Rawat	50	Rajiv Nagar	Male	9897029540
33	Mr. Amit Bhandari	56	Dharanpur	Male	9997443434

S.N.	Name of Ward Member	Ward No.	Ward Name	Gender	Mobile Number
34	Mr. Binesh Negi	57	Nehru Colony	Male	8445010530
35	Smt. Shushila Rawat	58	Defence colony	Female	99276932516
36	Mrs. Shikha Bansal	59	Gujara Mansingh	Female	7351907321
37	Mr. Abhishek Pant	60	Danda Lakhound	Male	9927151817
38	Mrs. Rita Rani	61	Aamela Tarla	Female	8126113532
39	Mr. Sumit Oudir	62	Nunan Khela	Male	8650454546
41	Mr. Kavindra Sempal	63	Ladpur	Male	9719101673
42	Mr. Mahipal Dhiman	71	Patel Nagar (East)	Male	9358104121
43	Mr. Rajpal Singh Payal	73	Vidya Vihar	Male	9145212860
44	Mr. Satish Kashyap	74	Bhrampur	Male	9857002678
45	Mr. Arjun Alam	77	Majra	Male	7830656565
46	Mr. Rajesh Parmar	79	Bharuwa Grant	Male	9715643000
47	Mr. Hari Prashad	87	Pithuwa	Male	9837187200
48	Mrs. Sabnam Shahin	Parthun	Rampur (Gram Parthun), Selaqui	Female	8126408709
49	Mrs. Baby Rani	Parthun	Shankarpur (Gram Parthun), Selaqui	Female	9760805651
56	SIDCUL	SIDCUL	MD, SIDCUL Office	Office	

Step 3: Visit to Sensitive Spot and On-site Consultation: Joint visit was held to important sensitive spots identified in Step 2 and on-site consultation was held with community members and stakeholders present there. The list of sensitive spots identified in each of the affected Ward is provided in section D.

Information Disclosure: Project Information Summary

The Project Information Summary was a two-page document which provided the details of the project interventions in Dehradun and its suburbs.

Introduction:

Uttarakhand Power Corporation Limited (UPCL) intends to improve the electricity supply and distribution system in Dehradun and a few other places and is seeking technical and financial support from ADB. This document provides a brief overview of the improvement activities under consideration and a preliminary screening of potential environment and social impacts. The information provided in this document are to facilitate stakeholder consultation at planning stage and incorporate relevant suggestions in environment and social safeguard documents.

Project Scope:

Uttarakhand Power Corporation Limited (UPCL) has planned the following to improve electricity supply in Dehradun:

Aspect	Improvement Activity	Scope		
Electricity Distribution System	Capacity enhancement of existing sub-stations	7 2 in Dehradun North (Sahasradhara, Hathibakala) 5 in Dehradun Rural (Vikasnagar- Sahiya, Swara, Rudrapur, and Dehwa- Ramnagar Danda, and Lal Tappa)		
	Conversion of existing 33kV Overhead Lines of 150 Km to Underground Cables	Zone	No. of Proposed 33kV Feeder	Total Length (Kms)
		EDD (Central), Dehradun	7 (4 New)	30
		EDD (North), Dehradun	3 (2 New)	27
		EDD (South), Dehradun	3 (3 New)	33
		EDD (Raipur), Dehradun	5 (1 New)	52.5
		EDD (Mohapur), Dehradun	4 (4 New)	8.5
		Total	22 (14 New)	150
	Conversion of Existing 11kV Overhead Lines of 231km to Underground Cables	Zone	No. of 33/11 kV Feeder Lines	Total Length (Kms)
		EDD (Central), Dehradun	20	45
		EDD (North), Dehradun	8	28
		EDD (South), Dehradun	26	106
		EDD (Raipur), Dehradun	14	52
		Total	68	231
	Smart meter installation at critical locations	DTR Metering and Protection on LT Side by installing Communicable MCCB/ACB including 5 Years AMC		

	on the distribute network	
--	------------------------------	--

Preliminary Impact Screening for Each Sub-Component

The preliminary screening of the environment and social impacts of the proposed construction work.

Sub-Component	Pre-Construction (Access to Land)	Construction Phase Impacts
Capacity Enhancement of existing Sub-stations	No additional land required	Face traffic inconvenience during Transportation of heavy equipment and material. Construction related nuisance (noise, emissions)
New Substations	Total land required is 0.4384 ha Private land is- 0 Government land 0.4384 ha	Face traffic inconvenience during Transportation of heavy equipment and material. Construction related nuisance (noise, emissions) and inconvenience
33kV Overhead Lines connecting 33kV Sub-stations (3 Numbers and 28 Kms)	Land Required for Tower Bases is negligible Land within RoW No ROW imposed	Face traffic inconvenience during Transportation of heavy equipment and material. Temporary land requirement by sub-contractors for storage/casting yard, labour camps etc) Damage to crop/property in adjacent area of the tower bases and access to it. Damage to onefree and assets during stringing. Setting up small and temporary labour (may be from outside state) camps close to construction locations.
Conversion of Existing 33kV Overhead Lines to Underground Cables	Existing RoW mostly public roads will be used and no fresh RoW will be imposed.	Face traffic inconvenience during construction. Unsafe conditions for public in general and vulnerable users in particular Lack of proper restoration of damaged public roads, utilities etc. Short term deterioration of conditions of environmental sanitation. Setting up small and temporary labour (may be from outside state) camps close to construction locations

Consultation Channels:

The stakeholder consultation meetings are planned to be held in each electricity division involved in power distribution in Dehradun. During these meetings the activities proposed, its potential impacts and planned mitigation measures will be explained. The panel of experts will collect all relevant suggestions for minimizing environment and social impacts and will incorporate them into the environment and social safeguard documents.

The suggestions on avoiding, mitigating and managing all potential environment and social impacts associated with these proposed improvement activities in the existing electric supply and distribution system in the city of Dehradun can be submitted in writing.

Coverage of Consultation for Underground Cable Area:

The study team carried out 25 consultations in and around Dehradun city and consulted 29 persons during this process. An overview of the consultation process in each EDO zone is provided in table below and detailed documentation of each of these consultations is provided in sub-sections below.

Coverage of Consultations in Underground Cable Area

EDO Zone	Total number of Ward/ Village	Number of Consultations Held	Total Number of Participants	Number of Male Participants	Total Number of Female Participants	Number of Sensitive Spots Identified
North	8	8	13	12	1	25
Central	12	8	7	6	2	20
South	16	11	9	7	2	28
Rural	10	5	12	7	5	12
	47	30	41	31	10	85

As laying underground cables will be done in an urban area with high population density and built-up areas, the consultation was carried out with stakeholder groups that represent various groups.

Consultation at Ward No-1, Dehradun Municipality

A	Name of EDO Zone (Rural/Urban) (Central/North/South/Rajpur/Mohangpur)		North	
B	Municipality/Panchayat/Ward No		Ward No 1, Meshi and Guniyal Gaon	
C	List of Distribution Lines to be made Under Ground: 33 KV Guniyal Gaon			
Sub-station Names and Location: Meshi / Guniyal Gaon				
Length of proposed line (In Km)		11xV= 12 KM	33kv= 7 KM	Total=7 KM
Important Notice: This document provides a working summary of the main facts captured during the consultation/key-informant interview held, and should not be treated as a formal minute. It is therefore deliberately not exhaustive or chronological. Its purpose is to capture significant information/feedbacks and not intended for official review or approval.				
D	Location	Meshi, Guniyal Gaon		
	Date:	30th September 2022		
  				
  				
E	Purpose of Consultation	Baseline Collection	Information Disclosure	
		Assessing perception	Impact	Medium
		Identification of Sensitive Spots	Disclosure Protocol Used	Project Summary
F	Key Questions:		Responses	
1. The Current Electricity Supply Situation				

Are there any challenges with the electricity supply? Power outages, low voltage, theft of electricity, transformer breakdown etc. If yes, does it affect you in any way?	No. Electricity supply is good. During rainy season few disruptions due weather, storm and heavy rain.
Are there any challenges with the open electric distribution lines?	No big issues, Electric poles on the roads some time creates traffic issues in few places.
Do you think the underground cabling system will benefit you? If yes, what are the benefits?	Lot of wires hanged on the poles, chance of electrocution be eliminated, roads will be neat and clean. Good supply of electricity during even rainy season.
Do you support this project?	Yes

2. Screening of Construction Phase Potential Impacts

Would the construction work for underground cabling would lead to significant environment pollution in the adjacent area? If yes, name a few sensitive locations. (Pollution -air, soil, water, noise pollution, Tree cutting, soil erosion, water logging)	No As line will pass near the Zoo entrance gate, precaution should be taken while construction
Will there be any permanent removal of structures (or part of structure) and immovable property viz. HP/Deep Tube Well, Well, Pond, Boundary Wall, etc.?	No Just highlighting two area 1. Zoo entrance gate and 2. Entrance gate of Max Hospital
Will there be any temporary evacuation of encroachers/squatters, street vendors? If yes provide details of the location and number of affected entities. Will it affect livelihood and reduction in income of these people? If yes, for how many days? Will they benefit after the under-ground cabling work is completed? If yes, then how?	No encroachment No requirement of temporary evacuation. No structured street vendors on the street. No effect on livelihood or reduction in income of people due to underground cabling. If construction work being done at night no problem will be faced.
Will there be any impact on public property or premise viz. school, religious site, playground/ Park, old-age home, differently abled Institutes etc whose access will be temporarily altered? If yes, provide the name of those locations.	No such issues in the area, Just line is passing through a school (Arya school) and an Institute (Gyanendra Training Institute)

Is there any historical monument close to (200m) from the line to be made underground? If yes, is it a protected monument?	No
Is there any narrow stretch of road, where traffic disruption is possible? Is there any alternative route to divert the traffic for a temporary duration?	No
Any potential damage to drinking water supply system including hand pumps, stand posts, tube well etc? If yes, how, and where? Is there any alternative solution?	Not known to the ward member
Any potential damage to road side storm water drainage system. (Details)	Nagola Nala between Duniyal Gaon and Masl.
Any potential damage to underground sewerage and drains carrying waste water?	Not know to the ward member
Any potential damage to paved footpath used by a significant number of pedestrians? If yes, provide location and length of the stretch. Does any of these stretches used by pedestrians in night and if it is illuminated?	No constructed pathway on the line
Will the removal of the existing electricity poles and lines cause any concern to anyone? If yes, to whom and how that can be avoided or minimized?	Yes, majority of the street lights are on these poles, so need to street lights poles
Can you suggest how best to address these concerns/issues during construction phase?	Construction at night
Number of Sensitive Spots Identified	1. Zoo entrance gate 2. Entrance gate of Max Hospital 3. Arya school and 4. Dyanandra Training Institute

Consultation at Ward No-8, Doon Vihar, Dehradun Municipality

A	Name of EDD Zone (Rural/Urban) (Central/North/South/Rajpur/Mohangpur)		North	
B	Municipality/Panchayat/Ward No		8 Doon Vihar	
C	List of Distribution Lines to be made Under Ground 11 KV Doon Vihar			
	Sub-station Names and Location: 33 KV Hathibakula Substation			
	Length of proposed line (In Km)	11kv=	0.5 KM	33kv= Total=
	Important Notice: This document provides a working summary of the main facts captured during the consultation/key-informant interview held, and should not be treated as a formal minute. It is therefore deliberately not exhaustive or chronological. Its purpose is to capture significant information/feedbacks and not intended for official review or approval.			
D	Location	Rajpura Road		
	Date:	30-09-2022		
E	Purpose of Consultation	Baseline Information Collection	Information Disclosure	
		Assessing impact perception	Medium	Oral (in Hindi local language)
		Identification of Sensitive Spots	Disclosure Protocols Used	Project Summary Non-Technical
F	Key Questions		Responses	
	1. The Current Electricity Supply Situation			
	Are there any challenges with the electricity supply? Power outages, low voltage, theft of electricity, transformer breakdown etc. If yes, does it affect you in any way?	Lot of wires of different agencies like Jio cables, electric wires, TC cables hanging on the poles. During rainy season due to storm and bad weather people face power outages.		
	Are there any challenges with the open electric distribution lines?	Due to poles on the road		
	Do you think the underground cabling system will benefit you? If yes, what are the benefits?	Yes		

	Do you support this project?	Full support
2. Screening of Construction Phase Potential Impacts		
	Would the construction work for underground cabling would lead to significant environment pollution in the adjacent area? If yes, name a few sensitive locations. (Pollution -air, soil, water, noise pollution, Tree cutting, soil erosion, water logging)	No
	Will there be any permanent removal of structures (or part of structure) and immovable property viz. HP(Deep Tube Well, Well, Pond, Boundary Wall, etc.?	No
	Will there be any temporary evacuation of encroachment/squatters, street vendors? If yes provide details of the location and number of affected entities. Will it affect livelihood and reduction in income of these people? If yes, for how many days? Will they benefit after the underground cabling work is completed? If yes, then how?	No encroachment. This is a commercial and market area, so construction work should be done at night. No livelihood will be affected during night. Also avoid week end (Friday to Sunday) for construction. Yes it will benefit the road and market particularly during rainy season. Poles creates lot of problem to the heavy traffic in the area particularly during the market period.
	Will there be any impact on public property or premise viz. school, religious site, playground/ Park, old-age home, differently abled institutes etc whose access will be temporarily altered? If yes, provide the name of those locations.	No
	Is there any historical monument close to (200m) from the lines to be made underground? If yes, is it a protected monument?	No
	Is there any narrow stretch of road, where traffic disruption is possible? Is there any alternative route to divert the traffic for a temporary duration?	Yes Measure diversion, On Rajpura road near Ramdev Baba Shop (a stretch of 2 KM)

Any potential damage to drinking water supply system including hand pumps, stand posts, tube well etc? If yes, how, and where? Is there any alternative solution?	No
Any potential damage to road side storm water drainage system. (Details)	No
Any potential damage to underground sewerage and drains carrying waste water?	Can't tell, Nagar and Jal Nigam must be consulted before construction
Any potential damage to paved footpath used by a significant number of pedestrians? If yes, provide location and length of the stretch. Does any of these stretches used by pedestrians in night and if it is illuminated?	Yes around 5 KM to 7 KM
Will the removal of the existing electricity poles and lines cause any concern to anyone? If yes, to whom and how that can be avoided or minimized?	No any serious issue.
Can you suggest how best to address these concern/issues during construction phase?	Work should be done at night. Avoid weekend (Friday to Sunday) Consult with traffic police, Nagar Nigam, and Jal sansthan
Number of Sensitive Spots identified	No such sensitive spot. However, complete the construction work at night near Scholons School, Pacific Mall, Physically Handicap School.

Consultation at Ward No-7, Jakhn, Dehradun Municipality

A	Name of EDD Zone (Rural/Urban) (Central/North/South/Rajpur/Mohangpur)		North	
B	Municipality/Panchayat/Ward No		7 Jakhn	
C	List of Distribution Lines to be made Under Ground 11 KV Doon Vihar 11 KV Malsi			
	Sub-station Names and Location: Hathbansala			
	Length of proposed line (In Kms) 11kv= 33kv= 70kv=			
	Important Notice: This document provides a working summary of the main facts captured during the consultation/key-informant interview held, and should not be treated as a formal minute. It is therefore deliberately not exhaustive or chronological. Its purpose is to capture significant information/feedbacks and not intended for official review or approval.			
D	Location	Rajpur Road		
	Date:	30th Sept 2022		
E	Purpose of Consultation	Baseline Information Collection	Information Disclosure	
		Assessing impact perception	Medium	Oral (in Hindi local language)
		Identification of Sensitive Spots	Disclosure Protocol Used	Project Non-Technical Summary
F	Key Questions:		Responses:	
	1. The Current Electricity Supply Situation			
	Are there any challenges with the electricity supply? Power outages, low voltage, theft of electricity, transformer breakdown etc. If yes, does it affect you in any way?		24x7 power supply. Only during rainy season due to storm and bad weather and maintenance work people face power outages.	
	Are there any challenges with the open electric distribution lines?		Lot of wires of different agencies like Jio cable, electric wires, TV cables hanging on the poles.	

		Power disruption during heavy storm and rain in rainy season due to open electric distribution lines
	Do you think the underground cabling system will benefit you? If yes, what are the benefits?	Yes
	Do you support this project?	Yes
2. Screening of Construction Phase Potential Impacts		
	Would the construction work for underground cabling would lead to significant environment pollution in the adjacent area? If yes, name a few sensitive locations. (Pollution -air, soil, water, noise pollution, Tree cutting, soil erosion, water logging)	No. Just may be Noise pollution
	Will there be any permanent removal of structures (or part of structure) and immovable property viz. HP/Deep Tube Well, Well, Pond, Boundary Wall, etc.?	No
	Will there be any temporary evacuation of encroachers/squatters, street vendors? If yes provide details of the location and number of affected entities. Will it affect livelihood and reduction in income of these people? If yes, for how many days? Will they benefit after the under-ground cabling work is completed? If yes, then how?	No encroachment. This is a commercial and market area, so construction work should be done at night. No livelihood will be affected during night. Also avoid week end (Friday to Sunday) for construction. Yes it will benefit the road and market particularly during rainy season. Poles creates lot of problem to the heavy traffic in the area particularly during the market period.
	Will there be any impact on public property or premises viz. school, religious site, playground/ Park, old-age home, differently abled institutes etc whose access will be temporarily altered? If yes, provide the name of those locations	No
	Is there any historical monument close to (200m) from the line to be made	No

underground? If yes, is it a protected monument?	
Is there any narrow stretch of road, where traffic disruption is possible? Is there any alternative route to divert the traffic for a temporary duration?	No
Any potential damage to drinking water supply system including hand pumps, stand posts, tube well etc? If yes, how, and where? Is there any alternative solution?	No. Nagar Nigam and Jal Nigam must be consulted before construction
Any potential damage to road side storm water drainage system. (Details)	No
Any potential damage to underground sewerage and drains carrying waste water?	Nagar Nigam and Jal Nigam must be consulted before construction
Any potential damage to paved footpath used by a significant number of pedestrians? If yes, provide location and length of the stretch. Does any of these stretches used by pedestrians in night and if it is illuminated?	Yes around 8 to 10 KMs
Will the removal of the existing electricity poles and lines cause any concern to anyone? If yes, to whom and how that can be avoided or minimized?	No.
Can you suggest how best to address these concerns/issues during construction phase?	Work should be done at night. Avoid weekend (Friday to Sunday) Consult with traffic police, Nagar Nigam, and Jal sanathan
Number of Sensitive Spots Identified	No particular sensitive spot, while construction near NIEPVD. The Presidency Body Guard area should be planned appropriately (at Night)

Consultation at Ward No-8, Solawala, Dehradun Municipality

A	Name of EDD Zone (Rural/Urban) (Central/North/South/Rajpur/Mohangpur)		North	
B	Municipality/Panchayat/Ward No		8 Solawala	
C	List of Distribution Lines to be made Under Ground 33 KV Bindal to Hathbarkala 11 KV Arvity (Hathbarkala to Dikran)			
	Sub-station Names and Location: Hathbarkala and Bindal			
	Length of proposed line (In Kms) 11kv= 2.8 KM 33kv= 4.8 KM Total= 7.6 KM			
	Important Notice: This document provides a working summary of the main facts captured during the consultation/key-informant interview held, and should not be treated as a formal minute. It is therefore deliberately not exhaustive or chronological. Its purpose is to capture significant information/feedbacks and not intended for official review or approval.		Insert photo of consultation capturing as many participants as possible.	
D	Location	Rajpur Road, Dikran Chowk		
	Date:	30th September 2022		
E	Attended By	Name	Designation	Contact Number
	(See the copy of the attendance sheet attached at the end)			
F	Purpose of Consultation	Baseline information Collection	Information Disclosure	
		Assessing impact perception	Medium	Oral (in Hindi local language)
		Identification of Sensitive Spots	Disclosure Protocols Used	Project Summary Non-Technical
G	Key Questions:		Responses	
	1. The Current Electricity Supply Situation			
	Are there any challenges with the electricity supply? Power outages, low voltage, theft of electricity, transformer breakdown etc. If yes, does it affect you in any way?		No	

Are there any challenges with the open electric distribution lines?	Yes, during rainy season due to storm and heavy rain.
Do you think the underground cabling system will benefit you? If yes, what are the benefits?	Yes, Poles will be eliminated.
Do you support this project?	Yes
2. Screening of Construction Phase Potential Impacts	
Would the construction work for underground cabling would lead to significant environment pollution in the adjacent area? If yes, name a few sensitive locations. (Pollution -air, soil, water, noise pollution, Tree cutting, soil erosion, water logging)	No
Will there be any permanent removal of structures (or part of structure) and immovable property viz. HP/Deep Tube Well, Well, Pond, Boundary Wall, etc.?	No
Will there be any temporary evacuation of encroachments/squatters, street vendors? If yes provide details of the location and number of affected entities. Will it affect livelihood and reduction in income of these people? If yes, for how many days? Will they benefit after the underground cabling work is completed? If yes, then how?	Not in my area Problem of power outage during rainy season, and problem of electrocution will be solved
Will there be any impact on public property or premises viz. school, religious site, playground Park, old-age home, differently abled institutes etc whose access will be temporarily altered? If yes, provide the name of those locations.	No, mostly commercial area
Is there any historical monument close to (200m) from the lines to be made underground? If yes, is it a protected monument?	No

Is there any narrow stretch of road, where traffic disruption is possible?	No
Is there any alternative route to divert the traffic for a temporary duration?	
Any potential damage to drinking water supply system including hand pumps, stand posts, tube well etc? If yes, how, and where?	No
Is there any alternative solution?	Consult Jal Nigam for drinking water supply system before construction
Any potential damage to road side storm water drainage system. (Details)	No
Any potential damage to underground sewerage and drains carrying waste water?	Consult Nagar Nigam for drinking water supply system before construction
Any potential damage to paved footpath used by a significant number of pedestrians? If yes, provide location and length of the stretch.	Yes around 6 KM
Does any of these stretches used by pedestrians in night and if it is illuminated?	
Will the removal of the existing electricity poles and lines cause any concern to anyone? If yes, to whom and how that can be avoided or minimized?	No, it will benefit to all
Can you suggest how best to address these concern/issues during construction phase?	Make coordination committee, keep ward members in the loop, provide contractor details and contact, number to monitor the work of contractor, quality assurance of patch-up work with PWD, and Work at night.
Number of Sensitive Spots Identified	Key sensitive spots may be near Dhanam Mandir, Forest Office, Mayu Auto (congestion, narrow road and school children commutes).

Consultation at Ward No-9, Dehradun Municipality

A	Name of EDD Zone (Rural/Urban) (Central/North/South/Raipur/Mohangpur)		North		
B	Municipality/Panchayat/Ward No		Ward No. 9, Arya Nagar		
C	List of Distribution Lines to be made Under Ground 33 KV Bindal to Hathibadkula 11 KV Dilaram to Hathibadkula 11 KV Ardy Sub-station Names and Location: Hathibadkula SS Length of proposed line (In Km): 11kv= 4.5 KM 33kv= 7KM Total= 11.5 KM				
Important Notice: This document provides a working summary of the main facts captured during the consultation/key-informant interview held, and should not be treated as a formal minute. It is therefore deliberately not exhaustive or chronological. Its purpose is to capture significant information/feedbacks and not intended for official review or approval.			Insert photo of consultation capturing as many participants as possible.		
D	Location	Hathibadkula SS			
	Date:	31st September 2022			
E	Purpose of Consultation	Baseline information Collection	Information Disclosure		
		Assessing impact perception	Medium	Oral (in Hindi local language)	
		Identification of Sensitive Spots	Disclosure Protocols Used	Project Non-Technical Summary	
F	Key Questions:		Responses		
1. The Current Electricity Supply Situation					
	Are there any challenges with the electricity supply? Power outages, low voltage, theft of electricity, transformer breakdown etc. If yes, does it affect you in any way?		No 24 x 7 hrs power supply. Power outage during rainy season for some time due to storm and heavy rain and maintenance.		
	Are there any challenges with the open electric distribution lines?		Lot of wires of different agencies i.e. Jo-cable, electric wires, TV cables hanging on the poles.		

		Power disruption during heavy storm and rain in rainy season due to open electric distribution lines
Do you think the underground cabling system will benefit you? If yes, what are the benefits?	Yes, better supply during rainy season, and less power outages due to maintenance. Poles will be eliminated, roads will be broadened and less accidents and beautiful wireless roads.	
Do you support this project?	Yes.	
2. Screening of Construction Phase Potential Impacts		
Would the construction work for underground cabling would lead to significant environment pollution in the adjacent area? If yes, name a few sensitive locations. (Pollution -air, soil, water, noise pollution, Tree cutting, soil erosion, water logging)	Yes, water supply related issues in 11 KV diaram feeder line at SKD Sharma street around 800 meters. Water issue near HDPC Bank and Rajpura Road lane number 5A.	
Will there be any permanent removal of structures (or part of structure) and immovable property viz, HP/Deep Tube Well, Well, Pond, Boundary Wall, etc.?	No	
Will there be any temporary evacuation of encroachers/squatters, street vendors? If yes provide details of the location and number of affected entities. Will it affect livelihood and reduction in income of these people? If yes, for how many days? Will they benefit after the under-ground cabling work is completed? If yes, then how?	No	
Will there be any impact on public property or premise viz, school, religious site, playground/ Park, old-age home, differently abled institutes etc whose access will be temporarily altered? If yes, provide the name of those locations.	Kanya Gurukul Vidyalaya (School) - Suggestion construction at night.	
Is there any historical monument close to (200m) from the lines to be made underground? If yes, is it a protected monument?	No	
Is there any narrow stretch of road, where traffic disruption is possible? Is there any alternative route to divert the traffic for a temporary duration?	Yes, narrow road on 11 KV diaram feeder line at SKD Sharma street around 800 meters, HDPC Bank,	

		Rapura Road lane number 54 and Gyan ICCI Bank around 800 meters.
Any potential damage to drinking water supply system including hand pumps, stand posts, tube well etc? If yes, how, and where?	Yes, water supply related issues in 11 KV Dikram feeder line at SKD Sharma street around 800 meters.	
Is there any alternative solution?	Water issue near HDPC Bank and Rapura Road lane number 54.	
Any potential damage to road side storm water drainage system. (Details)	No	
Any potential damage to underground sewerage and drains carrying waste water?	NO	
Any potential damage to paved footpath used by a significant number of pedestrians? If yes, provide location and length of the stretch.	Yes	
Does any of these stretches used by pedestrians in night and if it is illuminated?	11KV – around 3.5 KM 33KV – 3.5 KM	
Will the removal of the existing electricity poles and lines cause any concern to anyone? If yes, to whom and how that can be avoided or minimized?	Majority of the street lights on UPCL poles. Nagar Nigam should plan with UPCL for phased manner elimination of poles.	
Can you suggest how best to address these concern/issues during construction phase?		
Number of Sensitive Spots Identified	5	

Consultation at Ward No-11, Dehradun Municipality

A	Name of EDD Zone (Rural/Urban) (Central/North/South/Raipur/Mohangpur)		North		
B	Municipality/Panchayat/Ward No		Ward Number 11, Vijay Colony		
C	List of Distribution Lines to be made Under Ground 33 KV Line				
	Sub-station Names and Location:				
	Length of proposed line (In Km)		11kv=	33kv= 2KM Total=	
	Important Notes: This document provides a working summary of the main facts captured during the consultation/key-informant interview held, and should not be treated as a formal minute. It is therefore deliberately not exhaustive or chronological. Its purpose is to capture significant information/feedbacks and not intended for official review or approval.				
D	Location	Raipur			
	Date:	31st September 2022			
E	Attended By	Name	Designation	Contact Number	
	(See the copy of the attendance sheet attached at the end)				
F	Purpose of Consultation	Baseline Information Collection	Information Disclosure		
		Assessing impact perception	Medium	Oral (in Hindi local language)	
		Identification of Sensitive Spots	Disclosure Protocol Used	Project Non-Technical Summary	
G	Key Questions:		Responses		
	1. The Current Electricity Supply Situation				
	Are there any challenges with the electricity supply? Power outages, low voltage, theft of electricity, transformer breakdown etc. If yes, does it affect you in any way?		No 24 x 7 hrs power supply. Power outage during rainy season for some time due to storm and heavy rain and maintenance		
	Are there any challenges with the open electric distribution lines?		Lot of wires of different agencies like Jio cable, electric wires, TV cables hanging on the poles.		

		Power disruption during heavy storm and rain in rainy season due to open electric distribution lines
	Do you think the underground cabling system will benefit you? If yes, what are the benefits?	Yes, better supply during rainy season, and less power outage due to maintenance. Poles will be eliminated, roads will be broadened and less accidents and beautiful wireless roads.
	Do you support this project?	Yes
2. Screening of Construction Phase Potential Impacts		
	Would the construction work for underground cabling would lead to significant environment pollution in the adjacent area? If yes, name a few sensitive locations. (Pollution -air, soil, water, noise pollution, Tree cutting, soil erosion, water logging)	No
	Will there be any permanent removal of structures (or part of structures) and immovable property viz. HP/Deep Tube Well, Well, Pond, Boundary Wall, etc.?	No
	Will there be any temporary evocation of encroachers/squatters, street vendors? If yes, provide details of the location and number of affected entities. Will it affect livelihood and reduction in income of these people? If yes, for how many days? Will they benefit after the under-ground cabling work is completed? If yes, then how?	No
	Will there be any impact on public property or premise viz. school, religious site, playground, Park, old-age home, differently abled institutes etc whose access will be temporarily altered? If yes, provide the name of those locations.	No
	Is there any historical monument close to (200m) from the line to be made underground? If yes, is it a protected monument?	No
	Is there any narrow stretch of road, where traffic disruption is possible? Is there any alternative route to divert the traffic for a temporary duration?	No

Any potential damage to drinking water supply system including hand pumps, stand posts, tube well etc? If yes, how, and where? Is there any alternative solution?	No
Any potential damage to road side storm water drainage system. (Details)	No
Any potential damage to underground sewerage and drains carrying waste water?	NO
Any potential damage to paved footpath used by a significant number of pedestrians? If yes, provide location and length of the stretch. Does any of these stretches used by pedestrians in night and if it is illuminated?	Yes 11 KM
Will the removal of the existing electricity poles and lines cause any concern to anyone? If yes, to whom and how that can be avoided or minimized?	Majority of the street lights on UPCL poles. Nagar Nigam should plan with UPCL for phased manner elimination of poles.
Can you suggest how best to address these concerns/issues during construction phase?	Coordination with all relevant line departments and Nagar Nigam
Number of Sensitive Spots identified	3

Consultation at Ward No-22, Dharadun Municipality

A	Name of EDD Zone (Rural/Urban) (Central/North/South/Rajpur/Mohangpur)				
B	Municipality/Panchayat/Ward No		Ward No-22		
C	List of Distribution Lines to be made Under Ground				
Sub-station Names and Location:					
Important Notice: This document provides a working summary of the main facts captured during the consultation/key informant interview held, and should not be treated as a formal minute. It is therefore deliberately not exhaustive or chronological. Its purpose is to capture significant information/feedbacks and not intended for official review or approval.			Insert photo of consultation capturing as many participants as possible.		
D	Location				
	Date:	1st October 2022			
E	Purpose of Consultation	Baseline Information Collection	Information Disclosure		
		Assessing impact perception	Medium	Oral (in Hindi/local language)	
		Identification of Sensitive Spots	Disclosure Protocol Used	Project Non-Technical Summary	
F	Key Questions:		Responses		
1. The Current Electricity Supply Situation					
	Are there any challenges with the electricity supply? Power outages, low voltage, theft of electricity, transformer breakdown etc. If yes, does it affect you in any way?		No. 24 x 7 hrs power supply. Power outage during rainy season for some time due to storm and heavy rain and also due to maintenance work.		
	Are there any challenges with the open electric distribution lines?		Lot of wires of different agencies like Jo cable, electric wires, TV cables hanging on the poles. Power disruption during heavy storm and rain in rainy season due to open electric distribution lines		
	Do you think the underground cabling system will benefit you? If yes, what are the benefits?		Yes, better supply during rainy season, and less power outages due to maintenance.		

		Poles will be eliminated, roads will be broadened and less accidents and beautiful wireless roads.
	Do you support this project?	Yes
2. Screening of Construction Phase Potential Impacts		
	Would the construction work for underground casing would lead to significant environment pollution in the adjacent area? If yes, name a few sensitive locations. (Pollution -air, soil, water, noise pollution, Tree cutting, soil erosion, water logging)	Houses around 10%. No other issues
	Will there be any permanent removal of structures (or part of structure) and immovable property viz. HPI/Deep Tube Well, Well, Pond, Boundary Wat, etc.?	No
	Will there be any temporary evacuation of encroachers/squatters, street vendors? If yes provide details of the location and number of affected entities. Will it affect livelihood and reduction in income of these people? If yes, for how many days? Will they benefit after the underground casing work is completed? If yes, then how?	NO
	Will there be any impact on public property or premise viz. school, religious site, playground/ Park, old-age home, differently abled institutes etc whose access will be temporarily altered? If yes, provide the name of those locations.	Temporary Impact on Schools: Mahajeevan School, Playpan School, Harpreet School, Ideal Children School, Silver Ball Schools, Bait Vanda Ashram (Child) Temples: Jan temple, Tusi Prithvi Temple
	Is there any historical monument close to (200m) from the line to be made underground? If yes, is it a protected monument?	No
	Is there any narrow stretch of road, where traffic disruption is possible? Is there any alternative route to divert the traffic for a temporary duration?	Between Police chowki to Nala (Around 100 m)

Any potential damage to drinking water supply system including hand pumps, stand posts, tube well etc? If yes, how, and where? Is there any alternative solution?	Great change of drinking water supply system damage. Prior planning with Jal Nigam and Nagar Nigam before start of construction work.
Any potential damage to road side storm water drainage system. (Details)	No
Any potential damage to underground sewerage and drains carrying waste water?	Probably not
Any potential damage to paved footpath used by a significant number of pedestrians? If yes, provide location and length of the stretch. Does any of these stretches used by pedestrians in night and if it is illuminated?	Yes around 1.8 KM
Will the removal of the existing electricity poles and lines cause any concern to anyone? If yes, to whom and how that can be avoided or minimized?	Yes, street light issues, Nagar Nigam should start initiatives, inform all agencies private cable operators such as Cable TV, Jo, Airtel before demolition of poles.
Can you suggest how best to address these concern/issues during construction phase?	Coordinated and plan with relevant line departments (Nagar Nigam, Jal Nigam, traffic police etc)
Number of Sensitive Spots identified	11

Consultation at Ward No-25, Dehradun Municipality

A	Name of EDD Zone (Rural/Urban) (Central/North/South/Rajpur/Mohangpur)		South		
B	Municipality/Panchayat/Ward No		Ward Number 25, Harish Nagar		
C	List of Distribution Lines to be made Under Ground 11 KV Gandhi Road 11 KV Khurbura 11 KV Laaman Chowk Sub-station Names and Location:				
	Important Notice: This document provides a working summary of the main facts captured during the consultation/key-informant interview held, and should not be treated as a formal minute. It is therefore deliberately not exhaustive or chronological. Its purpose is to capture significant information/feedbacks and not intended for official review or approval.				
D	Location	Dehradun			
	Date	1st October 2022			
E	Purpose of Consultation:	Baseline Information Collection	Information Disclosure		
		Assessing impact perception	Medium	Oral (in Hindi local language)	
		Identification of Sensitive Spots	Disclosure Protocols Used	Project Non-Technical Summary	
F	Key Questions:		Responses		
1. The Current Electricity Supply Situation					
	Are there any challenges with the electricity supply? Power outages, low voltage, theft of electricity, transformer breakdown etc. If yes, does it affect you in any way?		No		
	Are there any challenges with the open electric distribution lines?		Yes		

Do you think the underground cabling system will benefit you? If yes, what are the benefits?	List of wires of different agencies like Jio cable, electric wires, TV cables hanging on the poles. Power disruption during heavy storm and rain in rainy season due to open electric distribution lines
Do you support this project?	Yes
2. Screening of Construction Phase Potential Impacts	
Would the construction work for underground cabling would lead to significant environment pollution in the adjacent area? If yes, name a few sensitive locations. (Pollution -air, soil, water, noise pollution, Tree cutting, soil erosion, water logging)	No
Will there be any permanent removal of structures (or part of structures) and immovable property viz. HP/Deep Tube Well, Well, Pond, Boundary Wall, etc.?	No
Will there be any temporary evacuation of encroachers/squatters, street vendors? If yes provide details of the location and number of affected entities. Will it affect livelihood and reduction in income of these people? If yes, for how many days? Will they benefit after the under-ground cabling work is completed? If yes, then how?	No
Will there be any impact on public property or premise viz. school, religious shi, playground/ Park, old-age home, differently abled institutes etc whose access will be temporarily altered? If yes, provide the name of those locations.	No
Is there any historical monument close to (200m) from the lines to be made underground? If yes, is it a protected monument?	No
Is there any narrow stretch of road, where traffic disruption is possible? Is there any alternative route to divert the traffic for a temporary duration?	No
Any potential damage to drinking water supply system including hand pumps, stand posts, tube well etc? If yes, how, and where? Is there any alternative solution?	Not aware
Any potential damage to road side storm water drainage system. (Details)	No

Any potential damage to underground sewerage and drains carrying waste water?	
Any potential damage to paved footpath used by a significant number of pedestrians? If yes, provide location and length of the stretch. Does any of these stretches used by pedestrians in night and if it is illuminated?	Approx not
Will the removal of the existing electricity poles and lines cause any concern to anyone? If yes, to whom and how that can be avoided or minimized?	Majority of the street lights on UPCL poles. Nagar Nigam should plan with UPCL for phased manner elimination of poles.
Can you suggest how best to address these concern/issues during construction phase?	Make coordination committee, keep ward members in the loop, provide contractor details and contact number to monitor the work of contractor, quality assurance of patch-up work with PWD, and Work at night.
Number of Sensitive Spots identified	No

Consultation at Ward No-28, Dhanbad Municipality

A	Name of EDD Zone (Rural/Urban) (Central/North/South/Rajpur/Mohangpur)	North			
B	Municipality/Panchayat/Ward No	Ward No. 28, Dalanwala			
C	List of Distribution Lines to be made Under Ground				
	11 KV Corporation				
	33 KV line				
	Sub-station Names and Location:				
	Length of proposed line (In Kms)	11kv= 5.0KM	33kv= 5.5KM	Total=	
	Important Notice: This document provides a working summary of the main facts captured during the consultation/key-informant interview held, and should not be treated as a formal minute. It is therefore deliberately not exhaustive or chronological. Its purpose is to capture significant information/feedbacks and not intended for official review or approval.		Insert photo of consultation capturing as many participants as possible.		
D	Location				
	Date:	1st October 2022			
F	Purpose of Consultation	Baseline Information Collection	Information Disclosure		
		Assessing impact perception	Medium	Oral (in Hindi local language)	
		Identification of Sensitive Spots	Disclosure Protocol Used	Project Non-Technical Summary	
G	Key Questions:		Responses		
	1. The Current Electricity Supply Situation				
	Are there any challenges with the electricity supply? Power outages, low voltage, theft of electricity, transformer breakdown etc. If yes, does it affect you in any way?	No, power supply is good, due to maintenance and storms, loading and chopping of trees, some time power outage.			
	Are there any challenges with the open electric distribution lines?	Within 3 / 4 years 2 electrocution happened (one child death) Lot of wires of different agencies like Jo cable, electric wires, TV cables hanging on the poles.			

		Power disruption during heavy storm and rain in rainy season due to open electric distribution lines
	Do you think the underground cabling system will benefit you? If yes, what are the benefits?	Yes
	Do you support this project?	Yes
2. Screening of Construction Phase Potential Impacts		
5	Would the construction work for underground cabling would lead to significant environment pollution in the adjacent area? If yes, name a few sensitive locations. (Pollution -air, soil, water, noise pollution, Tree cutting, soil erosion, water logging)	No
	Will there be any permanent removal of structures (or part of structure) and immovable property viz. HP/Deep Tube Well, Well, Pond, Boundary Wall, etc.?	No
	Will there be any temporary evacuation of encroachers/squatters, street vendors? If yes provide details of the location and number of affected entities. Will it affect livelihood and reduction in income of these people? If yes, for how many days? Will they benefit after the under-ground cabling work is completed? If yes, then how?	No
	Will there be any impact on public property or premise viz. school, religious site, playground/ Park, old-age home, differently abled institutes etc. whose access will be temporarily altered? If yes, provide the name of those locations.	Brooklyn School, Bright Line school, Doon International School, Doon Blossum school
	Is there any historical monument close to (200m) from the lines to be made underground? If yes, is it a protected monument?	No
	Is there any narrow stretch of road, where traffic disruption is possible?	No

Is there any alternative route to divert the traffic for a temporary duration?	
Any potential damage to drinking water supply system including hand pumps, stand posts, tube well etc? If yes, how, and where? Is there any alternative solution?	Not Aware, Jal Nigam Should be consulted
Any potential damage to road side storm water drainage system. (Details)	No
Any potential damage to underground sewerage and drains carrying waste water?	No loss
Any potential damage to paved footpath used by a significant number of pedestrians? If yes, provide location and length of the stretch. Does any of these stretches used by pedestrians in night and if it is illuminated?	No
Will the removal of the existing electricity poles and lines cause any concern to anyone? If yes, to whom and how that can be avoided or minimized?	Few street Lights on the UPCL poles
Can you suggest how best to address these concern/issues during construction phase?	Construction near Schools should be done during summer. In residential areas construction should be done at day time and in commercial area construction should be done at night.
Number of Sensitive Spots Identified	4

Consultation at Ward No-38, Dehradun Municipality

A	Name of EDD Zone (Rural/Urban) (Central/North/South/Rajpur/Mohangpur)		Central		
B	Municipality/Panchayat/Ward No		Ward Number 38, Belanwala		
C	List of Distribution Lines to be made Under Ground				
Sub-station Names and Location: 11 KV Handwar Road 11 KV Hosta					
Length of proposed line (In Kms) 11kv= 2 KM 33kv= Total=					
Important Notice: This document provides a working summary of the main facts captured during the consultation/key-informant interview held, and should not be treated as a formal minute. It is therefore deliberately not exhaustive or chronological. Its purpose is to capture significant information/feedbacks and not intended for official review or approval.			Insert photo of consultation capturing as many participants as possible.		
D	Location	Arghar Substation			
	Date:	1st October 2022			
E	Purpose of Consultation	Baseline Information Collection	Information Disclosure		
		Assessing impact perception	Medium	Oral (in Hindi local language)	
		Identification of Sensitive Spots	Disclosure Protocol Used	Project Non-Technical Summary	
F	Key Questions:		Responses		
1. The Current Electricity Supply Situation					
	Are there any challenges with the electricity supply? Power outages, low voltage, theft of electricity, transformer breakdown etc. If yes, does it affect you in any way?		No 24 x 7 hrs power supply. Power outage during rainy season for some time due to storm and heavy rain and maintenance		
	Are there any challenges with the open electric distribution lines?		Electrocution. Lot of wires of different agencies like Jo cable, electric wires, TV cables hanging on the poles.		

		Power disruption during heavy storm and rain in rainy season due to open electric distribution lines
	Do you think the underground cabling system will benefit you? If yes, what are the benefits?	Yes
	Do you support this project?	Yes
2. Screening of Construction Phase Potential Impacts		
5	Would the construction work for underground cabling would lead to significant environment pollution in the adjacent area? If yes, name a few sensitive locations. (Pollution -air, soil, water, noise pollution, Tree cutting, soil erosion, water logging)	No
	Will there be any permanent removal of structures (or part of structure) and immovable property viz, HP/Deep Tube Well, Wall, Pier, Boundary Wall, etc.?	No
	Will there be any temporary evacuation of encroachers/squatters, street vendors? If yes provide details of the location and number of affected entities. Will it affect livelihood and reduction in income of these people? If yes, for how many days? Will they benefit after the under-ground cabling work is completed? If yes, then how?	No
	Will there be any impact on public property or premise viz, school, religious site, playground/ Park, old-age home, differently abled institutes etc whose access will be temporarily altered? If yes, provide the name of those locations.	No
	Is there any National monument close to (200m) from the lines to be made underground? If yes, is it a protected monument?	No
	Is there any narrow stretch of road, where traffic disruption is possible? Is there any alternative route to divert the traffic for a temporary duration?	No
	Any potential damage to drinking water supply system including hand pumps, stand posts, tube well etc? If yes, how, and where?	Yes

Is there any alternative solution?	
Any potential damage to road side storm water drainage system. (Details)	No
Any potential damage to underground sewerage and drains carrying waste water?	Yes
Any potential damage to paved footpath used by a significant number of pedestrians? If yes, provide location and length of the stretch. Does any of these stretches used by pedestrians in night and if it is illuminated?	Yes 500 meters
Will the removal of the existing electricity poles and lines cause any concern to anyone? If yes, to whom and how that can be avoided or minimized?	Yes, street lights, private cable operators, jio, airtel etc.
Can you suggest how best to address these concerns/issues during construction phase?	
Number of Sensitive Spots Identified	No

Consultation at Ward No-34, Dendradun Municipality

A	Name of EDD Zone (Rural/Urban) (Central/North/South/Rajpur/Mohangpur)		South		
B	Municipality/Panchayat/Ward No		Ward No. 34, Govind Ghar		
C	List of Distribution Lines to be made Under Ground 11 KV V (Jay Park (Blood Bank)) 33 KV Line				
Sub-station Names and Location: SDO Office, Nehru Palace					
Important Notice: This document provides a working summary of the main facts captured during the consultation/key-informant interview held, and should not be treated as a formal minute. It is therefore deliberately not exhaustive or chronological. Its purpose is to capture significant information/feedbacks and not intended for official review or approval.					
D	Location	SDO Office, Nehru Palace			
	Date:	11-10-2022			
F	Purpose of Consultation	Baseline information Collection	Information Disclosure		
		Assessing impact perception	Medium	Oral (in Hindi local language)	
		Identification of Sensitive Spots	Disclosure Protocol Used	Project Non-Technical Summary	
G	Key Questions		Responses		
1. The Current Electricity Supply Situation					
	Are there any challenges with the electricity supply? Power outages, low voltage, theft of electricity, transformer breakdown etc. If yes, does it affect you in any way?		No, power supply is good.		
	Are there any challenges with the open electric distribution lines?		Yes, sparking on poles, birds safety.		
	Do you think the underground cabling system will benefit you? If yes, what are the benefits?		Yes		
	Do you support this project?		Yes		

2. Screening of Construction Phase Potential Impacts

Would the construction work for underground cabling would lead to significant environment pollution in the adjacent area? If yes, name a few sensitive locations. (Pollution -air, soil, water, noise pollution, Tree cutting, soil erosion, water logging)	15 meters Pullya at Shani Vihar, near Goyal Chakk, 40 meter pullya near Rajeev Colony
Will there be any permanent removal of structures (or part of structure) and immovable property viz. HP/Deep Tube Well, Well, Pond, Boundary Wall, etc.?	2 Hand Pumps Natural drainage 2 pullyas
Will there be any temporary evacuation of encroachers/squatters, street vendors? If yes provide details of the location and number of affected entities. Will it affect livelihood and reduction in income of these people? If yes, for how many days? Will they benefit after the under-ground cabling work is completed? If yes, then how?	On 33 KV line, encroachment due to slum area near Govind Ghar
Will there be any impact on public property or premises viz. school, religious site, playground/ Park, old-age home, differently abled Institutes etc whose access will be temporarily altered? If yes, provide the name of those locations.	No 95% residential and 5% commercial
Is there any historical monument close to (200m) from the lines to be made underground? If yes, is it a protected monument?	No
Is there any narrow stretch of road, where traffic disruption is possible? Is there any alternative route to divert the traffic for a temporary duration?	No
Any potential damage to drinking water supply system including hand pumps, stand posts, tube well etc? If yes, how, and where? Is there any alternative solution?	Not aware

Any potential damage to road side storm water drainage system. (Details)	No
Any potential damage to underground sewerage and drains carrying waste water?	Yes at around 5 places (Crossings), near lane 1, 6, 13, mandir and dose enclave
Any potential damage to paved footpath used by a significant number of pedestrians? If yes, provide location and length of the stretch. Does any of these stretches used by pedestrians in night and if it is illuminated?	Yes 5 KM
Will the removal of the existing electricity poles and lines cause any concern to anyone? If yes, to whom and how that can be avoided or minimize?	Majority of the street lights on the UPCL poles, keep poles till alternate solutions
Can you suggest how best to address these concern/issues during construction phase?	55% residential and 5% commercial. Construction at night in commercial area and in day at residential area.
Number of Sensitive Spots Identified	5 spots (sewerage and crossings)

Consultation at Ward No-35, Dendradun Municipality

A	Name of EDD Zone (Rural/Urban) (Central/North/South/Rajpur/Mohangpur)		Central	
B	Municipality/Panchayat/Ward No		Ward No 35, Shri Dax Suran	
C	List of Distribution Lines to be made Under Ground 11 KV Chakrata Road			
	Sub-station Names and Location:			
	Length of proposed line (In Km)	11kv= 4 KM	22kv=	Total= 4 KM
	Important Notice: This document provides a working summary of the main facts captured during the consultation/key-informant interview held, and should not be treated as a formal minute. It is therefore deliberately not exhaustive or chronological. Its purpose is to capture significant information/feedbacks and not intended for official review or approval.			
D	Location	SDO Office Near Ghanta Ghar, Chakrata Road		
	Date:	11/10/2022		
E	Purpose of Consultation	Baseline Information Collection	Information Disclosure	
		Assessing impact perception	Medium	Oral (in Hindi local language)
		Identification of Sensitive Spots	Disclosure Protocols Used	Project Non-Technical Summary
F	Key Questions:		Responses	
	1. The Current Electricity Supply Situation			
	Are there any challenges with the electricity supply? Power outages, low voltage, theft of electricity, transformer breakdown etc. If yes, does it affect you in any way?		No. Power Supply is 24 x 7	
	Are there any challenges with the open electric distribution lines?		List of wires of different agencies like Jo cable, electric wires, TV cables hanging on the poles. Power disruption during heavy storm and rain in rainy season due to open electric distribution lines	

	Do you think the underground cabling system will benefit you? If yes, what are the benefits?	Yes
	Do you support this project?	Yes
2. Screening of Construction Phase Potential Impacts		
5	Would the construction work for underground cabling would lead to significant environment pollution in the adjacent area? If yes, name a few sensitive locations. (Pollution -air, soil, water, noise pollution, Tree cutting, soil erosion, water logging)	No
	Will there be any permanent removal of structures (or part of structure) and immovable property viz. HP/Deep Tube Well, Well, Pond, Boundary Wall, etc.?	No
	Will there be any temporary evacuation of encroachers/squatters, street vendors? If yes provide details of the location and number of affected entities. Will it affect livelihood and reduction in income of these people? If yes, for how many days? Will they benefit after the under-ground cabling work is completed? If yes, then how?	No
	Will there be any impact on public property or premises viz. school, religious site, playground/ Park, old-age home, differently abled institutes etc whose access will be temporarily altered? If yes, provide the name of those locations.	No
	Is there any historical monument close to (200m) from the lines to be made underground? If yes, is it a protected monument?	No
	Is there any narrow stretch of road, where traffic disruption is possible? Is there any alternative route to divert the traffic for a temporary duration?	No

Any potential damage to drinking water supply system including hand pumps, stand posts, tube well etc? If yes, how, and where? Is there any alternative solution?	Good chance of drinking water supply system damage. Need to plan with Jal Nigam
Any potential damage to road side storm water drainage system. (Details)	No
Any potential damage to underground sewerage and drains carrying waste water?	No
Any potential damage to paved footpath used by a significant number of pedestrians? If yes, provide location and length of the stretch. Does any of these stretches used by pedestrians in night and if it is illuminated?	Yes 4 KM
Will the removal of the existing electricity poles and lines cause any concern to anyone? If yes, to whom and how that can be avoided or minimized?	Majority of the street lights are on the UPCL Poles, Plan with Nagar Nigam for Phased manner withdrawal of Poles
Can you suggest how best to address these concern/issues during construction phase?	
Number of Sensitive Spots Identified	No

Consultation at Ward No-36, Dendradun Municipality

A	Name of EDD Zone (Rural/Urban) (Central/North/South/Rajpur/Mohangpur)		South		
B	Municipality/Panchayat/Ward No		Ward No. 36 Vijay Pared		
C	List of Distribution Lines to be made Under Ground				
	11 KV Wala				
	Sub-station Names and Location:				
	Length of proposed line (In Km)	11kv=	4 KM	33kv= Total= 4 KM	
	Important Notice: This document provides a working summary of the main facts captured during the consultation/key-informant interview held, and should not be treated as a formal minute. It is therefore deliberately not exhaustive or chronological. Its purpose is to capture significant information/feedbacks and not intended for official review or approval.				
D	Location	SDO Office			
	Date:	11-10-2022			
E	Purpose of Consultation	Baseline Information Collection	Information Disclosure		
		Assessing impact perception	Medium	Oral (in Hindi local language)	
		Identification of Sensitive Spots	Disclosure Protocols Used	Project Summary Non-Technical	
F	Key Questions		Responses		
	1. The Current Electricity Supply Situation				
	Are there any challenges with the electricity supply? Power outages, low voltage, theft of electricity, transformer breakdown etc. If yes, does it affect you in any way?		Currently 20 hours power supply (disruption at Night), earlier it was 24 hours supply.		
	Are there any challenges with the open electric distribution lines?		No		
	Do you think the underground cabling system will benefit you? If yes, what are the benefits?		Yes		
	Do you support this project?		Yes		

2. Screening of Construction Phase Potential Impacts		
Would the construction work for underground cabling would lead to significant environment pollution in the adjacent area? If yes, name a few sensitive locations. (Pollution -air, soil, water, noise pollution, Tree cutting, soil erosion, water logging)		Not major issues Just near Ballapur Flyover and nala
Will there be any permanent removal of structures (or part of structure) and immovable property viz. HP/Deep Tube Well, Well, Pond, Boundary Wall, etc.?		No
Will there be any temporary evacuation of encroachers/squatters, street vendors? If yes provide details of the location and number of affected entities. Will it affect livelihood and reduction in income of these people? If yes, for how many days? Will they benefit after the under-ground cabling work is completed? If yes, then how?		No
Will there be any impact on public property or premise viz. school, religious site, playground/ Park, old-age home, differently abled Institutes etc whose access will be temporarily altered? If yes, provide the name of those locations.		Murry School and a Temple Wada Institute
Is there any historical monument close to (200m) from the lines to be made underground? If yes, is it a protected monument?		No
Is there any narrow stretch of road, where traffic disruption is possible? Is there any alternative route to divert the traffic for a temporary duration?		Ballapur Flyover Ballapur Nala
Any potential damage to drinking water supply system including hand pumps, stand posts, tube well etc? If yes, how, and where? Is there any alternative solution?		Yes, risk of drinking water supply system damage

Any potential damage to road side storm water drainage system. (Details)	No
Any potential damage to underground sewerage and drains carrying waste water?	No
Any potential damage to paved footpath used by a significant number of pedestrians? If yes, provide location and length of the stretch. Does any of these stretches used by pedestrians in night and if it is illuminated?	Yes 4 KM
Will the removal of the existing electricity poles and lines cause any concern to anyone? If yes, to whom and how that can be avoided or minimize?	Majority of the street lights on the divider, need to keep at least 15 poles for street light till alternative arrangements made by Nagar Nigam
Can you suggest how best to address these concern/issues during construction phase?	
Number of Sensitive Spots Identified	4

Consultation at Ward No-37, Dendradun Municipality

A	Name of EDD Zone (Rural/Urban) (Central/North/South/Rajpur/Mohangpur)		South		
B	Municipality/Panchayat/Ward No		Ward Number 37, Basant Vihar		
C	List of Distribution Lines to be made Under Ground 11 KV Ashineed 11 KV Pandikara				
	Sub-station Names and Location:				
	Length of proposed line (in Kms)	11kv= 5.5 KM	33kv=	Total=	
	Important Notice: This document provides a working summary of the main facts captured during the consultation/key-informant interview held, and should not be treated as a formal minute. It is therefore deliberately not exhaustive or chronological. Its purpose is to capture significant information/feedbacks and not intended for official review or approval.		Insert photo of consultation capturing as many participants as possible.		
D	Location				
	Date:	12/10/2022			
E	Purpose of Consultation	Baseline Information Collection	Information Disclosure		
		Assessing impact perception	Medium	Oral (in Hindi local language)	
		Identification of Sensitive Spots	Disclosure Protocol Used	Project Non-Technical Summary	
F	Key Questions:		Responses		
1. The Current Electricity Supply Situation					
	Are there any challenges with the electricity supply? Power outages, low voltage, theft of electricity, transformer breakdown etc. If yes, does it affect you in any way?		No, Supply is good		
	Are there any challenges with the open electric distribution lines?		Chance of Electrocuting, more mountaineous line, lot of other wire and cables on the poles		
	Do you think the underground cabling system will benefit you? If yes, what are the benefits?		Yes		

Do you support this project?	Yes
2. Screening of Construction Phase Potential Impacts	
Would the construction work for underground cabling would lead to significant environment pollution in the adjacent area? If yes, name a few sensitive locations. (Pollution -air, soil, water, noise pollution, Tree cutting, soil erosion, water logging)	Mohareri Bagh Nahan/Canal 500 meters Issue one side Canal and other side Sewerage 3 ft
Will there be any permanent removal of structures (or part of structure) and immovable property viz. HP/Deep Tube Well, Well, Pond, Boundary Wall, etc.?	Mini Tube well Ashhead Endave Lane 2.
Will there be any temporary evacuation of encroachments/quackers, street vendors? If yes provide details of the location and number of affected entities. Will it affect livelihood and reduction in income of these people? If yes, for how many days? Will they benefit after the under-ground cabling work is completed? If yes, then how?	No
Will there be any impact on public property or premise viz. school, religious site, playground/ Park, old-age home, differently abled institutes etc whose access will be temporarily altered? If yes, provide the name of those locations.	No
Is there any historical monument close to (200m) from the line to be made underground? If yes, is it a protected monument?	No
Is there any narrow stretch of road, where traffic disruption is possible? Is there any alternative route to divert the traffic for a temporary duration?	No
Any potential damage to drinking water supply system including hand pumps, stand posts, tube well etc? If yes, how, and where? Is there any alternative solution?	Yes, possibility of damage to drinking water supply system, plan with Jal Nigam for construction.
Any potential damage to road side storm water drainage system. (Details)	No
Any potential damage to underground sewerage and drains carrying waste water?	Yes

Any potential damage to paved footpath used by a significant number of pedestrians? If yes, provide location and length of the stretch. Does any of these stretches used by pedestrians at night and if it is illuminated?	Yes 250 meters
Will the removal of the existing electricity poles and lines cause any concern to anyone? If yes, to whom and how that can be avoided or minimized?	Around 10% of the street lights (60 Poles) are on UPCL Poles. We should keep poles till alternative arrangements.
Can you suggest how best to address these concerns/issues during construction phase?	Planning and coordination with all line departments, Establishment of Grievance Redressal system for community. Involvement of Ward members on review and monitoring of progress.
Number of Sensitive Spots Identified	4

Consultation at Ward No-38, Dendradun Municipality

A	Name of EDD Zone (Rural/Urban) (Central/North/South/Rajpur/Mohangpur)	South	
B	Municipality/Panchayat/Ward No	Ward Number 38, Pandhara	
C	List of Distribution Lines to be made Under Ground		
	11 KV 11 KV		
	Sub-station Names and Location:		
	Length of proposed line (in Kms)	11kv= 33kv= Total=	
	Important Notice: This document provides a working summary of the main facts captured during the consultation/key-informant interview held, and should not be treated as a formal minute. It is therefore deliberately not exhaustive or chronological. Its purpose is to capture significant information/feedbacks and not intended for official review or approval.		Insert photo of consultation capturing as many participants as possible.
D	Location		
	Date:	12th October 2021	
E	Purpose of Consultation	Baseline Information Collection	Information Disclosure
		Assessing impact perception	Medium Oral (in Hindi local language)
		Identification of Sensitive Spots	Disclosure Protocols Used Project Summary Non-Technical
F	Key Questions:		Responses
	1. The Current Electricity Supply Situation		
	Are there any challenges with the electricity supply? Power outages, low voltage, theft of electricity, transformer breakdown etc. If yes, does it affect you in any way?	No, Power supply is good, few power outage due to maintenance	
	Are there any challenges with the open electric distribution lines?	Yes, electrocution, poles with lot of other type of wires (cables, etc.)	
	Do you think the underground cabling system will benefit you? If yes, what are the benefits?	Yes	

Do you support this project?	Yes
2. Screening of Construction Phase Potential Impacts	
Would the construction work for underground cabling would lead to significant environment pollution in the adjacent area? If yes, name a few sensitive locations. (Pollution -air, soil, water, noise pollution, Tree cutting, soil erosion, water logging)	
Will there be any permanent removal of structures (or part of structure) and immovable property viz. HP(Deep Tube Well, Well, Pond, Boundary Wall, etc.?	
Will there be any temporary evacuation of encroachments/squatters, street vendors? If yes provide details of the location and number of affected entities. Will it affect livelihood and reduction in income of these people? If yes, for how many days? Will they benefit after the underground cabling work is completed? If yes, then how?	
Will there be any impact on public property or premise viz. school, religious site, playground/ Park, old-age home, differently abled institutes etc whose access will be temporarily altered? If yes, provide the name of those locations.	
Is there any historical monument close to (200m) from the lines to be made underground? If yes, is it a protected monument?	
Is there any narrow stretch of road, where traffic disruption is possible? Is there any alternative route to divert the traffic for a temporary duration?	Narrow road near Gunstwart, (around 1 KM)
Any potential damage to drinking water supply system including hand pumps, stand posts, tube well etc? If yes, how, and where?	May be damage to drinking water supply system

Is there any alternative solution?	
Any potential damage to road side storm water drainage system. (Details)	No
Any potential damage to underground sewerage and drains carrying waste water?	Yes
Any potential damage to paved footpath used by a significant number of pedestrians? If yes, provide location and length of the stretch. Does any of these stretches used by pedestrians in night and if it is illuminated?	Yes
Will the removal of the existing electricity poles and lines cause any concern to anyone? If yes, to whom and how that can be avoided or minimized?	Some Street lights on UPCL poles
Can you suggest how best to address these concern/issues during construction phase?	
Number of Sensitive Spots Identified	2

Consultation at Ward No-44, Dharadun Municipality

A	Name of EDD Zone (Rural/Urban) (Central/North/South/Rajpur/Mohangpur)		South	
B	Municipality/Panchayat/Ward No		Ward Number 44, Patel Nagar West	
C	List of Distribution Lines to be made Under Ground			
	11 KV Patel Nagar			
	11 KV Composite feeder			
	33 KV Mayra			
	Sub-station Names and Location:			
	Length of proposed line (In Kms) 11kV= 12 KV 33kV= Total=			
	Important Notice: This document provides a working summary of the main facts captured during the consultation/key-informant interview held, and should not be treated as a formal minute. It is therefore deliberately not exhaustive or chronological. Its purpose is to capture significant information/feedbacks and not intended for official review or approval.			
D	Location:			
	Date:		12th October 2022	
F	Purpose of Consultation	Baseline Information Collection	Information Disclosure	
		Assessing impact perception	Medium	Oral (in Hindi/local language)
		Identification of Sensitive Spots	Disclosure Protocol Used	Project Non-Technical Summary
G	Key Questions:		Responses	
	1. The Current Electricity Supply Situation			
	Are there any challenges with the electricity supply? Power outages, low voltage, theft of electricity, transformer breakdown etc. If yes, does it affect you in any way?		No, power supply is good, few Power outages due to maintenance	
	Are there any challenges with the open electric distribution lines?		Yes	

Do you think the underground cabling system will benefit you? If yes, what are the benefits?	Yes, prone to accident and electrocution. 3 / 4 cases of accident and death. People made houses under the lines.
Do you support this project?	Yes
2. Screening of Construction Phase Potential Impacts	
Would the construction work for underground cabling would lead to significant environment pollution in the adjacent area? If yes, name a few sensitive locations. (Pollution -air, soil, water, noise pollution, Tree cutting, soil erosion, water logging)	No Work at night
Will there be any permanent removal of structures (or part of structure) and immovable property viz, HP/Deep Tube Well, Well, Pond, Boundary Wall, etc.?	Aadarsh Mandir (encroachment) near Suvidha Store
Will there be any temporary evacuation of encroachments/squatters, street vendors? If yes provide details of the location and number of affected entities. Will it affect livelihood and reduction in income of these people? If yes, for how many days? Will they benefit after the under-ground cabling work is completed? If yes, then how?	Aadarsh Mandir (encroachment) near Suvidha Store
Will there be any impact on public property or premises viz. school, religious site, playground/ Park, old-age home, differently abled institutes etc whose access will be temporarily altered? If yes, provide the name of those locations.	Aadarsh Mandir
Is there any historical monument close to (200m) from the lines to be made underground? If yes, is it a protected monument?	No
Is there any narrow stretch of road, where traffic disruption is possible? Is there any alternative route to divert the traffic for a temporary duration?	No
Any potential damage to drinking water supply system including hand pumps, stand posts, tube well etc? If yes, how, and where? Is there any alternative solution?	No

Any potential damage to road side storm water drainage system. (Details)	No
Any potential damage to underground sewerage and drains carrying waste water?	Two sewerage cross (Bank of Baroda and
Any potential damage to paved footpath used by a significant number of pedestrians? If yes, provide location and length of the stretch. Does any of these stretches used by pedestrians in night and if it is illuminated?	40 meters
Will the removal of the existing electricity poles and lines cause any concern to anyone? If yes, to whom and how that can be avoided or minimized?	Street lights on 25 poles
Can you suggest how best to address these concern/issues during construction phase?	Need budget for street lights, coordination with Nagar Nigam, Jal Nigam, traffic police and other relevant line departments.
Number of Sensitive Spots Identified	2

Consultation at Ward No-48, Dehradun Municipality

A	Name of EDD Zone (Rural/Urban) (Central/North/South/Rajpur/Mohangpur)		North		
B	Municipality/Panchayat/Ward No		Ward Number 48, Adhwas		
C	List of Distribution Lines to be made Under Ground				
	11 MDDA				
	11 KV Satastradhara				
	Sub-station Names and Location:				
	Length of proposed line (In Kms)		11kv= 3 KV	33kv= Total=	
	Important Notice: This document provides a working summary of the main facts captured during the consultation/key-informant interview held, and should not be treated as a formal minute. It is therefore deliberately not exhaustive or chronological. Its purpose is to capture significant information/feedbacks and not intended for official review or approval.		Insert photo of consultation capturing as many participants as possible.		
D	Location				
	Date:	12th October 2022			
E	Purpose of Consultation	Baseline Information Collection	Information Disclosure		
		Assessing impact perception	Medium	Oral (in Hindi local language)	
		Identification of Sensitive Spots	Disclosure Protocol Used	Project Non-Technical Summary	
F	Key Questions:		Responses		
1. The Current Electricity Supply Situation					
	Are there any challenges with the electricity supply? Power outages, line voltage, theft of electricity, transformer breakdown etc. If yes, does it affect you in any way?		No, Power supply is good		
	Are there any challenges with the open electric distribution lines?		Yes		
	Do you think the underground cabling system will benefit you? If yes, what are the benefits?		Yes		
	Do you support this project?		Yes		

2. Screening of Construction Phase Potential Impacts

Would the construction work for underground cabling would lead to significant environment pollution in the adjacent area? If yes, name a few sensitive locations. (Pollution -air, soil, water, noise pollution, Tree cutting, soil erosion, water logging)	No
Will there be any permanent removal of structures (or part of structure) and immovable property viz. HP/Deep Tube Well, Well, Pond, Boundary Wall, etc.?	No
Will there be any temporary evacuation of encroachers/squatters, street vendors? If yes provide details of the location and number of affected entities. Will it affect livelihood and reduction in income of these people? If yes, for how many days? Will they benefit after the underground cabling work is completed? If yes, then how?	No
Will there be any impact on public property or premise viz. school, religious site, playground/ Park, old-age home, differently abled institutes etc whose access will be temporarily altered? If yes, provide the name of those locations.	No
Is there any historical monument close to (200m) from the lines to be made underground? If yes, is it a protected monument?	No
Is there any narrow stretch of road, where traffic disruption is possible? Is there any alternative route to divert the traffic for a temporary duration?	No
Any potential damage to drinking water supply system including hand pumps, stand posts, tube well etc? If yes, how, and where? Is there any alternative solution?	May be
Any potential damage to road side storm water drainage system. (Detrits)	No
Any potential damage to underground sewerage and drains carrying waste water?	No

Any potential damage to paved footpath used by a significant number of pedestrians? If yes, provide location and length of the stretch. Does any of these stretches used by pedestrians in night and if it is illuminated?	No
Will the removal of the existing electricity poles and lines cause any concern to anyone? If yes, to whom and how that can be avoided or minimized?	Majority of the street lights are on the UPCL poles.
Can you suggest how best to address these concerns/issues during construction phase?	
Number of Sensitive Spots Identified	No major issues

Consultation at Ward No-58, Dharadun Municipality

A	Name of EDD Zone (Rural/Urban) (Central/North/South/Rajpur/Mohangpur)		Central	
B	Municipality/Panchayat/Ward No		Ward Number 58, Dharadun	
C	List of Distribution Lines to be made Under Ground 33 KV Anaghar Deendardhan 11 KV Ajabour 11 KV PPCL 11 KV Laxmi Road 11 KV Rajpur 11 KV Vidhan Sabha 11 KV Ashok Vihar 11 KV Nandu Colony 11 KV LIC Sub-station names and Location: Length of proposed line (In Kms) 11kv:- 16.5 KM 33kv:- 4 KM Total:-			
Important Notice: This document provides a working summary of the main facts captured during the consultation/key-informant interview held, and should not be treated as a formal minute. It is therefore deliberately not exhaustive or chronological. Its purpose is to capture significant information/feedbacks and not intended for official review or approval.			Insert photo of consultation capturing as many participants as possible.	
D	Location	Anaghar SS		
	Date:	11th October 2022		
E	Purpose of Consultation	Baseline Information Collection	Information Disclosure	
		Assessing impact perception	Medium	Oral (in Hindi/local language)
		Identification of Sensitive Spots	Disclosure Prohibits Used	Project Non-Technical Summary
F	Key Questions:		Responses	

1. The Current Electricity Supply Situation		
	Are there any challenges with the electricity supply? Power outages, low voltage, theft of electricity, transformer breakdown etc. If yes, does it affect you in any way?	No. Power supply is good, sometime power outage due to maintenance or storms.
	Are there any challenges with the open electric distribution lines?	Yes, open wire, various type of cables on the poles, chance of electrocutions
	Do you think the underground cabling system will benefit you? If yes, what are the benefits?	Yes
	Do you support this project?	Yes
2. Screening of Construction Phase Potential Impacts		
5	Would the construction work for underground cabling would lead to significant environment pollution in the adjacent area? If yes, name a few sensitive locations. (Pollution -air, soil, water, noise pollution, Tree cutting, soil erosion, water logging)	Noise pollution in the residential area (Nehru colony)
	Will there be any permanent removal of structures (or part of structure) and immovable property viz. HPIDeep Tube Well, Well, Pond, Boundary Wall, etc.?	No
	Will there be any temporary evacuation of encroachers/squatters, street vendors? If yes provide details of the location and number of affected entities. Will it affect livelihood and reduction in income of these people? If yes, for how many days? Will they benefit after the under-ground cabling work is completed? If yes, then how?	No
	Will there be any impact on public property or premise viz. school, religious site, playground/ Park, old-age home, differently abled institutes etc. whose access will be temporarily altered? If yes, provide the name of those locations.	Haruman Mandir, Dharanagar Chowk Sanatan Mandir
	Is there any historical monument close to (200m) from the lines to be made	No

underground? If yes, is it a protected monument?	
Is there any narrow stretch of road, where traffic disruption is possible? Is there any alternative route to divert the traffic for a temporary duration?	No. Heavy traffic and commercial area Oshorimour Sahi Mandi, Agrawal Baker to Mautia Wala Road and Hanuman Mandir
Any potential damage to drinking water supply system including hand pumps, stand posts, tube well etc? If yes, how, and where? Is there any alternative solution?	No
Any potential damage to road side storm water drainage system. (Details)	No
Any potential damage to underground sewerage and drains carrying waste water?	No
Any potential damage to paved footpath used by a significant number of pedestrians? If yes, provide location and length of the stretch. Does any of these stretches used by pedestrians in night and if it is illuminated?	90% of footpath will get damage
Will the removal of the existing electricity poles and lines cause any concern to anyone? If yes, to whom and how that can be avoided or minimized?	Yes issue of street light in various places
Can you suggest how best to address these concerns/issues during construction phase?	
Number of Sensitive Spots Identified	Heavy traffic at three places

Consultation at Ward No-57, Dehradun Municipality

A	Name of EDD Zone (Rural/Urban) (Central/North/South/Rajpur/Mohangpur)	Central	
B	Municipality/Panchayat/Ward No	Ward Number 57, Nehru Colony	
C	List of Distribution Lines to be made Under Ground 33 KV Asghar Deendarshan 11 KV Ajahar 11 KV PPCL 11 KV Laxmi Road 11 KV Rajpur 11 KV Vidhan Sabha 11 KV Ashok Vihar 11 KV Nehru Colony 11 KV LIC Sub-station names and Location:- Length of proposed line (In Kms) 11kv:- 16.5 KM 33kv:- Total:-		
	Important Notice: This document provides a working summary of the main facts captured during the consultation/key-informant interview held, and should not be treated as a formal minute. It is therefore deliberately not exhaustive or chronological. Its purpose is to capture significant information/feedbacks and not intended for official review or approval.		
D	Location	Insert photo of consultation capturing as many participants as possible.	
	Date:		
	11th October 2022		
E	Purpose of Consultation	Baseline Information Collection	Information Disclosure
		Assessing impact perception	Medium Oral (in Hindi local language)
		Identification of Sensitive Spots	Disclosure Project Non-Technical Pretests Used Summary
F	Key Questions:		Responses

1. The Current Electricity Supply Situation		
	Are there any challenges with the electricity supply? Power outages, low voltage, theft of electricity, transformer breakdown etc. If yes, does it affect you in any way?	No, Power supply is good
	Are there any challenges with the open electric distribution lines?	Yes
	Do you think the underground cabling system will benefit you? If yes, what are the benefits?	Yes
	Do you support this project?	Yes
2. Screening of Construction Phase Potential Impacts		
	Would the construction work for underground cabling would lead to significant environment pollution in the adjacent area? If yes, name a few sensitive locations. (Pollution –air, soil, water, noise pollution, Tree cutting, soil erosion, water logging)	No
	Will there be any permanent removal of structures (or part of structure) and immovable property viz. HP/Deep Tube Well, Well, Pond, Boundary Wall, etc.?	No
	Will there be any temporary evacuation of encroachers/squatters, street vendors? If yes provide details of the location and number of affected entities. Will it affect livelihood and reduction in income of these people? If yes, for how many days? Will they benefit after the underground cabling work is completed? If yes, then how?	No
	Will there be any impact on public property or premise viz. school, religious site, playground/ Park, old-age home, differently abled institutes etc whose access will be temporarily altered? If yes, provide the name of those locations.	No, Sanatan Temple
	Is there any historical monument close to (200m) from the lines to be made underground? If yes, is it a protected monument?	No
	Is there any narrow stretch of road, where traffic disruption is possible? Is there any alternative route to divert the traffic for a temporary duration?	Heavy traffic in Nehru Nagar Sabji Mandi (Vegetable Market), Residential colony.

Any potential damage to drinking water supply system including hand pumps, stand posts, tube well etc? If yes, how, and where? Is there any alternative solution?	No
Any potential damage to road side storm water drainage system. (Details)	No
Any potential damage to underground sewerage and drains carrying waste water?	No
Any potential damage to paved footpath used by a significant number of pedestrians? If yes, provide location and length of the stretch. Does any of these stretches used by pedestrians in night and if it is illuminated?	Yes
Will the removal of the existing electricity poles and lines cause any concern to anyone? If yes, to whom and how that can be avoided or minimized?	Yes on various poles
Can you suggest how best to address these concerns/issues during construction phase?	
Number of Sensitive Spots Identified	2

Consultation at Ward No-71, Dharadun Municipality

A	Name of EDD Zone (Rural/Urban) (Central/North/South/Rajpur/Mohangpur)		South	
B	Municipality/Panchayat/Ward No		Ward Number 71, Patal Nagar East	
C	List of Distribution Lines to be made Under Ground 33 KB Bhandari bagh to Pothrbagh 33 KV Majra- Bhandarbagh 11 KV Bhandarbagh 11 KV Proposed back up 1 11 KV Composite Main Sub-station Names and Location: Length of proposed line (In Kms) 11KV= 1.9KM 33KV= 15.4 KKM Total=			
D		Important Notice: This document provides a working summary of the main facts captured during the consultation/key-informant interview held, and should not be treated as a formal minute. It is therefore deliberately not exhaustive or chronological. Its purpose is to capture significant information/feedbacks and not intended for official review or approval.		
		Insert photo of consultation capturing as many participants as possible.		
Location				
Date:		13th October 2022		
E	Purpose of Consultation	Baseline information Collection	Information Disclosure	
		Assessing impact perception	Medium	Oral (in Hindi local language)
		Identification of Sensitive Spots	Disclosure Protocol Used	Project Non-Technical Summary
F	Key Questions:		Responses	
i. The Current Electricity Supply Situation				
Are there any challenges with the electricity supply? Power outages, low voltage, theft of electricity, transformer breakdown etc. If yes, does it affect you in any way?			Good Power supply	

Are there any challenges with the open electric distribution lines?	Yes
Do you think the underground cabling system will benefit you? If yes, what are the benefits?	Yes
Do you support this project?	Yes
2. Screening of Construction Phase Potential Impacts	
Would the construction work for underground cabling would lead to significant environment pollution in the adjacent area? If yes, name a few sensitive locations. (Pollution -air, soil, water, noise pollution, Tree cutting, soil erosion, water logging)	No
Will there be any permanent removal of structures (or part of structure) and immovable property viz, HP/Deep Tube Well, Well, Pond, Boundary Wall, etc.?	No
Will there be any temporary evacuation of encroachers/squatters, street vendors? If yes provide details of the location and number of affected entities. Will it affect livelihood and reduction in income of these people? If yes, for how many days? Will they benefit after the under-ground cabling work is completed? If yes, then how?	No
Will there be any impact on public property or premise viz, school, religious site, playground/ Park, old-age home, differently abled institutes etc whose access will be temporarily altered? If yes, provide the name of those locations.	No
Is there any historical monument close to (200m) from the line to be made underground? If yes, is it a protected monument?	No
Is there any narrow stretch of road, where traffic disruption is possible? Is there any alternative route to divert the traffic for a temporary duration?	No
Any potential damage to drinking water supply system including hand pumps, stand posts, tube well etc? If yes, how, and where? Is there any alternative solution?	Maybe

Any potential damage to road side storm water drainage system. (Details)	No
Any potential damage to underground sewerage and drains carrying waste water?	May be
Any potential damage to paved footpath used by a significant number of pedestrians? If yes, provide location and length of the stretch. Does any of these stretches used by pedestrians in night and if it is illuminated?	Around 10 street lights on UPCL Poles
Will the removal of the existing electricity poles and lines cause any concern to anyone? If yes, to whom and how that can be avoided or minimized?	Yes, some street lights, cable wires
Can you suggest how best to address these concerns/issues during construction phase?	
Number of Sensitive Spots Identified	1 (Mathwadi bog)

Consultation at Ward No-77, Dendradun Municipality

A	Name of EDD Zone (Rural/Urban) (Central/North/South/Rajpur/Mohangpur)	South
B	Municipality/Panchayat/Ward No	Ward No-77, Majra
C	List of Distribution Lines to be made Under Ground 33 KV Majra- Bhandarbag 11 KV Majra 11 KV Basj Mandi Sub-station Names and Location: Length of proposed line (In Kms) 11KV= 14KM 33KV= 14 KM Total=	
	Important Notice: This document provides a working summary of the main facts captured during the consultation/key-informant interview held, and should not be treated as a formal minute. It is therefore deliberately not exhaustive or chronological. Its purpose is to capture significant information/feedbacks and not intended for official review or approval.	Insert photo of consultation capturing as many participants as possible.
D	Location	Turner Road Majra Substation
	Date:	06/10/2022
E	Purpose of Consultation	Baseline Information Collection Assessing impact Identification of Sensitive Spots
	Information Disclosure	Medium Oral (in Hindi local language) Project Non-Technical Summary
F	Key Questions:	Responses
1. The Current Electricity Supply Situation		
	Are there any challenges with the electricity supply? Power outages, low voltages, theft of electricity, transformer breakdown etc. If yes, does it affect you in any way?	No Supply is good
	Are there any challenges with the open electric distribution lines?	Yes
	Do you think the underground cabling system will benefit you? If yes, what are the benefits?	Yes

	Do you support this project?	Yes
2. Screening of Construction Phase Potential Impacts		
	Would the construction work for underground cabling would lead to significant environment pollution in the adjacent area? If yes, name a few sensitive locations. (Pollution -air, soil, water, noise pollution, Tree cutting, soil erosion, water logging)	No
	Will there be any permanent removal of structures (or part of structure) and immovable property viz. HP/Deep Tube Well, Well, Pond, Boundary Wall, etc.?	Yes Hand pumps
	Will there be any temporary evacuation of encroachers/squatters, street vendors? If yes provide details of the location and number of affected entities. Will it affect livelihood and reduction in income of these people? If yes, for how many days? Will they benefit after the underground cabling work is completed? If yes, then how?	Yes Muskan chowk ISBT
	Will there be any impact on public property or premise viz. school, religious site, playground/ Park, old-age home, differently abled institutes etc. whose access will be temporarily altered? If yes, provide the name of those locations.	Yes around 12-15 Schools, Madras school,
	Is there any historical monument close to (200m) from the line to be made underground? If yes, is it a protected monument?	No
	Is there any narrow stretch of road, where traffic disruption is possible? Is there any alternative route to divert the traffic for a temporary duration?	Yes Hamid colony, Muskan Chowk
	Any potential damage to drinking water supply system including hand pumps, stand posts, tube well etc? If yes, how, and where? Is there any alternative solution?	May be, Jal Nigam should be consulted
	Any potential damage to road side storm water drainage system. (Details)	No
	Any potential damage to underground sewerage and drains carrying waste water?	May be Nagar Nigam Should be consulted

Any potential damage to paved footpath used by a significant number of pedestrians? If yes, provide location and length of the stretch. Does any of these stretches used by pedestrians in night and if it is illuminated?	Yes 2 KM
Will the removal of the existing electricity poles and lines cause any concern to anyone? If yes, to whom and how that can be avoided or minimized?	Yes
Can you suggest how best to address these concerns/issues during construction phase?	
Number of Sensitive Spots Identified	5

Consultation at Ward No-75, Dharadun Municipality

A	Name of EDD Zone (Rural/Urban) (Central/North/South/Raipur/Mohangpur)		South		
B	Municipality/Panchayat/Ward No		Ward No-75, Bharuwa Grant		
C	List of Distribution Lines to be made Under Ground				
	11 KV Post Office				
	11 KV Suresh Nagar				
	11 KV Clement Town				
	Sub-station Names and Location:				
	Length of proposed line (In Kms)		11kV= T KM	33kV= Total=	
	Important Notice: This document provides a working summary of the main facts captured during the consultation/key-informant interview held, and should not be treated as a formal minute. It is therefore deliberately not exhaustive or chronological. Its purpose is to capture significant information/feedbacks and not intended for official review or approval.				
D	Location:	Turner Road			
	Date:	08th October 2022			
E	Purpose of Consultation	Baseline Information Collection	Information Disclosure		
		Assessing impact perception	Medium	Oral (in Hindi/local language)	
		Identification of Sensitive Spots	Disclosure Protocol Used	Project Non-Technical Summary	
F	Key Questions:			Responses:	
	1. The Current Electricity Supply Situation				
	Are there any challenges with the electricity supply? Power outages, low voltage, theft of electricity, transformer breakdown etc. If yes, does it affect you in any way?		Good Power supply. Some power outage due to maintenance, storm, tree topping and chopping		
	Are there any challenges with the open electric distribution lines?		Yes		

Do you think the underground casing system will benefit you? If yes, what are the benefits?	Yes
Do you support this project?	No
2. Screening of Construction Phase Potential Impacts	
Would the construction work for underground casing would lead to significant environment pollution in the adjacent area? If yes, name a few sensitive locations. (Pollution -air, soil, water, noise pollution, Tree cutting, soil erosion, water logging)	Water pipeline may be damaged
Will there be any permanent removal of structures (or part of structure) and immovable property viz. HP/Deep Tube Well, Well, Pond, Boundary Wall, etc.?	No
Will there be any temporary evacuation of encroachers/squatters, street vendors? If yes provide details of the location and number of affected entities. Will it affect livelihood and reduction in income of these people? If yes, for how many days? Will they benefit after the underground casing work is completed? If yes, then how?	No
Will there be any impact on public property or premise viz. school, religious site, playground/ Park, old-age home, differently abled institutes etc whose access will be temporarily altered? If yes, provide the name of those locations.	No
Is there any historical monument close to (200m) from the lines to be made underground? If yes, is it a protected monument?	No
Is there any narrow stretch of road, where traffic disruption is possible? Is there any alternative route to divert the traffic for a temporary duration?	No
Any potential damage to drinking water supply system including hand pumps, stand posts, tube well etc? If yes, how, and where? Is there any alternative solution?	Yes, potential damage to drinking water supply system in the crossings
Any potential damage to road side storm water drainage system. (Details)	No

Any potential damage to underground sewerage and drains carrying waste water?	No
Any potential damage to paved footpath used by a significant number of pedestrians? If yes, provide location and length of the stretch. Does any of these stretches used by pedestrians in night and if it is illuminated?	No footpaths
Will the removal of the existing electricity poles and lines cause any concern to anyone? If yes, to whom and how that can be avoided or minimized?	Yes issue of street lights with few poles (Transport Nagar to Kanta Place)
Can you suggest how best to address these concern/issues during construction phase?	
Number of Sensitive Spots Identified	2 (Subhash Nagar Business Park, water pipe lines in crossings)

Consultation at Ward No-87, Dendradun Municipality

A	Name of EDD Zone (Rural/Urban) (Central/North/South/Rajpur/Mohangpur)	South
B	Municipality/Panchayat/Ward No	Ward No-87, Pithuwa
C	List of Distribution Lines to be made Under Ground 11 KV Shrima Bye pass 11 KV Transport Nagar Sub-station Names and Location: Length of proposed line (In Kms) 11KV= 11 KV 33KV= Total=	
	Important Notice: This document provides a working summary of the main facts captured during the consultation/key-informant interview held, and should not be treated as a formal minute. It is therefore deliberately not exhaustive or chronological. Its purpose is to capture significant information/feedbacks and not intended for official review or approval.	Insert photo of consultation capturing as many participants as possible.
D	Location	Turner Road
	Date:	06-10-2022
E	Purpose of Consultation	Baseline Information Collection Assessing impact Identification of Sensitive Spots
	Information Disclosure	Medium Oral (in Hindi local language) Disclosure Protocols Used Project Summary Non-Technical
F	Key Questions:	Responses
	1. The Current Electricity Supply Situation	
	Are there any challenges with the electricity supply? Power outages, low voltage, theft of electricity, transformer breakdown etc. If yes, does it affect you in any way?	Good Power supply, some power outage due to maintenance, storm, tree felling and chopping
	Are there any challenges with the open electric distribution lines?	Yes
	Do you think the underground cabling system will benefit you? If yes, what are the benefits?	Yes

	Do you support this project?	No
2. Screening of Construction Phase Potential Impacts		
	Would the construction work for underground cabling would lead to significant environment pollution in the adjacent area? If yes, name a few sensitive locations. (Pollution -air, soil, water, noise pollution, Tree cutting, soil erosion, water logging)	No
	Will there be any permanent removal of structures (or part of structure) and immovable property viz. HP(Deep Tube Well, Well, Pond, Boundary Wall, etc)?	No
	Will there be any temporary evacuation of encroachers/squatters, street vendors? If yes provide details of the location and number of affected entities. Will it affect livelihood and reduction in income of these people? If yes, for how many days? Will they benefit after the underground cabling work is completed? If yes, then how?	Near Transport Nagar, Muskan Chowk (ISBT)
	Will there be any impact on public property or premise viz. school, religious site, playground/ Park, old-age home, differently abled institutes etc whose access will be temporarily altered? If yes, provide the name of those locations.	No
	Is there any historical monument close to (200m) from the lines to be made underground? If yes, is it a protected monument?	No
	Is there any narrow stretch of road, where traffic disruption is possible? Is there any alternative route to divert the traffic for a temporary duration?	No
	Any potential damage to drinking water supply system including hand pumps, stand posts, tube well etc? If yes, how, and where?	May be not aware

Is there any alternative solution?	
Any potential damage to road side storm water drainage system. (Details)	No
Any potential damage to underground sewerage and drains carrying waste water?	No
Any potential damage to paved footpath used by a significant number of pedestrians? If yes, provide location and length of the stretch. Does any of these stretches used by pedestrians in night and if it is illuminated?	2 KM both side of Transport Nagar Road
Will the removal of the existing electricity poles and lines cause any concern to anyone? If yes, to whom and how that can be avoided or minimized?	Majority of the Street Lights are on the UPCL Poles. No budget for street lights.
Can you suggest how best to address these concern/issues during construction phase?	
Number of Sensitive Spots Identified	2 Transport Nagar and Muskan Chowk

Ward-wise list of the Sensitive Spots- Name-Photo-observation

Ward No	Name of Sensitive Spot	Photo of Sensitive Spot	Observations and Mitigation Measures
Ward No-1	1. Zoo entrance gate 2. Entrance gate of Max Hospital 3. Anya school and 4. Gyanendra Training Institute 5. Nagota Nala		
Ward No-6	1. Scholars School, 2. Pacific Mall, 3. Jakhn Market (Heavy Traffic) 4. Physically Handicap School		
Ward No-7,	1. NIEPD, 2. The Presidency Body Guard 3. Jakhn Market (Heavy Traffic)		
Ward No-8	1. Dilaram Mandir 2. Forest Office, 3. Mayur Auto (congestion, narrow road and school children commutes)		
Ward No-9	1. SKD Sharma street around 800 meters (Supply water) 2. Near HDFC Bank 3. Rajpura Road lane number 54 4. Kanya Gurukul Vidyalya (School) 5. Near Gyan ICCI Bank around 800 meters		
Ward No-11	1. Balmiki Mandir Chowk 2. Kaldia Road 3. Kal Mandi		
Ward No-22	1. Mahajavan School, 2. Playpen School, 3. Harprasad School, 4. Iddai Children School, 5. Silver Bell Schools, 6. Basai Vanda Ashram (Child) 7. Jain temple, 8. Tulsi Prasthan Temple 9. Narrow road between Police Chowk to Nala (130 meters)		
Ward No-23	1. Brooklyn School, 2. Bright Line school, 3. Doon International School, 4. Doon Blossom school		

Ward No	Name of Sensitive Spot	Photo of Sensitive Spot	Observations and Mitigation Measures
Ward No-33	1. Damage to drinking water supply on road and crossings		
Ward No-34	1. Shanti Vihar Pullya crossing (Water supply) 2. All crossings (Water Supply)		
Ward No-35	1. Water supply and drainage (All crossings)		
Ward No-36	1. Near Satapur Flyover and Nela (both narrow road and water supply) 2. Merry School 3. Temple 4. Wadia Institute 5. All crossings (Water Supply)		
Ward No-37	1. Mahatma Bagh Nahar Canal 500 meters 2. Issue one side Canal and other side Sewerage 3. Mini Tube well Ashwade Endave Lane 2. 4. Damage to drinking water supply system near Ashwade Endave		
Ward No-38	1. Narrow Road near Gurudwara (around 1 KM) 2. Houses just on the side of the Gurudwara road 3. Damage to drinking water supply system at Gurudwara road		
Ward No-44	1. Aadash Mandir (encroachment) near Sujidha Sika 2. Two sewerages cross near Bank of Baroda and		
Ward No-59	1. Hanuman Mandir (Temple) 2. Dhanpur Chowk Sabji Mandi (Traffic) 3. Sanatan Mandir 4. Agrawal Baker to Maubta Wala Road (Traffic)		
Ward No-67	1. Sanatan Temple 2. Heavy traffic in Nehru Nagar Sabji Mandi (Vegetable Market) 3. Residential colony (Nehru Nagar)		

Ward No	Name of Sensitive Spot	Photo of Sensitive Spot	Observations and Mitigation Measures
Ward No-71	1. Mathwar Bag		
Ward No-77	1. Hand pumps on the sides of roads 2. Muskan Chowk ISBT 3. 12/15 Schools, 4. Mazra school 5. Narrow road Harid colony and Muskan Chowk		
Ward No-79	1. Risk of Water pipeline damaged at all cross section and near roads. 2. Subhash Nagar Business Park		
Ward No-87	1. Temporary encroachers near Transport Nagar at day time. 2. Temporary encroachers near Muskan Chowk (ISBT) at day time 3. Damage to drinking water supply system		

Multi-Stakeholder Consultation at City Level on 29th Mar 2023

After the round of consultations with elected representatives and identification of sensitive spots in each of the municipal wards within Dehradun Municipality, a city level multi-stakeholder consultation meeting was held on 29th Mar 2023.

The stakeholders invited to this consultation meeting included three broad groups, viz., (i) Government departments, (ii) Elected representatives of the affected Wards of Dehradun Municipality, and (iii) civil society or citizen groups.

The participants were sent formal invitation letters (sample letter is provided below) to attend this consultation meeting in advance. The consultation meeting was attended by 40 participants (attendance sheet provided below) which included elected representatives in Dehradun Municipality, BSNL (telecom department), and forest department.

UPCL provided information about the scope of the project work proposed by them for ADB finance under different EDO zones and informed the participants about the intended project benefits for Dehradun residents.

This was followed by presentation from the ADB technical assistant team assisting UPCL and PTOUL in preparing the IEE and RP documents that meets requirements of the national regulations as well as ADB safeguard requirements. The experts presented the key project benefits as well as adverse environment and social impacts. The participants were informed about how the planning process is avoiding some of the environmental and social impacts. The impacts which can not be avoided are assessed in the Initial Environment Examination (IEE) Report prepared. The IEE has proposed to minimize and mitigate unavoidable environment and social impacts through a Environment Management Plan (EMP) and resettlement plan (RP).

The presentation identified a range of key environment and social impacts and the adopted mitigation measures on which feedback from the participants was sought during the Q&A session. The key environmental issues included, (i) reducing the impacts from construction noise, (ii) reducing impacts from fugitive dust during construction works, (iii) protecting the Rajaji National Park, (iv) protection of road side trees, and (v) timely reinstatement of damaged pavements and public spaces. Similarly, the feed back on following social issues was sought from the participants: (i) how to improve advance notice and public awareness prior to and during construction, (ii) how to improve the grievance mechanism, (iii) how to improve coordination mechanism between EPC contractor, UPCL and Civil Authorities, (iv) How to improve traffic management, (v) how to avoid unintentional damage to civic properties including utilities, and (vi) how to maintain the aesthetic and cleanliness of the city.

In the Q&A session, participants asked following questions and UPCL responded to these questions.

Q.N.	Question/Query	UPCL Response
1	For how many years this underground cabling project will benefit the people of Dehradun?	This project is planned keeping population projections for 20 years. The construction will take 2 years to complete.
2	As a ward member we never receive any information on when the construction will get start and when it will complete in the specific area.	UPCL will publish the construction schedule (start and end date) of each cable line with ward number atleast before 10 days of construction.

Q.N.	Question/Query	UPCL Response
	Contractor starts digging without informing local people and ward members.	UPCL will also inform Ward members/Nagar Nigam on the construction schedule. UPCL will create a WhatsApp Group of Ward member. Before construction community leaders/ ward members will be informed through WhatsApp messages
3	Sani Mandi in Ward number 12 is a crowded and narrow area. How UPCL will do construction in such kind of locations.	Construction in commercial area, crowded area, religious places and public area will be done at night and after prior consultation with stakeholder groups.
4	Majority of the drinking water supply is underground on the road side, where UPCL is proposing the construction of underground cable. There is a high chance/risk of water pipe line damage due to construction work.	UPCL in coordination and consultation with Nagar Nigam, Jal Nigam. UPCL will prepare a construction plan for each underground cable line after GPR scanning.
5	What is the process of underground trenching? In Dohradun lot of trenches are there. Why don't government is constructing a common permanent underground platform?	UPCL is preparing separate trench for underground cabling and it will allow other interested operators to use them where feasible.
6	In ward number 37, trenching may be tough due to narrow area (Flyover and canal)	Construction will be done using underground trenching using HDD machine
7	Normally we found that digging and trenching done by other department and repair, filling and construction of road / pathway done by other departments. It creates lot of problem to people as usually repair work got delayed. Give entire construction and repair work to the same contractor, so that work may be finished within 24 hrs of construction.	Chief Minister has made a high-level committee to coordinate with other relevant departments. UPCL will pay for the entire repair amount to the relevant department before start of the work. We will coordinate with the relevant line department to complete the repair work within stipulated time.
8	ADB gave the Sewerage line construction directly to the contractor.	ADB is providing loan to UPCL, and UPCL is engaging the contractor.
9	In Sharanpur road, ISBT area when UPCL is starting the construction work	Yet we can't tell the exact time of construction, it will take some time. Tentatively we are planning to start construction work after rainy season around august/September 2023
10	Whether electricity will disrupt during underground cabling.	No disruption of electricity during construction
11	What is the construction completion time in a specific area?	At a time, construction work (trenching and cabling) will be done for 150-250 meters, so same area will be disturbed for around 24/36 hours.
12	What type of trenching has been planned for underground cabling by UPCL?	It depends on the GPR scanning and survey. If no rocks, barriers we go for underground

S.N.	Question/Query	UPCL Response
13	Majority of the street lights on the single road where dividers are not available are on the UPCL pole. How you are planning for street lights in the roads without dividers?	branching, if it is risky or with construction barriers we have to go for open trenching. Street lights does not come under UPCL. Nagar Nigam may be consulted. We can keep the poles for some time say six months, respective department/agency may be requested for street lights arrangement.
14	33 KV line pole is in Bindal River and it becomes dangerous during rainy season. UPCL is requested to uninstall that pole and provide safe alternative.	UPCL will look this matter seriously.
15	What is your monitoring and quality assurance mechanism for construction and repair works?	Construction quality assurance has been planned. We are also considering to make video before construct, during construction and after construction, to assure the construction and repair work as per work schedule. Creation of Ward members WhatsApp group to collect information (text, photographs and videos). Setting up a Helpline Number (1912) and constitute a Grievance Committee.

The participants though appreciated UPCL's efforts to share information with them and seek their feedback, but they were apprehensive if the interdepartmental coordination mechanism, grievance system, and continuous stakeholder consultations will really work during the construction phase. The key suggestions for improvement in these areas are summarized below.

S.N.	Area of Improvement	Suggestions for Improvement
1	Inter-departmental coordination mechanism	In addition to the high level (Chief Secretary) coordination committee, a local (Ward level) coordination mechanism should be constituted. The Ward members should be part of these local committees to monitor compliance by EPC contractor. Where WhatsApp groups are formed with EPC contractor, line departments and UPCL, Ward Members too should be part of these groups.
2	Grievance Mechanism	The grievance mechanism to be simple and responsive. The complainants should enjoy protection from any retaliatory action from government departments.
3	Reinstatement of damaged pavements and civic infrastructure	The reinstatement of damaged pavements and civic infrastructure is delayed as the contract for this work is issued by Dehradun Municipality (Nagar Nigam) and there is no coordination between EPC contractor of UPCL and civic contractor of the Nagar Nigam. It may work better if the same EPC contractor damaging the pavement is also made responsible for reinstating the pavement condition to pre-project condition.
4	Continuous Stakeholder Consultation	These pre-project consultations should not be one-off events. The UPCL and EPC contractor to continue the

		stakeholder consultation and undertake public awareness initiatives throughout the construction period.
--	--	---

Invitation Letter for Multi-stakeholder consultation

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100	101	102	103	104	105	106	107	108	109	110	111	112	113	114	115	116	117	118	119	120	121	122	123	124	125	126	127	128	129	130	131	132	133	134	135	136	137	138	139	140	141	142	143	144	145	146	147	148	149	150	151	152	153	154	155	156	157	158	159	160	161	162	163	164	165	166	167	168	169	170	171	172	173	174	175	176	177	178	179	180	181	182	183	184	185	186	187	188	189	190	191	192	193	194	195	196	197	198	199	200	201	202	203	204	205	206	207	208	209	210	211	212	213	214	215	216	217	218	219	220	221	222	223	224	225	226	227	228	229	230	231	232	233	234	235	236	237	238	239	240	241	242	243	244	245	246	247	248	249	250	251	252	253	254	255	256	257	258	259	260	261	262	263	264	265	266	267	268	269	270	271	272	273	274	275	276	277	278	279	280	281	282	283	284	285	286	287	288	289	290	291	292	293	294	295	296	297	298	299	300	301	302	303	304	305	306	307	308	309	310	311	312	313	314	315	316	317	318	319	320	321	322	323	324	325	326	327	328	329	330	331	332	333	334	335	336	337	338	339	340	341	342	343	344	345	346	347	348	349	350	351	352	353	354	355	356	357	358	359	360	361	362	363	364	365	366	367	368	369	370	371	372	373	374	375	376	377	378	379	380	381	382	383	384	385	386	387	388	389	390	391	392	393	394	395	396	397	398	399	400	401	402	403	404	405	406	407	408	409	410	411	412	413	414	415	416	417	418	419	420	421	422	423	424	425	426	427	428	429	430	431	432	433	434	435	436	437	438	439	440	441	442	443	444	445	446	447	448	449	450	451	452	453	454	455	456	457	458	459	460	461	462	463	464	465	466	467	468	469	470	471	472	473	474	475	476	477	478	479	480	481	482	483	484	485	486	487	488	489	490	491	492	493	494	495	496	497	498	499	500	501	502	503	504	505	506	507	508	509	510	511	512	513	514	515	516	517	518	519	520	521	522	523	524	525	526	527	528	529	530	531	532	533	534	535	536	537	538	539	540	541	542	543	544	545	546	547	548	549	550	551	552	553	554	555	556	557	558	559	560	561	562	563	564	565	566	567	568	569	570	571	572	573	574	575	576	577	578	579	580	581	582	583	584	585	586	587	588	589	590	591	592	593	594	595	596	597	598	599	600	601	602	603	604	605	606	607	608	609	610	611	612	613	614	615	616	617	618	619	620	621	622	623	624	625	626	627	628	629	630	631	632	633	634	635	636	637	638	639	640	641	642	643	644	645	646	647	648	649	650	651	652	653	654	655	656	657	658	659	660	661	662	663	664	665	666	667	668	669	670	671	672	673	674	675	676	677	678	679	680	681	682	683	684	685	686	687	688	689	690	691	692	693	694	695	696	697	698	699	700	701	702	703	704	705	706	707	708	709	710	711	712	713	714	715	716	717	718	719	720	721	722	723	724	725	726	727	728	729	730	731	732	733	734	735	736	737	738	739	740	741	742	743	744	745	746	747	748	749	750	751	752	753	754	755	756	757	758	759	760	761	762	763	764	765	766	767	768	769	770	771	772	773	774	775	776	777	778	779	780	781	782	783	784	785	786	787	788	789	790	791	792	793	794	795	796	797	798	799	800	801	802	803	804	805	806	807	808	809	810	811	812	813	814	815	816	817	818	819	820	821	822	823	824	825	826	827	828	829	830	831	832	833	834	835	836	837	838	839	840	841	842	843	844	845	846	847	848	849	850	851	852	853	854	855	856	857	858	859	860	861	862	863	864	865	866	867	868	869	870	871	872	873	874	875	876	877	878	879	880	881	882	883	884	885	886	887	888	889	890	891	892	893	894	895	896	897	898	899	900	901	902	903	904	905	906	907	908	909	910	911	912	913	914	915	916	917	918	919	920	921	922	923	924	925	926	927	928	929	930	931	932	933	934	935	936	937	938	939	940	941	942	943	944	945	946	947	948	949	950	951	952	953	954	955	956	957	958	959	960	961	962	963	964	965	966	967	968	969	970	971	972	973	974	975	976	977	978	979	980	981	982	983	984	985	986	987	988	989	990	991	992	993	994	995	996	997	998	999	1000
---	---	---	---	---	---	---	---	---	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	------

Venue	Date	Contact Person
West Suffolk Local G.M.S. Hall, Dedham	24 March 2023 (Wednesday)	El. M.S., Tamsy Superintending Engineer (A200) Contact no: 8276627630
Agenda of the Meeting		
From	To	Activity
11:00 AM	11:20 AM	Arrival and Registration
11:20 AM	11:30 AM	Welcome Address by: Presentations on Proposed Project Components by U.P.C.L.
11:30 AM	12:30 PM	Lunch Break
12:30 PM	03:00 PM	Presentation on Environment Impact and Mitigation Measures, Presentation on Social Impact and Mitigation Measures by A200
03:00 PM	03:30 PM	Q&A and Feedback Session by A200





Presentation by UPCL



Presentation by TA Consultants for IEE and RP



Q&A Session



Q&A Session





Q&A Session

-			-		
Serial	Name	Description	Hand Ref	Location	Signature
1	Subsidiary	Subsidiary	1	Subsidiary	1
2	Subsidiary	Subsidiary	2	Subsidiary	2
3	Subsidiary	Subsidiary	3	Subsidiary	3
4	Subsidiary	Subsidiary	4	Subsidiary	4
5	Subsidiary	Subsidiary	5	Subsidiary	5
6	Subsidiary	Subsidiary	6	Subsidiary	6
7	Subsidiary	Subsidiary	7	Subsidiary	7
8	Subsidiary	Subsidiary	8	Subsidiary	8
9	Subsidiary	Subsidiary	9	Subsidiary	9
10	Subsidiary	Subsidiary	10	Subsidiary	10
11	Subsidiary	Subsidiary	11	Subsidiary	11
12	Subsidiary	Subsidiary	12	Subsidiary	12
13	Subsidiary	Subsidiary	13	Subsidiary	13
14	Subsidiary	Subsidiary	14	Subsidiary	14
15	Subsidiary	Subsidiary	15	Subsidiary	15
16	Subsidiary	Subsidiary	16	Subsidiary	16
17	Subsidiary	Subsidiary	17	Subsidiary	17
18	Subsidiary	Subsidiary	18	Subsidiary	18
19	Subsidiary	Subsidiary	19	Subsidiary	19
20	Subsidiary	Subsidiary	20	Subsidiary	20
21	Subsidiary	Subsidiary	21	Subsidiary	21
22	Subsidiary	Subsidiary	22	Subsidiary	22
23	Subsidiary	Subsidiary	23	Subsidiary	23
24	Subsidiary	Subsidiary	24	Subsidiary	24
25	Subsidiary	Subsidiary	25	Subsidiary	25
26	Subsidiary	Subsidiary	26	Subsidiary	26
27	Subsidiary	Subsidiary	27	Subsidiary	27
28	Subsidiary	Subsidiary	28	Subsidiary	28
29	Subsidiary	Subsidiary	29	Subsidiary	29
30	Subsidiary	Subsidiary	30	Subsidiary	30
31	Subsidiary	Subsidiary	31	Subsidiary	31
32	Subsidiary	Subsidiary	32	Subsidiary	32
33	Subsidiary	Subsidiary	33	Subsidiary	33
34	Subsidiary	Subsidiary	34	Subsidiary	34
35	Subsidiary	Subsidiary	35	Subsidiary	35
36	Subsidiary	Subsidiary	36	Subsidiary	36
37	Subsidiary	Subsidiary	37	Subsidiary	37
38	Subsidiary	Subsidiary	38	Subsidiary	38
39	Subsidiary	Subsidiary	39	Subsidiary	39
40	Subsidiary	Subsidiary	40	Subsidiary	40
41	Subsidiary	Subsidiary	41	Subsidiary	41
42	Subsidiary	Subsidiary	42	Subsidiary	42
43	Subsidiary	Subsidiary	43	Subsidiary	43
44	Subsidiary	Subsidiary	44	Subsidiary	44
45	Subsidiary	Subsidiary	45	Subsidiary	45
46	Subsidiary	Subsidiary	46	Subsidiary	46
47	Subsidiary	Subsidiary	47	Subsidiary	47
48	Subsidiary	Subsidiary	48	Subsidiary	48
49	Subsidiary	Subsidiary	49	Subsidiary	49
50	Subsidiary	Subsidiary	50	Subsidiary	50

Information Shared during Consultation Meeting



UTTARAKHAND POWER CO

Undergrounding of HT & LT EL Dehradun CH

under

Uttarakhand Transmission System Improvement Programme (UTSIP)

**Summary of
Undergrounding of 33 KV, 11 KV &
Arterial Roads of Dehradun CH**

Type of Work	Lot-1 (Central & North)	Lot-2 (South)
33 KV New Line	57	21
33 KV Ring Main Line (RML) (No.)	5	4
11 KV Line (km.)	71	106
11 KV Ring Main Line (RML) (No.)	100	117
LT Line (km.)	63	62
New Compact Sub- station (CIS) (No.)	40	20

**LINE CHART FOR PROPOSED HT/LT LINES AND
LMS**



Details of Proposed UPCL work

Major Roads Covered for undergrounding of HT

1. Dehradun Chowk to Nanakshi Chowk
2. Survey Chowk to Shastri Chowk Crossing to DSNL
3. Dendral Chowk to Police Chowk and Deen Durg
4. Rishabh Nagar Chowk to Karamb Chowk
5. Rishabh Chowk to Forest Chowk to Rishabh Bridge
6. Rishabh Chowk to Ghanshyam Chowk to Rishabh Bridge

Important Installation Proposed in

1. Coroner Hospital
2. Deen Hospital
3. Rishabh Chowk (Proposed A to be located again to be)

Benefits of Project

- Reliability:
- Safety:
- More Area for Footpaths:
- Improvement in commercial activities (benefit to own)
- Beautification:
- More Greenery:
- To provide 24x7 quality power to all consumers.
- To improve LTRF, ATRF, MTRF which is turned on
- Reduction of AT&C losses, improved supply hours to
- To cater the future load growth 10% per annum app
- To maintain the Feeds.

Thank You

CONSULTATION ON S ENVIRONMENTAL IMP MITIGATION

436 TRUSTEES ENGINEERING CONSULTING TO COORDINATE
SECTION PROJECTS

DISTRIBUTION COMPONE

PROJECT BENEFITS

Aesthetics

- Positive impacts on the city, important for both the community and tourism



Traffic and Pedestrian Safety

- Create optimum on sidewalks (and partially sidewalks) currently occupied by poles and transformers



PROJECT BENEFITS

Power Supply

- Provides safe, secure infrastructure that cannot be accessed by the public
- Limits potential for illegal connections



Efficient



CONSULTATION PROCESS AND STEPS

Step 1: Input Number of Works and Road Planners

- Identification of Roadworks and Road Planners
- Integration of Roadworks and Road Planners
- Road Section Planning and Road Plan

Step 2: Project Level Consultation

- Working Project Meetings Road and Road Section
- Group Consultation for Identification of Roadworks
- Joint Integration of Roadworks and Road Planners

WHAT THE SCREENING DISCUSSION AT WAR



EFFORTS TO AVOID SOCIAL IMPACTS IN C

Management and Cultural Sites

- Protected Structures: Avoid 300m regulated area

Disruption to Roadworks and Public

- US calls alignment to be within road/roadwork reserves as far as is practical
- Lane closures using the road side

EFFORTS TO AVOID ENVIRONMENTAL IMPACT

Hydrology

- All UG works crossing rivers must be in conduit attached to bridge or trestle beneath the river using HDD.
- Identify all water supply systems and water pumps, public and private.

Community Safety

- Design will ensure no illegal access to CSS, RMU or to UG connection chambers.

PRE-CONSTRUCTION PHASE : ADVANCE MEASURES ABOUT GRIEVANCE MECHANISM

Address Grievance and Complaints

- UGCL will support all grievances to be dealt with communities in the vicinity of work, will also set HODs for categories of grievance to notify them about the commencement of work.
- Local communities and facilities to be consulted when selecting sites for temporary construction facilities and work sites prior to initiation of final location of each work station.

Community Help

- Setting up a grievance committee.
- Community Helpline (hotline) to provide information and support.
- Helpline for construction-related issues to get the Help.

PRE-CONSTRUCTION PHASE : AWARENESS SAFETY

- Awareness Campaign on Electrical Safety to avoid Construction and Demolition
 - Partnership with Municipality (Bhuj, Rajkot)
 - Partnership with Media
 - Local communities and schools.
- UGCL Collaboration with various stakeholders
 - Awareness on Community Health relating HAV communicable diseases
 - Code of conduct for construction workers

PRE-CONSTRUCTION PHASE : LABOUR AT CAMPS

General living conditions, Safety and Security

Room facilities, Sanitation, kitchen, sports

Dining room

Security and police facilities for night shift

Canteen and canteen facilities

Medical (first aid and minor facilities)

Facilities for religious, social and cultural activities

PRE-CONSTRUCTION PHASE : MANAGING THE PROJECT

- Constructive prepare Construction Environmental and Social Impact Plan
- This Plan sets out how the contractor will manage the social impacts of the Project
- CEMP must be prepared and approved before any works
- Includes a range of sub-plans

- Pollution Management Plan
- Traffic Management Plan
- Noise Management Plan
- Working Plan
- CEMP Plan
- Construction Plan
- Traffic Plan
- Construction Plan
- Construction Plan

CONSTRUCTION PHASE : ENVIRONMENTAL IMPACTS

How to manage

- Long term impacts on the environment
- Short term impacts on the environment
- Cumulative impacts on the environment
- Mitigation measures to avoid, minimize or compensate for impacts
- Monitoring and reporting on impacts
- Management plans to avoid, minimize or compensate for impacts
- Management plans to avoid, minimize or compensate for impacts
- Management plans to avoid, minimize or compensate for impacts

CONSTRUCTION PHASE : ENVIRONMENTAL IMPACTS

Factors
and
Impacts

- Noise and vibration from machinery and vehicles
- Dust and air pollution from machinery and vehicles
- Water and soil pollution from machinery and vehicles
- Construction activities and the potential for noise and vibration
- Construction activities and the potential for dust and air pollution
- Construction activities and the potential for water and soil pollution
- Construction activities and the potential for cumulative impacts
- Construction activities and the potential for long-term impacts

CONSTRUCTION PHASE : DAMAGES AND IMPACTS

Factors that minimize construction impacts



CONSTRUCTION PHASE: CONSULTATION

Continuity in
Stakeholder
Engagement

- The continuation of this stakeholder engagement by Contractors for all Officers and monitor the project's Commercial Viability.

CONSTRUCTION PHASE : TRAFFIC MANAGEMENT

Traffic
Management
&
Community
Safety

- Traffic management will be done in the direction flow and traffic police will be deployed.
- The project will be done in the direction flow and traffic police will be deployed.
- The project will be done in the direction flow and traffic police will be deployed.
- The project will be done in the direction flow and traffic police will be deployed.
- The project will be done in the direction flow and traffic police will be deployed.
- The project will be done in the direction flow and traffic police will be deployed.
- The project will be done in the direction flow and traffic police will be deployed.
- The project will be done in the direction flow and traffic police will be deployed.

CONSTRUCTION PHASE : TRAFFIC MANAGEMENT

Traffic
Management
&
Community
Safety

- Traffic management will be done in the direction flow and traffic police will be deployed.
- The project will be done in the direction flow and traffic police will be deployed.
- The project will be done in the direction flow and traffic police will be deployed.
- The project will be done in the direction flow and traffic police will be deployed.
- The project will be done in the direction flow and traffic police will be deployed.
- The project will be done in the direction flow and traffic police will be deployed.
- The project will be done in the direction flow and traffic police will be deployed.
- The project will be done in the direction flow and traffic police will be deployed.

YOUR SUGGESTIONS TO IMPROVE



Reduce impacts from noise



Reduce impacts from dust



Protection of Heavy Air



Protection of Trees



Reinstatement of Pavements and Public Spaces



YOUR SUGGESTIONS TO IMPROVE



How to improve pedestrian safety and public awareness and road safety behaviour?



How to improve the rescue of victims?



How to improve identification of vulnerable road users (VRUs) and (low) traffic speed?



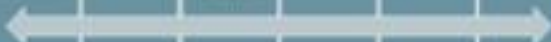
How to improve traffic management?



How to avoid undesirable damage to road properties (including bridges)?



How to improve the maintenance and improvement of the road?



Appendix 8: Records of Gender Consultations

#	Date and Location	Participants	Male	Female	Total	Issues Discussed
132 kV Mangore Asahi line, Mangore Nara and 220 kV Mangore Nara lines						
1.	19.04.23 Office of Gram Pradhan	Gram Pradhan, locals of village Gadarjuda	8	10	18	Consultation was held with the Gram Pradhan and locals of village Gadarjuda. The locals were informed of the project scope and objectives. It was informed that a new 132/33 kV Substation of PTCUL is coming up in their area. A brief on Safeguards policy and Compensation mechanism was also given to the villagers. Discussion was held on the potential risks from Substation, the associated Power line and mitigation measures. Locals were generally not aware of risks from SS and lines. Few locals opined that coming up of Substation in their area discourages industries from establishing nearby. One local also said that there is sometimes intense humming from the lines more so in the rainy season. Others informed that they haven't encountered any problems due to the existing Power lines passing through their areas. The Gram Pradhan informed that the village population comprises Jats, SC, OBC. The average landholding is less. Most of the females of the village are employed in pharma industries in jobs like packaging, etc. Main industries are pharmaceutical industries-Sun Pharma, Talekar Pharma, JS Pharma, Asahi Glass, Phinolex etc. The main occupation of the villagers is agriculture but now

#	Date and Location	Participants	Male	Female	Total	Issues Discussed
						people are preferring working in in nearby factories. Also, farmers have started plantation of poplar and Eucalyptus on their fields rather than crops since it yields higher benefits. Villagers were inquired regarding the electricity situation in their villages and the electrification status. Women informed that village is 100% electrified. There are power cuts of 2-3hours daily which can happen anytime. Generally, the power supply is restored soon. The locals were also asked if they practice dairy farming and where do they dispose the dead animals. The women informed that earlier they had a site on the outskirts of village but now habitations have come up in the area and due to resistance from the residents they cannot dump the carcass there.
2.	18.04.23 Gadarjute Mangalore (near SS site)	Local Women	00	05	05	A one-to-one consultation was held with the women at village. They were asked about the situation of electricity in their area. They informed that power supply is generally fine except for disturbances during bad weather. Most of the women work in agriculture and related activities. They requested some capacity building and livelihood opportunities for them so that they can meet their daily needs.
3.	18.04.23 Gadarjute Mangalore (near SS site)	Local Women	00	03	03	A one to one consultation was held with the women of village Gadarjute. They were informed about the project scope and objectives. The women were

#	Date and Location	Participants	Male	Female	Total	Issues Discussed
						engaged in cutting of wheat crop in the field next to the proposed Mangione SS site. They were informed about the project scope and objectives, ADB Safeguards policy and compensation in case of standing crop being impacted, etc. They were also asked about the potential risks from Substation and associated OHLs. Women informed that they have been working in these fields from quite long and have not seen any issues due to the lines. On asking about witnessing any bird collisions on these lines, they replied no such issue has been noticed by them.
4.	19.04.23 Office of Gram Pradhan, Jhabiran	Locals	08	10	18	Consultation was held with the Gram Pradhan and locals of village Jhabiran wherein they were informed of the project scope and objectives. It was informed that the proposed 200 KV Roorkee Nara line and Mangione Asahi line shall pass through some agricultural fields. Exact alignment shall be finalized at later stage. A brief on Safeguards policy and Compensation mechanism was also discussed. Locals wanted to know the compensation policy for land given for towers and line. Discussion was held on the potential risks from the Power line and mitigation measures. Locals were not much aware of risks from Power lines and agreed that it is a developmental work and will trigger development in the region. They were also expecting their power supply situation will improve

#	Date and Location	Participants	Male	Female	Total	Issues Discussed
						once the project is established. They haven't experienced any problems due to the existing Power lines passing through their areas. Women were inquired regarding the electricity situation in their villages and the electrification status. Women informed that there are power cuts of 4-5 hours daily which can happen anytime, more so in the sowing and harvesting season when power is required for pumps and machines. Power cuts also happen during bad weather situations which takes time to resume. Power cuts affects them especially during summer season and children's exam times. They have to wait for power to resume to continue their household jobs depending on electricity. On being asked about the common electrical appliances they use, it was informed that refrigerators, TV, mixer grinder in the kitchen, air coolers, fans and lights are used. They used both fuelwood and gas in kitchen. On being asked about the presence of raptors and other birds. They opined that raptors are not usually seen in this area. Common birds like thrush, sparrow, crow, robin is noticed. They informed that there is no dumping ground nearby. Deep burial of the cows and buffaloes in own fields are practiced. Other animals are poiced by the slaughterhouses who charge \$00-1000 rs for an

#	Date and Location	Participants	Male	Female	Total	Issues Discussed
						animal. The further disposal was not known to the people.
5.	18.04.23 Office of Gram Pradhan Gopalpur	Locals	02	05	07	Consultation was held with the Gram Pradhan and locals of village Gopalpur wherein they were informed of the project scope and objectives. It was informed that the proposed 220 kv Mangalore Nara line shall pass through some agricultural fields. The locals were already aware that the proposed Mangalore Nara line and wanted to know the exact alignment. PTCLU officials informed that exact alignment will be finalized at later stage. A brief on Safeguards policy and Compensation mechanism was also presented to the locals. The locals informed that the main source of livelihood in this region is agriculture while some people are engaged in neighboring brick kiln and jaggery making units also. Rice, wheat, sugarcane are the major crops however, now people are more resorting to growing trees of Eucalyptus and Poplar at their fields rather than crops since trees fetch well and are more weather and pest resilient than crops. Trees also need less efforts. On being asked about the power situation, it was informed that there is no fixed time of power cut and power is usually for 20 hours a day. The locals wanted continuity in power supply and a fixed time for mending if at all is necessary. Suggestions were also sought from the women. They were supportive of the project and wanted that the lines

#	Date and Location	Participants	Male	Female	Total	Issues Discussed
						should not pass through houses or structures. It was assured by PTCUL officials that due care will be taken during final alignment to avoid any impacts on the community and structures, and compensation for the crop and land loss is done as per prevalent policies and rules.

132 kV Kashiur – Mahuakheraganj, 132 kV Mahuakheraganj-Jaspur lines

S No	Date and Location	Participants	Male	Female	Total	Issues Discussed
1.	Gram Pradhan office Harniyawala and Community hall	Locals of Harniyawala	03	22	25	Consultation was held with the locals of village Harniyawala wherein they were informed of the project scope and objectives. It was informed that a new 132/33 kV Substation of PTCUL is coming in their area. A brief on Safeguards policy and Compensation mechanism was also given to the villagers. Discussion was held on the potential risks from Substation, the Power line and mitigation measures. Locals were not aware of risks from SS and lines and informed that they haven't encountered any problems due to the existing Power lines passing through their areas. The Gram Pradhan informed that the village population is 1700 of which 450 is general while rest is constituted by OBC, SC and Muslims. Almost 70% of the population is landless and the average landholding is 10 acres. There is huge development in the region due to many industries located here. Main

132 kV Kachipur – Mahuakheraganj, 132 kV Mahuakheraganj-Jaspur lines

S.No	Date and Location	Participants	Male	Female	Total	Issues Discussed
						industries are Surya Lights, Naini Tissues, Sidharth paper mill, Pashupati Laminates, Shampoo and V guard cables. The main occupation of the villagers is agriculture but few people are also employed in nearby factories. Also, people from neighboring states come here to work in factories and stay in the village houses on rent. This has increased the income opportunities in the village. The industries include Villagers were inquired regarding the electricity situation in their villages and the electrification status. Women informed that village is 100% electrified. There are power cuts of 2-3hours daily which can happen anytime and it affects them especially during summer season and cropping season. It impacts their daily works since they have to wait for power to resume to continue their household jobs depending on electricity.
	Gram Pradhan's Office Haldia Sahu	Locals	09	08	17	Consultation was held with the Gram Pradhan and locals of village Haldia Sahu wherein they were informed of the project scope and objectives. It was informed that the proposed Mahuakheraganj-Jaspur line shall pass through the agricultural land of the villagers and around 10 towers are proposed. Exact alignment shall be finalized at later stage. A brief on Safeguards policy and Compensation mechanism was

132 kV Kachipur – Mahalaksherganj, 132 kV Mahalaksherganj-Jasour lines

S No	Date Location	and Participants	Male	Female	Total	Issues Discussed
						also given to the villagers. Discussion was held on the potential risks from the Power line and mitigation measures. Locals were not much aware of risks from Power lines and informed that they haven't encountered any problems due to the existing Power lines passing through their areas. Women were inquired regarding the electricity situation in their villages and the electrification status. Women informed that there are power cuts of 4-5 hours daily which can happen anytime, more so in the sowing and harvesting season when power is required for pumps and machines. Power cuts also happen during bad weather situations which takes time to resume. Power cuts affects them especially during summer season and childrens exam times. They have to wait for power to resume to continue their household jobs depending on electricity. On being asked about the common electrical appliances they use, it was informed that refrigerators, TV, mixer grinder in the kitchen, air coolers, fans and lights are used. They used both fuelwood and gas in kitchen. One of the locals asked if they are going to get any direct benefits from the project like jobs. PTCUL officials informed that power is the basic necessity for development of a region. Other than that, they will

132 kV Kachipur – Mahualheraganj, 132 kV Mahualheraganj-Jasour lines

S.No	Date Location	and Participants	Male	Female	Total	Issues Discussed
						have less power cuts and good voltage. On being asked about the presence of raptors and other birds. They opined that raptors are not seen in this area. Common birds near paddy fields are noticed. They informed that there is no dumping ground nearby. Sometimes they do deep burial of the cows and buffaloes so that they are not dug up by other animals.
	Village	06	07	07		One to one consultation was held with women at Haldus Sahu village. They were asked about the power supply condition in their village and any impacts they have witnessed due to the Power lines. The women informed that power supply is erratic especially since multi cropping system is being practiced here. For paddy cultivated there is huge water demand, that is met from borewells run on electricity. They requested that authorities should look into this type of cropping system as it is too much water intensive and can deplete the water table. They were also asked about the trees grown on agricultural plots. It was informed that poplar is grown both on periphery and as a crop itself since it needs less maintenance and there is huge demand of poplar and timber trees in the region due to large number of paper and board industries. On asked about carcass dumping one woman informed that bury

132 kV Kachipur – Mahualheraganj, 132 kV Mahualheraganj-Jasour lines

S No	Date Location	and Participants	Male	Female	Total	Issues Discussed
						their cows in deep pits in their own fields due to religious beliefs. Earlier the people used to dump carcasses in some vacant plots or the forest but those practices have stopped now. The women were informed of the project scope and objectives. They had not much concern with the project but wanted their power supply to improve.
	21.04.2022 Harizawa	Villagers, Gram Pradhan and PTOUL officials	02	23	25	Consultation was held with the locals of village Harizawa wherein they were informed of the project scope and objectives. It was informed that a new 132/33 kV Substation of PTOUL is coming in their area. A brief on Safeguards policy and Compensation mechanism was also given to the villagers. Discussion was held on the potential risks from Substation, the Power line and mitigation measures. Locals were not aware of risks from SS and lines and informed that they haven't encountered any problems due to the existing Power lines passing through their areas. Villagers were inquired regarding the electricity situation in their villages and the electrification status. Women informed that there are power cuts of 4-5 hours daily which can happen anytime and it affects them especially during summer season and children's study time. It also impacts since they

132 kV Kashipur – Mahuakheragani, 132 kV Mahuakheragani-Jaspur lines

S No	Date Location	and Participants	Male	Female	Total	Issues Discussed
						have to wait for power to resume to continue their household jobs depending on electricity. The locals asked if they are going to get any jobs and livelihood opportunities during construction of the SS. PTCUL official informed that local labor is preferred for unskilled works demand and skilled if available in the area. But since it is an industrial area, the establishment of SS will promote development and coming up of industries which will promote local livelihoods.
	22.04.23 Barkheta Pandey	Villagers, Gram Pradhan and PTCUL officials	10	20	30	Consultation was held with the locals of Barkheta Pandey wherein they were informed of the project scope and objectives. It was informed that few towers of the proposed Mahuakheragani-Jaspur line shall pass through the agricultural land of the villagers and 66 towers are proposed. A brief on Safeguards policy and Compensation mechanism was also given to the villagers. Discussion was held on the potential risks from the Power line and mitigation measures. Villagers were inquired regarding the electricity situation in their villages and the electrification status. Women informed that there are power cuts of 4-6 hours daily which can happen anytime and it affects them especially during summer season and children's study time. They use gas stoves and

132 kV Kashipur – Mahuakheraganj, 132 kV Mahuakheraganj-Jasour lines

S No	Date Location	and Participants	Male	Female	Total	Issues Discussed
						firewood for cooking and electric appliances like fans, coolers, pumps for water. Few locals have washing machines too. Few women opined that they are least concerned with the impacts of a project since they have many basic issues like livelihood and food supply to be concerned about. They requested if project can provide them capacity building and trainings related to livelihood so that their basic demands are met. Agriculture is the main source of the livelihoods of people. Some are land owners while others work as farm labours. Few males also work in nearby industries but the distance being relatively much, women in this village have less opportunity to work in factories. On being asked about the culling of vultures and carcass dumps, it was informed that they have not seen these birds for quite a long time in their villages. The dead cows are generally buried in their own fields and the other animals are being picked by some people on payment of 500-1000 Rs. They were not sure of the end disposal but informed that due to coming up of habitations there are no carcass dumping grounds nearby.

132 kV Kachpur – Mahuakheraganj, 132 kV Mahuakheraganj-Jaspur lines

S No	Date Location	and Participants	Male	Female	Total	Issues Discussed
	22.04.23	Villagers, Gram Pradhan and PTCUL officials	9	15	24	Consultation was held with the locals of Garhi Hussain wherein they were informed of the project scope and objectives. It was informed that few towers of the proposed Mahuakheraganj-Jaspur line shall pass through the agricultural land of the villagers and 62 towers are proposed. A brief on Safeguards policy and Compensation mechanism was also given to the villagers. Discussion was held on the potential risks from the Power line and mitigation measures. Villagers were informed regarding the electricity situation in their villages and the electrification status. Women informed that there are power cuts of 4-6 hours daily which can happen anytime, more so in the summer season and during nights. This badly affects their sleep and children's study also. They use gas stoves and firewood for cooking and electric appliances like fans, coolers, pumps for water. Few locals have washing machines and air conditioners too. Locals opined that already many existing towers pass through their fields. But still they have erratic power supply conditions. Also the 132 kV Mahuakheraganj SS is nearby, but they still don't have continuous power supply. They demanded for direct power supply from the PTCUL SS. PTCUL officials informed about

132 kV Kachipur – Mahualheraganj, 132 kV Mahualheraganj-Jasour lines

S No	Date	and Location	Participants	Male	Female	Total	Issues Discussed
------	------	--------------	--------------	------	--------	-------	------------------

the voltages for Power and distribution, and direct power supply can't be given through their SS, since power is transmitted at a high voltage to the UPCL SS, which then distribute it. Locals requested for a new SS for their village. On asked about the risks from the lines, they were not much concerned as there are many lines passing through their fields, but they have not seen any impacts. However, they informed about crop damage from a line three years back. The standing crop caught fire. PTCLL officials discussed with the villagers and informed that the incident was due to distribution line and not due to Power line. Villagers agreed to this.

On being asked about significant risks to birds, the women informed that big birds like vultures and even crows are not **seen these days. They couldn't** account any specific reason for it. There is no carcass dump in or nearby their villages. They informed that general practice is to either bury the cows in their own fields and get other animals picked and disposed elsewhere.



















Transparency Unit Village & Gram Panchayat, Prithvi Pathar
ADB TA 887 (2010): Increasing Capacity to Design and Implement Energy Sector Projects

Date of Consultation: _____

Page: _____

Time: _____

Page No: _____

Name: Rishabh Singh ID: _____

Residence No: _____

S. No.	Name	Sex	Age	Occupation	Signature	Contact Number
1	Jagdeesh	M		Farmer		
2	Sidaram	M		Farmer		
3	Jay Bhaksh	M		Farmer		
4	Ravi Kumar	M		Farmer		
5	Ravi Kumar	M		Farmer		
6	Shanti R. Bhand	M		Farmer		
7	Habibul Ghouse	M		Business		98189-0371
8	Uday Raj Singh	M		Teacher		9358155566
9	Shanku Prasad	M		Business		9929158594
<u>Wife Name</u> (Living with) near village of _____						
1	Daya Rani	F	45	Housewife		9761342202
2	Ravita Rani	F				
3	Mandam Rani	F				
4	Puja	F				
5	Nisha Rani	F				
6	Adha	F				
7	Prigda	F				
8	Bansi Rani	F				
9	Gita Rani	F				

Transmission Loss Offset and Community Working Fund
 2021-24 MCH 400: Enhancing Capacity to Design and Implement Energy Sector Projects

Date of Completion: 22.11.2022

Page: 1 of 1

Area: Bakhara Landry ①

Household List

S. No.	Name	Gender	Age	Occupation	Signature	Contact Number
1	Chand H. Bhandari					
2	Radhakant Desi	1	60		राधाकांत	
3	Manohar Desi		60		मानोहर	8940547786
4	Kishor Desi		45		किशोर	
5	Shashu Desi (Aunt)		98		शशु	9390524778
6	Rajul		45		राजुल	8471800084
7	Shikharji		45		शिकारजी	8775547777
8	Murari Desi		45		मुरारी	9873719520
9	Gauram Desi		45		गुराम	9874526621
10	Janki Desi (Aunt)		50		जानकी	
11	Vinla		45		विनला	
12	Saurav Desi		40		सुरव	9873719520
13	Ruchin		28		रुचिन	9873719520
14	Vinila		40		विनला	9873719520
15	Ram Murari		60		राममुरारी	
16	Bharnasati		60		भरनासती	
17	Rajwadi		40		राजवादी	
18	Sandhuvi		45		संधुवी	
19	Wife of Sandhuvi		37		संधुवी	
20	Landry Logi		25	House		

U.S. Department of Agriculture, Bureau of Entomology and Plant Quarantine
 Washington, D. C. 20250

Form 1-62 (Rev. 1-15-62)

Field No. 2149 Date 11/10/62 Locality Barro Colorado

Collector(s) W. H. S. & J. H. S.

Host Plant Adiantum

No.	Name	Sex	Age	Description	Signature	Collector Number
1	Yellow-headed	F	10	Greenish		
2	Birds	F	20	Greenish		
3	Red-bellied	F		Greenish		1149-1150
4	(Greenish)	F				
5	Greenish	F				
6	Greenish	F				
7	Greenish	F				1151-1152
8	Greenish	F				
9	Greenish	F				
10	Greenish	F				1153-1154
11	Alba	F				
12	Angela	F				
13	Alba	F				
14	Alba	F				
15	Alba	F				
16	Alba	F				
17	Alba	F				1155-1156
18	Alba	F				
19	Alba	F				
20	Alba	F				
21	Alba	F				
22	Alba	F				
23	Alba	F				
24	Alba	F				
25	Alba	F				
26	Alba	F				
27	Alba	F				
28	Alba	F				
29	Alba	F				
30	Alba	F				

Signature W. H. S.

USDA, Washington State Department of Ecology
 1000 1st St. SW, Olympia, WA 98501
 Phone: (360) 355-7000

Date: 10/1/98
 Page: 1 of 1

Project: Habitat Study

Observation Sheet

No.	Species	Sex	Age	Observation	Signatures	Comments/Notes
1	Ring Neck	F			Ring	
2	Ring Neck	F			Ring	
3	Ring Neck	F			[Signature]	
4	Ring Neck	F			[Signature]	
5	Ring Neck	F			[Signature]	
6	Ring Neck	F			[Signature]	
7	Ring Neck	F			[Signature]	
8	Ring Neck	F			[Signature]	
9	Ring Neck	F			[Signature]	
10	Ring Neck	F			[Signature]	
11	Ring Neck	F			[Signature]	
12	Ring Neck	F			[Signature]	
13	Ring Neck	F			[Signature]	
14	Ring Neck	F			[Signature]	
15	Ring Neck	F			[Signature]	
16	Ring Neck	F			[Signature]	
17	Ring Neck	F			[Signature]	
18	Ring Neck	F			[Signature]	
19	Ring Neck	F			[Signature]	
20	Ring Neck	F			[Signature]	
21	Ring Neck	F			[Signature]	
22	Ring Neck	F			[Signature]	
23	Ring Neck	F			[Signature]	
24	Ring Neck	F			[Signature]	
25	Ring Neck	F			[Signature]	
26	Ring Neck	F			[Signature]	
27	Ring Neck	F			[Signature]	
28	Ring Neck	F			[Signature]	
29	Ring Neck	F			[Signature]	
30	Ring Neck	F			[Signature]	
31	Ring Neck	F			[Signature]	
32	Ring Neck	F			[Signature]	
33	Ring Neck	F			[Signature]	
34	Ring Neck	F			[Signature]	
35	Ring Neck	F			[Signature]	
36	Ring Neck	F			[Signature]	
37	Ring Neck	F			[Signature]	
38	Ring Neck	F			[Signature]	
39	Ring Neck	F			[Signature]	
40	Ring Neck	F			[Signature]	
41	Ring Neck	F			[Signature]	
42	Ring Neck	F			[Signature]	
43	Ring Neck	F			[Signature]	
44	Ring Neck	F			[Signature]	
45	Ring Neck	F			[Signature]	
46	Ring Neck	F			[Signature]	
47	Ring Neck	F			[Signature]	
48	Ring Neck	F			[Signature]	
49	Ring Neck	F			[Signature]	
50	Ring Neck	F			[Signature]	

Appendix 9: Social Safeguards Monitoring Template

Proposed Format of Social Safeguard Monitoring Report

Social Safeguard Monitoring Report

Reporting Period (From Month, Year to Month, Year)

Date (Month, Year)

Title of the Project (Example:)

Prepared by the (Executing Agency) for the Asian Development Bank

Template for Social Monitoring Report

The following headings provide guidance on the main elements the social monitoring report should contain:

Executive Summary - brief overview of the status of the project and monitoring activities.

- 1.0 Introduction
- 1.1 Scope of Report
- 1.2 Brief Project Description
- 2.0 Project Status
- 2.1 Status of Project Implementation
- 2.2 Status of Project Monitoring Activities
- 2.3 Implementation Schedule
- 3.0 Performance Monitoring

Provide a brief summary on performance monitoring in accordance to SPS 2005 requirements

- 3.1 Compliance with Legal and Policy Requirements

Provide a brief summary on the status of the project's compliance with host country laws on RP requirements

- 3.2 Compliance with Social Safeguard Covenants

In brief, identify the loan covenants relating to social safeguards and describe (preferably in table format) - the process and status for complying with each

- 3.3 Compliance with Resettlement Plan Requirements

Generally identify compliance with the process of consulting DPs, payment of entitlements (compensation and assistances), and getting their participation in livelihood restoration programs, as defined in the RP; identify any major variations or changes to the process/requirements; identify and describe any updates to the RP and process to address these.

To demonstrate real value added, it will be important to highlight and discuss the nature and scope of the livelihood restoration programs - including how many people are benefiting, define those that are eligible (under what criteria), describe what kind of livelihood programs are offered, and involved in and what is the intended or real consequence of this - how will it help people improve their quality of life.

- 4.0 Implementation of the Grievance Redress Mechanism
- 4.1 Grievance Redressal Mechanism - briefly define/explain the process

4.2 Status of implementation of the GRM

Briefly describe how the GRM is being implemented. In table format, please list all complaints received, the nature of the complaint, the status of resolution and the resolution itself. Where grievances have not been closed, please identify what is being done to try to reach a resolution.

5.0 Stakeholder Engagement

5.1 Stakeholder Engagement Process

Briefly define and explain the process followed to maintain on-going dialogue with stakeholders/DPs.

5.2 Consultations

Provide an updated list of consultations carried out during the period. Identify the nature of the issues raised and how these have been resolved.

6.0 Conclusion

Provide a brief conclusion summarizing the general findings on the process of performance monitoring. Provide recommendations for continued action, improvements or refinements in the process.