



Environmental Monitoring Report

Project Number: 47100-004
March 2017

Period: February 2016 – July 2016

IND: Madhya Pradesh Power Transmission and Distribution System Improvement Project

Submitted by

Madhya Pradesh Madhya Kshetra Vidyut Vitaran Co. Ltd. (DISCOM-C), Bhopal

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Asian Development Bank



OFFICE OF THE MANAGING DIRECTOR

M. P. Madhya Kshetra Vidyut Vitaran Co. Ltd.

(Government of M.P. Undertaking)

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No. MD/MK/ADB Cell/1867

Date: 01/03/2017

To,

M. Teresa Kho, Country Director,
ADB-INRM, Asian Development Bank, Speed Post
4, San Martin Marg, Chanakyapuri,
New Delhi-110021



Sub: - Submission of Half Yearly Environmental Monitoring Report against, Loan No. 3066 (ADB-III).

Ref: - 1. Contract award no. MD/MK/ADB Cell/1950 dated 15/12/2014.

2. Extension Order no. MD/MK/ADB Cell/1150 dated 28/09/2016.

Dear Sir,

As per terms and condition of the above loans, for preparation of Environmental Monitoring Report, the Central Discom has engaged M/s Environmental Planning & Coordination Organization, Bhopal as environmental Specialist. The following Half Yearly Environmental Reports prepared by M/s Environmental Planning & Coordination Organization, Bhopal are sent here with for acceptance.

S. No.	Loan No.	Package/ Lot no.	Project	Report Period
1	3066	Pkg-1, Lot -I & II (Bhopal & Gwalior Region)	New 33/11 KV substations	01/02/2016 to 31/07/2016
2		Pkg-2, Lot -I & II (Bhopal & Gwalior Region)	11 KV, 1500 KVAR Automatic Switched Capacitor Bank	

Encl: - As above.

M. Mahajan

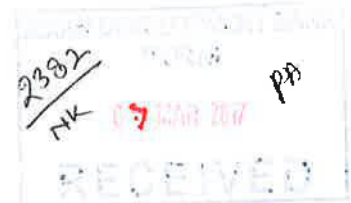
Chief General Manager (RP)

Copy to:-

1. The OSD, Govt. of MP, Energy Department, Bhopal.
2. The Director (Finance) O/o MD (CZ) MPMKVCL, Bhopal.
3. Mr. J. Banerjee Project Officer (Energy), Asian Development Bank, 4 San Martin Marg, Chanakyapuri, New Delhi-110021. Enclosed copy of EMR Report.
4. Mr. Girish Mahajan, Environmental Officer Asian Development Bank, 4 San Martin Marg, Chanakyapuri, New Delhi 1110021.

—cd—

Dy. General Manager (ADB Cell)



Hand copy read

Environmental Monitoring Report

01 February 2016 to 31 July 2016

ADB Loan No 3066 IND

IND: Madhya Pradesh Power Transmission and Distribution System Improvement Project

Prepared by

Dr. Vinita Vipat (PI)
Dr. Dinesh Damde,
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Environmental Planning and Coordination Organization Bhopal

(Department of Environment, Government of Madhya Pradesh)

For

Executing Agency

**Madhya Pradesh Madhya Kshetra Vidyut Vitaran Company Limited
(DISCOM-C), Bhopal**

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ABBREVIATIONS

Abbreviations	Full Form
ADB	Asian Development Bank
AIS	Air Insulated Substation
AP	Affected People
CFC	Chloro Fluoro Carbon
CMP	Construction Management Plan
DDR	Due Diligence Report
DISCOM-C	Distribution Company – Central
EA	Executing Agency
EARF	Environment Assessment Review Framework
EIA	Environment Impact Assessment
EMMP	Environment Management and Monitoring Plan
EMoP	Environmental Monitoring Plan
EMP	Environment Management Plan
EPC	Engineering, Procurement and Construction
EPCO	Environmental Planning & Coordination Organization
ESMU	Environment Safeguard Management Unit
GoI	Government of India
GoMP	Government of Madhya Pradesh
GRC	Grievance Redressed Committee
HVDS	High Voltage Distribution System
HWMH	Hazardous Waste Management and Handling
IA	Implementing Agency
IEE	Initial Environment Examination
LVDS	Low Voltage Distribution System
MOEF	Ministry of Environment and Forests, Government of India
MP	Madhya Pradesh
MP Transco	MP Power Transmission Corporation Limited
MPMKVVCL	Madhya Pradesh Madhya Kshetra Vidyut Vitaran Company Limited
MPPCB	MP State Pollution Control Board
PCB	Polychlorinated biphenyl
PMU	Project Management Unit
ROW	Right of Way
RP	Resettlement Plan
SOP	Standard Operating Practices

EXECUTIVE SUMMARY

To improve the quality and reliability of services in the power transmission and distribution system networks, the Government of Madhya Pradesh (GoMP) has taken initiatives to invest in the power sector with funding from development partners like the Asian Development Bank (ADB). The investments involve expansion, upgrading and reconfiguration of the existing power transmission and distribution networks. The Project has three components: (i) transmission system improvement; (ii) distribution system improvement; and (iii) capacity building for the executing agency staff. The executing agency (EA) for the project in Madhya Pradesh Central is DISCOM-C. The impact of the project would be adequate and reliable power supply for sustainable growth of power sector of MP. The project outcome would be increased capacity and improved operational efficiency in electricity transmission and distribution system in MP.

The Government of Madhya Pradesh is utilizing fund through the Government of India to improve the quality & reliability of service in the power transmission & distribution system networks under ADB Loan No 3066 IND (ADB-III). It is being implemented by MPMKVVCL, Bhopal.

Environmental Planning and Coordination Organization (EPCO), under Environment Department, Govt of MP, Bhopal is appointed as an Environmental Specialist to carry out the environment monitoring of each sub projects.

The main objective of the due diligence is to assess the compliance with mandatory environment regulations (national, state and local levels), loan covenants, Environmental Assessment and Review Framework (EARF), ADBs Safeguard Policy Statement (2009) and EMMP and suggest mitigative/ corrective measures. For this, the team has reviewed and monitored the implementation of EMMP mention in the ADB approved Initial Environmental Examination Report (IEE) reports. The team has also referred to the environmental covenants from respective loan agreement, IEE and EARF approved by the ADB. The due diligence is carried out for the works completed under ADB –III such as construction of New 33/11 KV Substations and installation & commissioning of 11 KV 1500 KVAR Capacitor Bank. In this regard consultation was also carried out during the monitoring period with the local, contractors, workers of contractors and DISCOM staff. It was observed that, the local people are aware of the proposed project and are generally supportive due to expected long-term benefit of reliable and stable supply of power.

With regards to sub project under ADB Loan No 3066 IND (ADB-III), 90 % new substations, 49.54% 33 KV line and 32.52 % 11 KV line works have been completed in Gwalior and Bhopal Region. Similarly, 100% of 11 KV 1500 KVAR Capacitor Banks have been installed & commissioned in both the Region (Gwalior and Bhopal). The implementation of the Project under ADB-III was started with the signing of Loan Agreement No. 3066 IND on February 2014.

The above projects have no negative impact on vegetation, trees, humans or any other environmental receptors. It was observed during monitoring period of February 2016 to July 2016, that in the agricultural field, care is taken to do the alignment along the road side, to minimize the impact on the field crops. Concerning environment, care has also been taken to avoid tree cutting & is only limited to trimming/pruning. Alignment is done to avoid human settlements.

ESMU has been set up and conducted meetings under this loan to review the implementation of EMP. Similarly, Grievance Redressed Committee (GRC) meetings have been conducted in each circle on monthly basis. However, there is no complaint received so far.

As per the direction of DISCOM- C, the contractors should ensure the review and implementation of EMP in each subproject. This Due Diligence Report confirms that subprojects of ADB Loan 3066 IND of DISCOM- C have so far caused no serious negative environmental impact.

1.0. Introduction

1.1. Project Description

To improve the quality and reliability of service in the power transmission and distribution system networks, the Government of Madhya Pradesh (GoMP) has taken initiatives to invest in the power sector with funding from development partners like the Asian Development Bank (ADB). The investments involve expansion, upgrading and reconfiguration of the existing power transmission and distribution networks.

The Project has three components: (i) transmission system improvement; (ii) distribution system improvement; and (iii) capacity building for the executing agency staff. The executing agency (EA) for the project in Madhya Pradesh Central is DISCOM-C. The impact of the project would be adequate and reliable power supply for sustainable growth of power sector of MP. The project outcome would be increased capacity and improved operational efficiency in electricity transmission and distribution system in MP.

The environmental monitoring was carried out in Bhopal & Gwalior Region covering the due diligence of sub project-

1. Construction of new 33/11 KV substations
2. Installation & Commissioning of 11 KV 1500 KVAR Capacitor Banks

1.2. Scope of Work

EPCO, Bhopal has been appointed as an Environmental Specialist to undertake the monitoring of the subprojects. The objective of the assignment is to establish and assess the environmental performance of subprojects. The scope of work includes the following aspects.

- To assess the compliance with Mandatory Environmental Regulatory Requirements
- To assess the adequacy of implementation of Loan Covenants
- To assess the adequacy of implementation EARF
- To assess the adequacy of implementation of ADB safeguards
- To assess the adequacy of implementation of EMMP
- To recommend corrective/remedial measure for impacts/implications, if any

1.3. Approach and Methodology

The team of environment specialist has reviewed and monitored the implementation of Environmental Management and Monitoring Plans of the ADB approved IEE Reports for the Sub-Projects. The team has also referred the environmental covenants from respective loan agreements and the Environmental Assessment and Review Framework approved by the ADB. Separate questionnaires have been used for each sub project. In each sub-project, 10 % of site visits were covered out representing whole project to get a proportionate allocation of sample New 33/11 KV Substations and 11 KV 1500 KVAR Capacitor Banks locations. Consultation was carried out with the locals, contractors, workers of contractor & DISCOM-C staff members.

1.4. Status of Implementation

As per the available data and detailed review of sub project under ADB Loan No 3066, the implementation of project New 33/11 KV Substations is being under progress and 11 KV 1500 KVAR Capacitor Banks have been installed and commissioned in both region (Bhopal & Gwalior).

With regards to sub project New 33/11 KV Substation, in Bhopal region there are 43 substations have been constructed and commissioned. In the mean time, 150.9 km of 33 KV lines and 62.41 km of 11 KV lines have also been installed in Bhopal region. Similarly, construction of 28 substations has been completed and commissioned in Gwalior region along with installation of 115.61 km of 33 KV lines and 61.8 km of 11 KV lines.

With regards to sub project Installation & Commissioning of 11 KV 1500 KVAR Capacitor Banks (CBs), there are all the 331 CBs have been installed and commissioned in both region (Bhopal & Gwalior) against the provision. The status of each sub project under this Loan is enclosed at **Annexure-II, III & VI**.

During monitoring period, the works has not reflected any shortcomings related to the environment. The environmental monitoring of sub projects for the period February 2016 to July 2016 to has not identified any negative environmental impact. In concern with above projects, consultation was carried out with the local people, contractors, workers and DISCOM-C staff **Annexure-I**.

Status of Implementation (as on 31.07.16)

(I) New 33/11 KV Substations

S. No.	Name of (O&M) Circle	Provision			Project Status (No.s)			Progress (%)		
		New 33/11 KV S/S (No.s)	33 KV Line (km)	11 KV Line (km)	New 33/11 KV S/S (No.s)	33 KV Line (km)	11 KV Line (km)	New 33/11 KV S/S (No.s)	33 KV Line (km)	11 KV Line (km)
I	Bhopal Region	49	292	235	43	150.9	62.41	88	51.68	26.56
II	Gwalior Region	30	246	147	28	115.61	61.8	93.00	47.00	42.04
	Grand Total	79	538	382	71	266.51	124.21	90.00	49.54	32.52

(II) Automatic Capacitor Bank 11 KV, 1500 KVAR

S.No.	Name of (O&M) Circle	Automatic Capacitor Bank 11 KV, 1500 KVAR		
		Provision (No.s)	Status (No.s)	Progress (%)
I	Bhopal Region	136	136	100
II	Gwalior Region	195	195	100
	Grand Total	331	331	100

2.0. Compliance Status

2.1. Compliance with National/State/Local statutory Environmental Requirement

(Schedule 5 Item No 5 (a) of Loan Agreement dated 17 February 2014 ADB Loan No 3066)

S No	Notification/ Rule	Compliance Requirement under the Rule	Status
1.	Environmental Clearance as per EIA Notification 2006, as amended	All development projects listed in Schedule 1 of EIA Notification needs to get prior environmental clearance.	Power distribution projects are excluded from the Schedule 1 list of EIA Notification 2006.
2.	Batteries Management and Handling Amendment Rules 2010	As per Rule 3, it shall be the responsibility of the bulk consumer to: (i) Ensure that used batteries are not disposed of in any manner other than by depositing with the registered dealer/ manufacturer/ registered recycler/ importer/reconditioned or at the designated collection centres and (ii) File half-yearly return in Form VIII to the State Board.	Presently, there is no issue related to this.
3.	Municipal Solid Wastes Management and Handling) Rules, 2000	It shall be the responsibility of generator of wastes to avoid littering and ensure delivery of wastes in accordance with the collection and segregation system to be notified by the municipal authority as per Para 1 (2) of this Schedule II.	Presently, there is no scrap and debris generated from the project.
4.	Hazardous Waste (Management and Handling) Rules	Used/ burned transformer oils to be disposed off in accordance with the Rules	The Government of India considers power transmission projects as environment-friendly compared to other power development projects since they do not generate and dispose of hazardous waste to land air and water, thus, they are not included within the realm of the Environment Protection Act 1986. Presently, there is no such issue observed.
5.	Ozone Depleting Substance (Regulation & Control) Rules 2000	Avoid equipments using CFCs/PCBs	CFCs/ PCBs are not used in any equipment.
6.	Air Prevention and Control of Pollution Act, 1981, with Rules	Compliance to National Ambient Air Quality Standard	The Government of India considers power transmission projects as environment-friendly compared to other power development projects since they do not generate and dispose of hazardous waste to land, air and water, thus, they are not included within the realm of the Environment Protection Act 1986. However, visual inspection has been carried out to check the air pollution. No issue of air pollution has been observed during the monitoring period

			& no complaints received from locals. No oil leakages from transformers/ CBs have been observed. During civil works occurrence of dust has not caused any problem to locals as human settlements are mostly away from the substations.
7.	Water (Prevention and Control of Pollution) Act, 1974, with Rules	Protection of Water Quality; Discharge of sewage from project	The Government of India considers power transmission projects as environment-friendly compared to other power development projects since they do not generate and dispose of hazardous waste to land air and water, thus, they are not included within the realm of the Environment Protection Act 1986. However, During monitoring it was observed that no siltation of water bodies due to the project; No disposal of sewage from the project; No release of chemicals to the water bodies due to the project.
8.	Noise Pollution (Regulation & Control) Rules, 2000	Compliance with Ambient Noise Standards in accordance to land use of the area.	No complaints received from the locals. Civil works is been carried out during day time. Most of the substations are away from human settlements.
9.	Forest Act 1980	Clearance from MoEF/forest department, if the line passes through the forest area.	No areas pass through forest area such as RF/PF, National Park, Wildlife Sanctuaries, etc.

2.2. Compliance with EARF

S No	Compliance Requirement (As per EARF)	Compliance Station
1	ESMU will be created within DISCOM headed by concerned head of the company which will be accountable and responsible for implementation of EMP	An ESMU has been created under Tranche IV for the implementation of the MFF (as per procedure No. 73-74 dated 05. 05. 2010) with three officers having part time responsibilities. The same ESMU will be functional for Tranche V and ADB-III (Annexure-IV). An environmental specialist is appointed as member since 30.07.12 to assess environmental compliance & implementation of sub project as per the EARF, EMMP etc. The same team of environmental specialist has been appointed for the present tranche. Monthly meeting of ESMU are being conducted since August 2010.
2	A Grievance Redressed Committee will be constituted in each sub project location to address all concerns & grievances of the local communities & affected parties	DISCOM-C has constituted a Project Grievance Redressed Committee at all the circle vide Order No. CMD/MK/PMU/98 dated 14/05/10 to address all concerns & grievances of the local communities & affected parties. The same working committee is been responsible for this loan (Annexure: V). During public consultation no complaint received/ registered regarding this project (Annexure: I)
3	An independent monitoring agency will be hired by the EA for undertaking external monitoring	EPCO, Urban Development & Environment Department, Govt of Madhya Pradesh, Bhopal is appointed as an external monitor to carry out the environmental monitoring of each sub project. (MD/ MK/ ADB Cell/ 2639 dated 30.07.12)

2.3. Compliance with Loan Covenants

S No	Loan Agreement	Compliance Requirement	Status
1	Schedule 5 Item 5 (b) and (c)	Implement the project strictly in compliance with IEE, EARF, ADB's Safeguard Policy Statement (2009) and National Regulations.	Compliance to the extent as mentioned in Tables 2.1 to 2.7.3
2	Schedule 5 Item 5(c) and Item 10 (a)	IEE with EMP shall be prepared. The DISCOMs shall ensure that subproject bidding documents include all recommendations from the IEE, and related contracts of civil works incorporate mitigation measures specified in the relevant EMP.	IEE with EMP is prepared. The subprojects fall under category B. DISCOM-C has advised the contractors (vide letter no CMD/ MK/ ADB Cell/ 472) to implement the EMP and submit the subproject wise report to DISCOM-C
3	Schedule 5 Item 11 (a)	a) DISCOM-C shall monitor, audit, and report to ADB twice a year on the implementation of the EMP related to each subproject b) DISCOMs shall verify that all associated power projects not financed by ADB will be constructed and commissioned in compliance with the laws and regulation of the Borrower and the State prior to connecting such facilities to the ADB-supported transmission and distribution networks.	a) The present monitoring report is submitted to ADB for the period of 01.02.16 to 31.07.16. b) Compliance found
4	Schedule 5 Item 1	Any Change to the location, land alignment, or environmental impacts on account of detailed designs of a subproject shall be subject to prior approval by ADB and/ or DISCOMs, as the case may be, in accordance with the selection criteria and process stipulated in Schedule 4 to the FFA	No location change

2.4. Compliance with ADBs Environmental Safeguards (SPS, 2009)

(Schedule 5 Item No 5 (b) of Loan Agreement dated 17 February 2014 ADB Loan No 3066)

S No	ADB's Safeguard Requirements	Compliance Requirement	Status
1.	Environmental Assessment	Identify potential environmental impacts on various resources and determine its significance in consultation with all stakeholders.	The project falls under Category B. An EMP is prepared projecting the environmental impacts. Public consultation was carried out during IEE & also by the external monitor.
2.	Environmental Planning and Management	The borrower will prepare an EMP that addresses the potential impacts and risks identified by the environmental assessment. At times a third party will implement EMP.	The client has prepared an EMP addressing the potential impact and risks, suggesting mitigation measures.
3.	Information Disclosure	The borrower will submit to ADB: the final IEE & environmental monitoring report.	The final IEE is submitted. The present environmental monitoring report is prepared for the period, February 2016 to July 2016.
4.	Consultation and participation	The borrower will carry out consultation with affected people and other stakeholders. The consultation process and its results are to be documented and reflected in the environment report.	Public consultation was carried out during IEE. The external monitor has also carried out the public consultation during the construction phase.

5.	Grievance Redress Mechanism	The borrower will establish a mechanism to receive and facilitate resolution of affected people's concerns, complaints and grievance about the project's environmental performance.	Grievance Redressed Committee has conducted GRC meeting on monthly basis at each circle in both region.
6.	Monitoring and Reporting	The borrower will prepare periodic monitoring reports that describe progress with implementation of the EMP and compliance issue and corrective actions.	The present environmental monitoring report is submitted for the period, February 2016 to July 2016 illustrating the progress of each sub-project considering the implementation of the EMP and compliance issue.
7.	Unanticipated Environmental Impacts	The borrower will update the environmental assessment and EMP where unanticipated environmental impacts become apparent.	No unanticipated environmental impact was observed.
8.	Biodiversity Conservation and Sustainable NRM	The borrower will assess major threats to the biodiversity	No habitat change, no degradation of natural habitat & critical habitats, no introduction of invasive alien species has been recorded and no threat to air/water/soil ecosystems was observed.
9.	Pollution Prevention and Abatement	Pollution prevention and control technologies consistent with international good practice such as World Bank group EHS Guidelines.	No hazardous waste from construction. No Pesticide Use. No Green House Gas Emissions (No halon or PCBs).
10.	Health and Safety	The borrower will provide workers with a safe and healthy working environment provide equipments to minimize risks, render training, document the accidents disease & incidents, provided emergency prevention and response arrangements.	Protective equipments were provided to the workers during constructions.
11.	Physical Culture Resources	The borrower to avoid significant damage to physical cultural resources.	No damage to archaeological/historical/architectural/paleontological/religious structures.

2.5. Compliance with Environmental Management Plan (EMP)

S. No.	Proposed Mitigation Measures	Status of Implementation	Measure for Improvement
Pre-construction Phase			
1.	13 criteria for site selection and a 17-question checklist/questionnaire guide the selection of transmission line route and substations, among others, to avoid significant adverse environmental impacts	13 criteria for site selection and a 17-question checklist/questionnaire have been followed as mentioned in Analysis of Alternatives for Pre-construction & Design phase.	-
2.	Substations will be air insulated	All the substation have been designed for construction are Air Insulated Substation (AIS)	-
3.	Land acquisition for the substations	All the MP Transco substation sites are on government land so there is no need for land acquisition from private owners	-
4.	Prepare construction management plan for avoiding the unplanned activities of EPC Contractor(s)	Construction Management Plan (CMP) has been prepared and followed by the contractor	-

5.	Construction techniques and machinery selection to minimize noise/ vibration distribution	Heavy equipments are not used in the construction work. Best modern construction practices are followed by the contractor. Work was carried out during the day	-
6.	Facilities to include drainage and sewage disposal system to avoid offsite land and water pollution	Facilities included in the project, proper drainage and sewage disposal system has been adopted.	-
7.	Appropriate sitting and facilities constructed above the high flood level (HFC) by raising the foundation	Substation is designed to account for flood level of the area. Provision for foundation pads exists.	-
8.	Design of facilities to include modern fire control system/ firewalls.	Facilities for fire control/ safety system included in the tender document	-
Construction Phase			
1.	Construction techniques and machineries selection seeking to minimize ground disturbance	Best modern construction practices are been followed by the contractor. No disturbance recorded.	-
2.	Construction activities on cropping land timed to avoid disturbance of field crops	No disturbance to field crops. Construction carried out during the fallow time	-
3.	Construction equipment to be well maintained	Compliance followed	-
4.	Proper maintenance and turning off plants not in use	Compliance followed	-
5.	Existing road and tracks used for construction and maintenance access to the line/ site wherever possible	Existing road and tracks used for the project	-
6.	New access ways restricted to a single carriage way width within the right-of-way ROW	Compliance followed	-
7.	Temporary placement of fill in drain / canals not permitted	No fill is placed in canal or drains	-
8.	Marking of vegetation to be removed prior to clearance, and ensured minimal clearance.	No disturbance to field crops. Construction carried during the fallow time	-
9.	Trimming/ cutting of tress within row	Trimming/ pruning is done wherever required No illegal tree cutting is done.	-
10.	Wood/ vegetation harvesting prohibited	Compliance found. No illegal harvesting reported	-
11.	Disposal of surplus earthwork/ soil in proper way.	The soil excavation for cable trench and tube well is levelled in the substation premise.	-
12.	Soil and water pollution/ wastage avoided during substation construction.	Compliance found.	-
13.	Tree clearance for easement establishment to only involve cutting tree off at ground level or pruning as appropriate, with tree stumps and roots left in place and ground cover left undisturbed	Trimming/ pruning is done wherever required. No illegal tree cutting is done.	-
14.	Fuel and other hazardous materials securely stored above high flood level.	Provision for storage exists. Compliance found.	-
15.	Construction scheduled only during day hours with information to locals	Construction limited to day time and no disturbance to locals	-
16.	Construction workforce facilities to include proper sanitation, water supply and waste disposal facilities.	Local workers are employed in temporary basis for civil works.	-

17.	Avoid encroachment into farmland	No encroachment observed	-
18.	Uncontrolled erosion/ silt runoff	No disturbance due to substation. Excavation for pole erection for 33 or 11 KV lines does not lead to erosion/ silt.	-
19.	Nuisance to nearby properties. Losses to neighbouring land use/ values	No land use change observed during implementation & monitoring period of the project.	-
20.	Avoid natural drainage pattern/ facilities being disturbed/ blocked/ diverted by the on-going construction activities.	No disturbance to the natural drainage	-
21.	Equipment stored at secure place above the high flood level (HFL)	Compliance found. Provision for foundation pad exists.	-
22.	Health and safety plan, training for workers and public.	SOP manual displayed in substations. Training on Health and safety is being conducted for worker. No complaints received from public regarding health and safety.	-
23.	Training of executing agency (EA) staff by Environmental monitoring personnel.	Training programmes have been conducted at DISCOM-C	-
24.	Appropriate contract clauses to ensure satisfactory implementation of contractual environmental mitigation measures.	EMP made part of the contractual agreement. Contractors carried out the routine visits to the project sites to ensure the implementation of EMP and submit the subproject wise report to DISCOM- C	-
25.	Effective Environmental Monitoring system using Checklist	All the Contractors have made responsible for to strictly implement the EMP Effective Environmental Monitoring system using Checklist	-

2.6. Compliance with Environmental Monitoring Plan (EMoP)

S. No.	Environment Monitoring Task	Responsibility	Measurement	Frequency	Status of Compliance
Pre- Construction Phase					
1.	Incorporation of mitigation measures into design and site identification as suggested in EMP	DISCOM- C	Design Check	One-off before design approval	Compliance found
2.	Minimization of tree cutting by best alignment	DISCOM- C	Site visit and interaction with design engineers	One-off before design approval	Compliance found
3.	Encroachment into forest land	DISCOM -C	Site visit and interaction with design engineers	One-off before design approval	Compliance found
4.	Incorporation of construction stage mitigation measures in contract document	DISCOM -C	Inspection of contract document	One-off before finalization of contract	Compliance found
Construction Phase					
5.	Preparation of Construction management plan	DISCOM -C	Inspection of plan as per the EMP recommendation	One-off before start of construction	Compliance found

6.	Implementation of mitigation measures in contract document	Contractor	Site visits, consultation with local people, worker. Inspection of construction record.	Weekly	Contractors carry out site visits on a regular basis & consult with worker.
7.	Local recruitment of workers and staff	Contractor	Number of local workers and staff recruited	Monthly	Compliance found. Recruitment of workers and staff is been maintained by Contractors
8.	Orientation of Contractor(s) & workers on issues like HIV/ AIDS, compliance to EMP, etc.	Contractor	Number of participants	Once before construction, and as needed	Compliance found
9.	Spraying of water to opened land areas and before movement of construction vehicles	Contractor	Ocular inspection/spot checks	Weekly	Compliance found
10.	Solid waste management	Contractor	Ocular inspection/spot checks	Weekly	Compliance found
11.	Danger and warning signs for safety of workers & the public	Contractor	Ocular inspection/spot checks	Monthly	Compliance found
12.	Announcement to the public of works schedule	Contractor	Work schedule log sheet	As needed	Compliance found. Works schedule is been communicated to local stakeholder & people prior to the commencement of work
13.	Erosion control measures such as silt traps	Contractor	Ocular inspection	Monthly	Compliance found
14.	Smoke belching construction vehicles	Contractor	Ocular inspection/spot checks	Weekly	Compliance found
15.	Dust and noise level (Ambient Air Quality & Noise)	Contractor	Ocular inspection/spot checks	Twice a month	Compliance found Construction work is limited to the day time. It has not created any nuisance to the locals. Majority of the substations are also situated away from the human settlements. The external monitors have not received any complaints from the locals regarding Noise, dust or other air related problems
16.	Housekeeping	Contractor	Ocular inspection/spot	Weekly	

2.7. Social Issues and Safeguards

2.7.1 Land Acquisition & Involuntary Resettlement

S. No.	Laws/ Regulations	Compliance Requirement	Status
1.	Land Acquisition Act- 1894 (as amended in 1984)	Compensation for land acquisition	The land does not involve any displacement of people, and property hence no compensation is payable
2.	National Rehabilitation and Resettlement Policy, 2007 (NRRP-2007)	Address development- induced rehabilitation and resettlement issues	There is no development-induced rehabilitation and resettlement issues
3.	Madhya Pradesh Resettlement and Rehabilitation Policy, 2002 (MPRR)	Policy covers different categories of losses i) Land Compensation, ii) Loss of Structures, iii) Rehabilitation grant for vulnerable groups	No issue related to this policy
4.	Involuntary Resettlement Safeguards (as per ADB's SPS, 2009)	It covers physical displacement (relocation, loss of residential land, or loss of shelter) and economic displacement (loss of land, assets, access to assets, income sources, or means of livelihoods) i) involuntary acquisition of Land ii) involuntary restrictions on land use or on access to legally designated parks and protected areas	No issue related to this policy

2.7.2 Labour Standards

S. No.	Laws/ Regulations	Compliance Requirement	Status
1.	Prohibition of employment or use of children as labour	The contract for execution of work binds the contractor to follow the guidelines for Prohibition of employment of children or child labour.	No labour employed below the age of 18years
2.	Prohibition of Forced or Compulsory Labour	The contract for execution of work binds the contractor to follow the guidelines for Prohibition of Forced or Compulsory Labour.	There is no forced or compulsory labour engaged.
3.	Ensure equal pay for equal work to both men and women	The contract for execution of work binds the contractor to follow the guidelines to ensure equal pay for equal work to both men and women	Equal pay for equal work to both men and women is being paid.
4.	Implementation of all statutory provisions on labour like health, safety, welfare, sanitation, and working conditions	The contract for execution of work binds the contractor to follow the guidelines for Implementation of all statutory provisions on labour like health, safety, welfare, sanitation, and Working conditions. EMP and Resettlement Plan conditions are also being monitored.	Watch on Implementation of all statutory provisions on labour like health, safety, welfare, sanitation, & working conditions is being kept.
5.	Maintenance of employment records of workers	The contract for execution of work. Binds the contractor to follow the labour law guidelines.	The contractor shall make the records.

2.7.3 Indigenous Peoples

S. No.	Laws/ Regulations	Compliance Requirement	Status
1.	The Constitution of India (Fifth Schedule)	Protect of the rights of the Adivasi (Tribal's) on their land, forest & water as their natural rights.	No violation of distinct identity and rights of the tribal people
2.	Displacement of schedule tribe/ schedule population	Physical displacement should be avoided and other impacts should be minimized. If unavoidable, the same must be addressed through proper compensation and assistance as per Resettlement Framework and Resettlement Plan which shall comply with ADB's Guidelines and MPMKVCL's safeguard policy which shall cover the interests of Scheduled Tribes or Forest dwellers.	No displacement of any Scheduled Tribe is involved in the project. Interest of Forest dwellers shall be protected.

3.0 Monitoring of Environmental Attributes

The chances of environmental pollution from the sub-project New 33/11 KV Substations and Installation & Commissioning of 11 KV 1500 KVAR Capacitor Banks are very low. Civil work including the installation of gate, bore-well, yard fencing and construction of foundation pad, cable trenches, control room, has not caused any negative impact to any of the environmental receptors so far. No much debris is generated from these civil works. Wherever soil is excavated i.e. for cable trenches, bore-wells, pole erection, foundation pad of CBs etc, the same is levelled in the premises itself. Usually, old metal scraps and construction wastes are collected by the contractor and are auctioned to registered dealers. In most of the places removal of debris has been carried out regularly. As construction is limited to the day time and the majority of the substations are away from the human settlements thus, noise & dust during the construction has not affected the local people.

3.1 Environmental Attributes/ Receptors

S. No.	Environmental Receptor	Impact Source	Mitigation Measure	Status
1.	Air quality	Dust during construction	Spraying of water in construction sites and exposed earth surface. Covering of transportation with Tarpaulin. Equipments & vehicles shall comply with the norms & standards prescribed by MoEF	Compliance found
2.	Noise	Construction vehicles, equipments & activities	Equipments should comply with Indian & International standard. Construction works will be carried out only during day time	Compliance found
3.	Water and Land	Waste from labour quarters	Labour quarters shall be provided with facilities for water, sanitation disposal of sewage & solid waste.	Local workers are employed. Hence no labour camps are established.

		Wastewater from equipments & activities	Dispose the water as per statutes	Compliance found
		Waste oil from phased out equipments & lubricant store	To be disposed as per the HWMH rules	No waste oil is been generated so far. However, burnt/used oil is usually being reprocessed through M/s Divya Refineries, Satna or Mangalam Petro Chemicals, Sagar Road, Vidisha; both are registered with MoEF/CPCB as Recyclers/ Reprocess or having eco-friendly management facilities. Recovered oil is usually reused in the existing transformer
		Spoils and construction debris	Debris to be removed as per status	Debris was properly removed. Dug out soil is been levelled properly in the premises
		Phased out equipments	Auction in to the registered dealers as per rules	So far no waste batteries generated in this project. However, waste batteries are normally collected in the Area Stores of DISCOM-C in Bhopal, Guna and Gwalior, and from there it is auctioned to Metal Scrap Trading Corporation (MSTC), a Government of India Undertaking. Scrap equipments such as parts of old gates, old fencing materials, construction wastes etc. are disposed to MSTC
4.	Flora and Fauna	Cutting of trees/ vegetation	Marking of vegetation to be removed prior to clearance.	No disturbance to farm activities/ crops
			Tree clearance for easement establishment to only involve cutting trees off a ground level or pruning as appropriate, with tree stumps and roots left in place & ground left undisturbed.	Only tree trimming/ pruning is been carried out. No illegal harvesting observed/ reported

4.0 Any other environmental aspects, impacts observed during implementations which were not covered earlier.

Environmental monitoring of the each sub project under ADB Loan No 3066 reveals that, there is no unanticipated environmental impacts were observed/ reported during the period of February 2016 to July 2016.

5.0 Details of Grievance Redress Committee and complaints received from public and actions taken thereof to resolve

The Project Grievance Redress Mechanism has been constituted vide Order No. CMD/MK/PMU/98 dated 14/05/10 and made responsible for handling public complaints regarding Environmental/Social related matters. The Project GRC meeting has been conducted regularly on monthly basis at each circle. However, no complaint received/ registered so far. All public complaints will be subjected to enter into the complaints register.

The contractor will promptly investigate and review environmental complaints and adopt appropriate corrective actions to arrest or mitigate the cause of the complaints. All the complaints received will be placed before the Project GRC and the decision of the committee will be implemented. The complaint register will be placed at a convenient place, easily accessible by the public.

6.0 Follow-up Actions and Conclusion

The monitoring report confirms that the sub-projects- (a) Construction of new 33/11 KV New Substations, 33 KV & 11 KV Lines and (b) installation & commissioning of Capacitor Banks under ADB Loan No 3066 (ADB- III) of DISCOM-C have so far caused no serious negative environmental impacts on the project sites and surrounding.

Details of Public Consultation
Sub Project: Construction of New 33/11 KV Substations
Bhopal Region

Circle: Hoshangabad

Location: Nandwada Harda Substation

Public Consultation

Name of Sub Project Construction of New 33/11 KV SS
 ADB Loan No 3066
 District Hoshangabad Distt.
 Location: Nandwada

S No	Name of Respondent	Age	Gender	Address	Signature	Remark
1	Sachin Soni	24	M	Nandwada	[Signature]	
2	Pankaj Gout	23	M	---	[Signature]	
3	Pohob Singh	25	M	---	[Signature]	
4						
5						
6						

Circle: Betul

Location: Rampur

Public Consultation

Name of Sub Project Construction of New 33/11 KV
 ADB Loan No 3066
 District Betul Distt.
 Location: Rampur

S No	Name of Respondent	Age	Gender	Address	Signature	Remark
1	Vijay Likhita	30	M	Rampur	[Signature]	
2	Bheeruk Khare	28	M	---	[Signature]	
3	Neha Bhasin	26	M	---	[Signature]	
4						
5						
6						

City Circle: Bhopal

Location: MVM College (MLA Rest House) Substation

Public Consultation

Name of Sub Project New 33/11 KV S/S
 ADB Loan No 3066
 District Bhopal
 Location: MVM College (MLA Rest House)

S No	Name of Respondent	Age	Gender	Address	Signature	Remark
1	Bablu Meena	23	M	MLA Guest house	[Signature]	
2	Malathi Rani	25	M	---	[Signature]	
3						
4						
5						
6						

Circle: Vidisha

Location: Dabargan (Kakrawda) Substation

Public Consultation

Name of Sub Project New 33/11 Kv S/s
 ADB Loan No 3066
 District Vidisha
 Location: Dabargan (Kakrawda S/s)

S No	Name of Respondent	Age	Gender	Address	Signature	Remark
1	Rajendra Kumar	28	M	Kakrawda	[Signature]	
2	Rishi Shrivastava	28	M	" "	[Signature]	
3	Laxminarayana	22	M	" "	LAXMI PARIKH	
4						
5						
6						

Gwalior Region

Sub Project: Construction of New 33/11 KV Substations

Circle: Rajgarh

Location: Hasrod Substation

Public Consultation

Name of Sub Project NEW 33/11 KV S/s
 ADB Loan No 3066
 District Rajgarh
 Location: Hasrod

S No	Name of Respondent	Age	Gender	Address	Signature	Remark
1	Brijendra Meena	25	M	Hasrod	[Signature]	
2	Omkar Yadav	27	M	" "	[Signature]	
3	Mukesh Meena	24	M	" "	[Signature]	
4	Karishma	56	M	" "	[Signature]	
5						
6						

Circle: Gwalior

Location: Science College Substation

Public Consultation

Name of Sub Project Construction of New 33/11 KV SS
 ADB Loan No 3066
 District Gwalior
 Location: Science College

S No	Name of Respondent	Age	Gender	Address	Signature	Remark
1	Iskender	39	M	College area	[Signature]	
2	Anand V. Shrivastava	29	M	" "	[Signature]	
3	Sudam Thakur	30	M	" "	[Signature]	
4						
5						
6						

Circle: Bhind

Location: Kanathar Substation

Public Consultation

Name of Sub Project New SS 33/11KV S/S
 ADB Loan No 3066 (Distt. Bhind)
 District
 Location: Kanathar

S No	Name of Respondent	Age	Gender	Address	Signature	Remark
1.	Khemraj	20	M	Kanathar	[Signature]	
2.	Chandraj	25	M	—	[Signature]	
3.	Ravi	30	M	—	[Signature]	
4.	Deepsingh	39	M	—	[Signature]	
5.						
6.						

Circle: Morena

Location: Rajodha Substation

Public Consultation

Name of Sub Project Construction of New 33/11 KV S/S
 ADB Loan No 3066
 District Morena
 Location: Rajodha

S No	Name of Respondent	Age	Gender	Address	Signature	Remark
1.	Sunil Singh	26	M	Rajodha	[Signature]	
2.	Pradeep Singh	24	M	—	[Signature]	
3.	Baksh Khan	40	M	—	[Signature]	
4.						
5.						
6.						

Circle: Shivpuri

Location: Kheru Hotel Substation

Public Consultation

Name of Sub Project Construction of New 33/11 KV SS
 ADB Loan No 3066
 District Gwalior
 Location: Science College

S No	Name of Respondent	Age	Gender	Address	Signature	Remark
1.	Israni	39	M	College area	[Signature]	
2.	Anand V. Shrivastava	29	M	—	[Signature]	
3.	Sudamthakur	30	M	—	[Signature]	
4.						
5.						
6.						

Circle: Sheopur

Location: Radep Substation

Public Consultation

Name of Sub Project New 33/11 KV S/S
 ADB Loan No 3066
 District Sheopur
 Location: Radep

S No	Name of Respondent	Age	Gender	Address	Signature	Remark
1	Abdul Rashid	26	M	Radep	<i>[Signature]</i>	Nil
2	Vikram Singh	32	M	" "	<i>[Signature]</i>	
3	Deepender Sharma	24	M	" "	<i>[Signature]</i>	
4	Rahul Mishra	28	M	" "	<i>[Signature]</i>	
5						
6						

Circle: Guna

Location: Pathi Substation

Public Consultation

Name of Sub Project New 33/11 KV S/S
 ADB Loan No 3066
 District Guna
 Location: Pathi S/S

S No	Name of Respondent	Age	Gender	Address	Signature	Remark
1	Birendra Prasad	38	M	Pathi	<i>[Signature]</i>	
2	Ranjana Meena	27	M	" "	<i>[Signature]</i>	
3	Yashwanth Yadav	27	M	" "	<i>[Signature]</i>	
4	Paizan Shah	25	M	" "	<i>[Signature]</i>	
5						
6						

Sub Project: Installation & commissioning of 11 KV 1500 KVAR Capacitor Bank Bhopal Region

Circle: Hoshangabad

Location: Rani Pipariya Substation

Public Consultation

Name of Sub Project Installation & Commissioning of
 ADB Loan No 3066 11 KV 1500 KVAR CB
 District Hoshangabad
 Location: Ranpuriya

S No	Name of Respondent	Age	Gender	Address	Signature	Remark
1	Ramgopal Puriya	31	M	Rani Pipariya	<i>[Signature]</i>	
2	Lokendra Shrivastava	36	M	" "	<i>[Signature]</i>	
3	Suresh Dubey	51	M	" "	<i>[Signature]</i>	
4	Narash Ukey	42	M	" "	<i>[Signature]</i>	
5						

Circle: Betul

Location: Malajpur Substation

Public Consultation

Name of Sub Project: Installation & Comm of 11 KV ISO
 ADB Loan No: 3066
 District: Betul
 Location: Malajpur

S No	Name of Respondent	Age	Gender	Address	Signature	Remark
1	Krishna Yadav	26	M	Malajpur	[Signature]	
2	Chiranjeev	30	M	Malajpur	[Signature]	
3	Nilesh Kakale	32	M	Malajpur	[Signature]	
4						
5						
6						

Circle: Bhopal

Location: MP Nagar Substation

Public Consultation

Name of Sub Project: 1500 KVAR CB
 ADB Loan No: 3066
 District: Bhopal
 Location: MP Nagar

S No	Name of Respondent	Age	Gender	Address	Signature	Remark
1	J.K. Bhanubhai	29	M	MP Nagar	[Signature]	
2	Sunil Shukla	24	M	MP Nagar	[Signature]	
3	Jyoti Kulkarni	25	F	MP Nagar	[Signature]	
4						
5						
6						

Circle: Vidisha

Location: Sirnora

Public Consultation

Name of Sub Project: 1500 KVAR CB
 ADB Loan No: 3066
 District: Vidisha
 Location: Sirnora S/S

S No	Name of Respondent	Age	Gender	Address	Signature	Remark
1	Shikhandu Mishra	33	M	Sirnora	[Signature]	
2	Deepak Rai	28	M	Sirnora	[Signature]	
3	Ravi Mishra	27	M	Sirnora	[Signature]	
4						
5						
6						

Circle: Sehore

Location: Ichhawar Substation

Public Consultation						
Name of Sub Project 1500 KVAR CB						
ADB Loan No 3066						
District Sehore						
Location: Ichhawar S/S						
S No	Name of Respondent	Age	Gender	Address	Signature	Remark
1.	Ashok Verma	32	M	Ichhawar	[Signature]	
2.	Ashok Verma	30	M	"	[Signature]	
3.	Bharmendra Bakshi	28	M	"	[Signature]	
4.	Mohan Lal	59	M	"	[Signature]	
5.						

Circle: Rajgarh

Location: Boda Substation

Public Consultation						
Name of Sub Project 1500 KVAR CB						
ADB Loan No 3066						
District Rajgarh						
Location: Boda S/S						
S No	Name of Respondent	Age	Gender	Address	Signature	Remark
1.	Pratul Singh	42	M	Boda	[Signature]	
2.	Dhanraj Vashley	25	M	"	[Signature]	
3.	Pavani Verma	22	M	"	[Signature]	
4.	Rajendra K Sharma	57	M	"	[Signature]	
5.						
6.						

Sub Project: Installation & commissioning of 11 KV 1500 KVAR Capacitor Bank Gwalior Region

Circle: Gwalior

Location: Barai Substation

Public Consultation						
Name of Sub Project Inst. & Comm. of 11KV 1500 KVAR CB						
ADB Loan No 3066						
District Gwalior						
Location: Barai						
S No	Name of Respondent	Age	Gender	Address	Signature	Remark
1.	Snal Kurchhale	20	F	Barai	[Signature]	
2.	Bhawani Shankar	25	M	"	[Signature]	
3.	Naveen Deshpande	30	M	"	[Signature]	
4.						
5.						
6.						

Circle: Bhind

Location: Sarva Substation

Public Consultation

Name of Sub Project: Installation of 11 KV 1500 KVAR CB
 ADB Loan No: 3066 (Bhind Distt)
 District: Sarva ss
 Location: Sarva ss

S No	Name of Respondent	Age	Gender	Address	Signature	Remark
1.	Arvind Bhadga	20	M	Sarva	Arvind Bhadga	
2.	Kansal Jigar	50	M	Sarva	Kansal	
3.	Kansal Tami	47	M	Sarva	Tami	
4.						
5.						
6.						

Circle: Morena

Location: Porsa Substation

Public Consultation

Name of Sub Project: Installation & Comm. of 11 KV 1500 KVAR CB
 ADB Loan No: 3066 (Morena Distt)
 District: Morena 66
 Location: Porsa

S No	Name of Respondent	Age	Gender	Address	Signature	Remark
1.	Yugendra Dubey	20	M	Porsu Village	Yugendra Dubey	
2.	Ashok Kumar	25	M	"	Ashok Kumar	
3.	Susendra Tami	50	M	"	Susendra Tami	
4.	Anil Sharma	30	M	"	Anil Sharma	
5.	R.N. Mishra	41	M	"	R.N. Mishra	
6.						

Circle: Shivpuri

Location: Ratore Substation

Public Consultation

Name of Sub Project: 1500 KVAR CB
 ADB Loan No: 3066
 District: Shivpuri
 Location: Ratore sps

S No	Name of Respondent	Age	Gender	Address	Signature	Remark
1.	Rajendra Mishra	30	M	Ratore	Rajendra Mishra	
2.	Virendra Pandey	27	M	"	Virendra Pandey	
3.	Balveer Kishor	26	M	"	Balveer Kishor	
4.	Bikram Chiswani	65	M	"	Bikram Chiswani	
5.						

Circle: Sheopur

Location: Janpura Substation

Public Consultation						
Name of Sub Project 1500 KV AR LB						
ADB Loan No 3066						
District Sheopur						
Location: Janpura S/S						
S No	Name of Respondent	Age	Gender	Address	Signature	Remark
1.	Sanabbar Ali	24	M	Janpura	Sanabbar Ali	
2.	Keshav Goswami	24	M	- " -	Keshav	
3.	Rambhawan	22	M	- " -	Rambhawan	
4.	Shubhpal Kumar	32	M	- " -	Shubhpal	
5.						

Circle: Guna

Location: Muradpur Substation

Public Consultation						
Name of Sub Project 1500 KV AR CP						
ADB Loan No 3066						
District Guna						
Location: Muradpur S/S						
S No	Name of Respondent	Age	Gender	Address	Signature	Remark
1.	Vinod Dhatad	30	M	Muradpur	Vinod	
2.	Lakhan Pauli	50	M	- " -	Lakhan	
3.	Gopendra Sharma	31	M	- " -	Gopendra	
4.	Imrat Lal	52	M	- " -	Imrat Lal	
5.						

Progress of Sub Project

(01.02.16 to 31.07.16)

Loan No. 3066

(I) NEW 33/11 KV SUBSTATIONS

S. No.	Name of (O&M) Circle	Provision			Status		
		New 33/11 KV Substations (No.s)	33 KV Line (km)	11 KV Line (km)	New 33/11 KV Substations (No.s)	33 KV Line (km)	11 KV Line (km)
I	Bhopal Region						
1.	Bhopal (City Circle)	10	38	25	7	10.64	5.00
2.	Bhopal (O&M)	7	46	56	5	17.55	4.56
3.	Vidisha (O&M)	6	46	42	6	36.76	18.78
4.	Sehore (O&M) Circle	4	28	14	4	18.12	3.10
5.	Rajgarh (O&M) Circle	9	41	28	9	17.12	13.22
6.	Hoshangabad (O&M) Circle	6	48	30	6	35.94	8.59
7.	Betul (O&M) Circle	7	45	40	6	14.77	9.16
	Total	49	292	235	43	150.9	62.41
II	Gwalior Region						
1.	Gwalior City Circle	3	30	10	3	2.35	5.41
2.	Gwalior (O&M) Circle	5	39	20	5	24.85	14.37
3.	Guna (O&M) Circle	5	46	26	5	31.17	12.24
4.	Shivpuri (O&M) Circle	2	13	12	2	2.50	5.00
5.	Sheopur (O&M) Circle	5	34	26	5	22.29	4.86
6.	Bhind (O&M)	3	33	18	2	3.50	2.10
7.	Morena (O&M) Circle	7	51	35	6	28.95	17.82
	Total	30	246	147	28	115.61	61.8
	Grand Total	79	538	382	71	266.51	124.21

(II) Automatic Capacitor Bank 11 KV, 1500 KVAR

S.No.	Name of (O&M) Circle	Automatic Capacitor Bank 11 KV, 1500 KVAR (Nos.)	
		Provision	Status
I	Bhopal Region		
1.	Bhopal (City Circle)	10	10
2.	Bhopal (O&M)	15	15
3.	Sehore (O&M) Circle	15	15
4.	Vidisha (O&M)	17	17
5.	Rajgarh (O&M) Circle	20	20
6.	Hoshangabad (O&M) Circle	29	29
7.	Betul (O&M) Circle	30	30
	Total	136	136
II	Gwalior Region		
1.	Gwalior City Circle	8	8
2.	Gwalior (O&M) Circle	40	40
3.	Morena (O&M) Circle	31	31
4.	Bhind (O&M)	23	23
5.	Shivpuri (O&M) Circle	30	30
6.	Sheopur (O&M) Circle	29	29
7.	Guna (O&M) Circle	34	34
	Total	195	195
	Grand Total	331	331

Summary of Sub Project
(01.02.16 to 31.07.16)

(I) NEW 33/11 KV SUBSTATIONS

S. No.	Name of (O&M) Circle	Provision			Status (No.s)			Progress (%)		
		New 33/11 KV S/S (No.s)	33 KV Line (km)	11 KV Line (km)	New 33/11 KV S/S (No.s)	33 KV Line (km)	11 KV Line (km)	New 33/11 KV S/S	33 KV Line (km)	11 KV Line (km)
I	Bhopal Region									
1.	Bhopal (City Circle)	10	38	25	7	10.64	5.00	70	28.00	20.00
2.	Bhopal (O&M)	7	46	56	5	17.55	4.56	71	38.15	8.14
3.	Vidisha (O&M)	6	46	42	6	36.76	18.78	100	79.91	44.71
4.	Sehore (O&M) Circle	4	28	14	4	18.12	3.1	100	64.71	22.14
5.	Rajgarh (O&M)	9	41	28	9	17.12	13.22	100	41.76	47.21
6.	Hoshangabad (O&M)	6	48	30	6	35.94	8.59	100	74.88	28.63
7.	Betul (O&M) Circle	7	45	40	6	14.77	9.16	86	32.82	22.90
	Total	49	292	235	43	150.9	62.41	88	51.68	26.56
II	Gwalior Region									
1.	Gwalior City Circle	3	30	10	3	2.35	5.41	100	7.83	54.10
2.	Gwalior (O&M)	5	39	20	5	24.85	14.37	100	63.72	71.85
3.	Guna (O&M) Circle	5	46	26	5	31.17	12.24	100	67.76	47.08
4.	Shivpuri (O&M)	2	13	12	2	2.5	5.00	100	19.23	41.67
5.	Sheopur (O&M)	5	34	26	5	22.29	4.86	100	65.56	18.69
6.	Bhind (O&M)	3	33	18	2	3.5	2.1	67	10.61	11.67
7.	Morena (O&M)	7	51	35	6	28.95	17.82	86	56.76	50.91
	Total	30	246	147	28	115.61	61.8	93	47.00	42.04
	Grand Total	79	538	382	71	266.51	124.21	90	49.54	32.52

(II) Automatic Capacitor Bank 11 KV, 1500 KVAR

S.No.	Name of (O&M) Circle	Automatic Capacitor Bank 11 KV, 1500 KVAR (Nos.)		
		Provision	Status (No.s)	Progress (%)
I	Bhopal Region			
	Bhopal (City Circle)	10	10	100
	Bhopal (O&M)	15	15	100
	Sehore (O&M) Circle	15	15	100
	Vidisha (O&M)	17	17	100
	Rajgarh (O&M) Circle	20	20	100
	Hoshangabad (O&M) Circle	29	29	100
	Betul (O&M) Circle	30	30	100
	Total	136	136	100
II	Gwalior Region			
	Gwalior City Circle	8	8	100
	Gwalior (O&M) Circle	40	40	100
	Morena (O&M) Circle	31	31	100
	Bhind (O&M)	23	23	100
	Shivpuri (O&M) Circle	30	30	100
	Sheopur (O&M) Circle	29	29	100
	Guna (O&M) Circle	34	34	100
	Total	195	195	100
	Grand Total	331	282	100

Establishment of Environmental Safeguard Management Unit (ESMU)

**OFFICE OF THE CHAIRMAN & MANAGING DIRECTOR****M. P. Madhya Kshetra Vidyut Vitaran Co. Ltd.**

(Wholly Owned by Government of M.P. Undertaking)

NISHITA PARISAR GOVINDPURA BHOPAL, 462023

☎ Phone no.91-755-2602033/2602034 Fax no. 91-755-2589821

No. CMD/MK/ADB CELL/ 7-3-74

Date 5/5/2010

ORDER

As per the provisions of ADB Loan agreement no.2247 & 2530, the requirement of establishment of environmental and social management unit (ESMU) is mandatory to review the environmental and social safeguards under the area covered under project financed by ADB. In order to fulfill the above requirement, an Environmental Social Management Unit (ESMU) in Central Discom headed by C.G.M.(ADB Cell) is hereby established consisting of the following officers.

Corporate Office

Dy. C.G.M. (ADB Cell)

G.M. (P.O.R. Cell)

Addl. G.M. (ADB Cell)-2

Dy. G.M. (ADB Cell)

Field office

G.M. (Bhopal O&M Circle)

G.M. (Bhopal City Circle)

G.M. (Vidisha O&M Circle)

G.M. (Sehore O&M Circle)

G.M. (Rajgarh O & M Circle)

G.M. (Hoshangabad O & M)

G.M. (Betul O&M Circle)

G.M. (Gwalior O & M City Circle)

G.M. (Gwalior City Circle)

G.M. (Dana O&M Circle)

G.M. (Morena O & M Circle)

G.M. (Bhind O& M Circle)

G.M. (Shivpuri O&M Circle)

The unit will look after the environmental and social management in the areas where the ADB financed projects are going on in accordance with Environment Management Plan submitted to ADB.

[Signature]
Chief General Manager (ADB Cell)

Appl/Letter

Establishment of Grievance Redressed Committee (GRC)

**OFFICE OF THE CHAIRMAN & MANAGING DIRECTOR****M. P. Madhya Kshetra Vidyut Vitaran Co. Ltd.***[Wholly Owned by Government of M.P. Undertaking]***NISHTA PARISAR GOVINDPURA BHOPAL. 462023****Phone no. 91-755-2602033/2602034 Fax no. 91-755-2589021**

No. CMD/MK/PMU/ 38

Date 14/5/2010

To,

The General Manager**City / (O&M) Circle**Sub:- **Environmental Monitoring - follow up action.**

Ref:- This office order no. CMD/MK/ADB Cell/71-74 Bhopal dated 5.5.2010.

As per Para C(20) of E&RF of ADB and as desired in the email dated 5.05.2010 received from Mr. Molly George Environmental Specialist, ADB (INRM New Delhi, you are advised to constitute a GRC (Grievance Redressed Committee) at your circle level in each of subproject location with representation from local authorities, affected parties, and well reputed person from health, education sectors. Environmental Officer shall represent our company at circle level in the committee.

You are also advised to comply all the instruction as desired by ADB Environmental Specialist Mr. Molly George as given in the Annexure and send the compliance report to this office within 15 days.

Encl:- Annexure

CHIEF GENERAL MANAGER (ADB Cell)

Copy to:

1. The C.G.M. (HR Region & CR Region) for information.
2. Mr. Thevakumar Kandiah, Director Energy Division, South Asia Department (SAEN) Asian Development Bank, P.O. box 700, Manila Philippine 1000

May/Letter

10/5/10

10/5/10

Photographs (Project Status & Public Consultation)
Sub Project: Construction of New 33/11 KV Substations
(01.02.16 to 31.07.16)
Bhopal Region

Circle: Hoshangabad

Location: Nandwada Substation Tehsil Pipariya



New 33/11 KV substation at nandwara village



Construction of Control Room & Control pannels



Installation of 33 & 11 KV Feeder and incoming and outgoing lines



Public Consultation at village Nadwara, District Hoshangabad

Circle: Betul

Location: Rampur substation



Construction of New 33/11 KV substation & Control Room at Rampur



Installation of Transformer



Installation of incoming & outgoing lines



Installation of Control Pennels



Installation of Fencing



Public Consultation at village Rammpur, District Betul

Circle: Bhopal City

Location: MVM (MLA Guest House) Substation



Installation of Main Gate & Signage Board at New 33/11 KV MVM (MLA Guest House) Substation



Construction of Control Room and Installation of Control Panel



Installation of Transformer, 33 & 11 KV Feeder, ME and incoming and outgoing lines



Consultation with MPMKVCL Staff at MVM (MLA Guest House) Substation

Circle: Rajgarh

Location: Harsod (Suthaliya) substation



Installation of Signage Board, Main gate and Fencing at New 33/11 KV substation at Village Harsod



Construction of Control Room



Installation of Control Panel



Installation of Transformer, ME and incoming 33 KV & outgoing 11 KV Lines



Installation of Cable Tranche, Bore well and Public consultation at village Harsod

Circle: Vidisha

Location: Kakrawada (Dabar Gaon) Substation



Installation of Signage Board, Main gate & Fencing at New 33/11 KV Kakrawada Substation



Construction of Control Room and Installation of Control Panel and Cable Tranche



Installation of Incoming 33KV and outgoing 11 KV lines, ME & Power transformer



Installation of 33KV and 11 KV Feeders & Consultation with MPMKVVCL staff

Gwalior Region
Sub Project: Construction of New 33/11 KV Substations

Circle: Gwalior

Location: Science College



Installation of Signage Board, Main Gate and Control Room and bouandry wall around the Substation



Installation of Control Panel, Battery Bank, Input-Output, Battery Charger



Installation of Transformer and Installation of ME, incoming 33 KV & outgoing 11 KV Lines



Public Consultation at New Substation Science College

Circle: Bhind

Location: Kanathar Substation



Construction of New 33/11 KV Substation at Kanathar & Sinage Board , Main gate and Fencing



Installation of Power transformer, incoming 33 KV , outgoing 11 KV Lines



Installation of Control Room & Control Pennel



Public Consultation with Locals

Location: Rajodha Substation



Construction of New Control room, Installation of Main Gate, Singnage Board and Fencing at 33/11 KV Rajodha Substation



Installation of control Panel, battery bank and fire safety



Installation of Power Transformer, incoming 33 KV , outgoing 11 KV Lines & Distrubution Transformer



Consultation with MPMKVCL Staff & others

Circle: Shivpuri

Location: Kheru Hotel (Badori) Substation



Installation of Signage Board and Main Gate at New 33/11 KV Kheru Hotel Substation



Installation of Fencing and Construction of Control Room



Installation of 33/11 KV Lines, feeders, Power Transformer and ME



Consultation with MPMKVVCL Staff at Badori Substation

Circle: Sheopur

Location: Radep Substation



Installation of Signage Board and Main Gate at New 33/11 KV Radep Substation



Installation of Bore Well and Fencing



Construction of New Control room and Installation of Control Panel



Installation of Power Transformer, 33/11 KV lines, ME and Feeders



Public consultation at village Radep

Circle: Guna

Location: Pathi Substation



Construction of New Control, Installation of Main Gate and Fencing at Pathi Substation



Installation of Signage Board, Contol Panel, Battery bank and Meter box



Installation of 33/ 11 KV lines, Feeder, ME and Power transformer and Public Consultation at village Pathi

**Sub Project: Installation & commissioning of 11 KV 1500 KVAR Capacitor Bank
Bhopal Region**

Circle: Hoshangabad

Location: Rani Pipariya substation



Installation of 1500 KVAR Capacitor Bank & Control panel at Rani Pipariya Substation and Public Consultation

Circle: Betul

Location: Malajpur Substation



Installation of Capacitor Bank & Control Panel at Malajpur Substation

Circle: Bhopal
Location: MP Nagar



Installation of Capacitor Bank & Control Panel at MP Nagar Substation and Public Consultation

Circle: Vidisha
Location: Sirnota



Installation of Capacitor Bank & Control Panel at Sirnota Substation and Public Consultation

Circle: Sehore
Location: Ichhawar



Installation of Capacitor Bank & Control Panel at Ichhawar Substation and Public Consultation

Circle: Rajgarh
Location: Boda



Installation of Capacitor Bank & Control Panel at Boda Substation and Public Consultation

Sub Project: Installation & commissioning of 11 KV 1500 KVAR Capacitor Bank **Gwalior Region**

O & M Circle: Gwalior
Location: Barai Substation



Installation of Capacitor Bank & Control Panel at Barai Substation and Public Consultation

O & M Circle: Bhind
Location: Sarva Substation



Installation of Capacitor Bank & Control Panel at Sarva Substation and Consultation with Locals

O & M Circle: Morena
Location: Porsa Substation



Installation of Capacitor Bank & Control Panel at Substation and Public Consultation with locals

Circle: Shivpuri

Location: Ratore Substation



Installation of Capacitor Bank & Control Panel at Ratore Substation and Public Consultation

Circle: Sheopur

Location: Janpura



Installation of Capacitor Bank & Control Panel at Janpura Substation and Public Consultation

Circle: Guna

Location: Muradpur



Installation of Capacitor Bank & Control Panel at Muradpur Substation and Public Consultation