



Environmental Monitoring Report

Project Number: 32298-05
January 2010

IND: Madhya Pradesh Power Sector Investment Program

Prepared by

Madhya Pradesh Poorv Kshetra Vidyut Vitaran Company Limited (DISCOM-E), Jabalpur

For

Executing Agency

Madhya Pradesh Poorv Kshetra Vidyut Vitaran Company Limited (DISCOM-E), Jabalpur

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Asian Development Bank

Environmental Monitoring Report

Loan Number: 2347-IND

Reporting period: March 2008 - December 2009

MADHYA PRADESH POWER SECTOR INVESTMENT PROGRAM

Prepared by: Madhya Pradesh Poorv Kshetra Vidyut Vitaran
Company Limited (DISCOM-E), Jabalpur

Implementing Agency: Madhya Pradesh Poorv Kshetra Vidyut Vitaran
Company Limited (DISCOM-E), Jabalpur

Executing Agency: Madhya Pradesh Poorv Kshetra Vidyut Vitaran
Company Limited (DISCOM-E), Jabalpur

Date: January 2010

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1. Introduction

1. The Government of Madhya Pradesh (GoMP) through Government of India (GoI) has availed a multi-tranche financing facility from Asian Development Bank (ADB) to fund the power sector investment program in the State of Madhya Pradesh. The investment program will cover physical investments in generation (including renewable energy), transmission, distribution, energy efficiency, and non-physical investments in management information system and other areas (e.g., capitalization of a state energy conservation fund). A part of the fund is being utilized for the upgradation and improvement of the distribution networks coming under the jurisdiction of three distribution companies in the State. The Madhya Pradesh Poorv Kshetra Vidyut Vitaran Company Limited (DISCOM-E), Jabalpur is implementing various schemes under Tranches III, IV and V approved by Loan agreement Nos.2324, 2347 and 2520. The details of sub-projects undertaken under Tranche IV are presented in Table 1.1.

Table 1.1: Projects Undertaken by DISCOM-W under Tranche IV and Present Status

Sl. No.	Loan No.	Details of sub-projects	Progress achieved so far
1	2347-IND	Laying of 751 km 11 kV lines and installation of 609 Nos 25 kVA DTRs for segregation of domestic and agriculture consumers in rural area of Sagar District.	28%
		Installation of single-phase meters for 70,000 consumers; and three phase meters for 12,500 consumers including shifting of existing meters to accessible location and replacement of service lines	9%
		Installation of 33kV and 11 kV circuit breakers and renovation of 233 nos. of 33/11 kV substations	5%

2. The major activities proposed under various sub-projects under Tranche IV include laying of 751 km of 11 kV lines and installation of distribution transformers for segregation of agriculture and domestic supplies in rural area of Sagar District, installation of single phase and three phase meters, relocating the existing meters to accessible locations, installation of 11 kV and 33 kV circuit breakers, renovation of 33/11 kV substations etc. The overall objective of the Investment Program is to address power sector issues and provide a solid foundation for the sustainable growth of the power sector in the State of Madhya Pradesh including the area coming under the jurisdiction of DISCOM E. The project will (i) improve quality and reliability of power; (ii) remove transmission bottlenecks; (iii) facilitate in-state and interregional power transfers; (iv) facilitate a reduction in overall system losses; (v) improve energy efficiency, expand renewable energy capacity, and capitalize related carbon market opportunities; and (vi) improve utility operational and financial performance. During the project preparation stage, environmental assessment of the project was carried out as per the Environmental Assessment and Review Framework (EARF) and the project is categorized as Environment Category B. Based on the environment assessment an Environment Management Plan (EMP) was prepared which was

approved by ADB. The EMP is being implemented along with the project. The implementation of Tranche IV of the project started with the signing of Loan Agreement No.2347 on 3 March 2008 and is at various stages of implementation. The works connected with segregation of agricultural and domestic lines were completed upto 25%. The renovations of substations were completed about 5% and installation of meters upto 9%. The status of implementation of Tranche IV is presented in column 4 of Table 1.1. The sub-projects under Loan 2520 are under bidding stage and physical implementation is yet to be started.

2. Compliance status with National /State /Local statutory environmental requirements

3. The loan agreement of the project requires the Executing Agency to implement the project and operate and maintain the project facilities in compliance with the Initial Environmental Examination (IEE), Environment Assessment and Review Framework (EARF), ADB's Environment Policy (2002), and Environmental Regulations of the Country applicable to the project. Hence the sub-projects are to be implemented strictly in compliance with the environmental laws of the country. The IEE and EARF prepared for the project had identified the environmental regulatory requirements of the project undertaken by DISCOM-E, which is summarized and presented in Table 2.1. The compliance status with environmental regulatory requirements is presented under column 3 of Table 2.1.

Table 2.1: Environmental Regulatory Requirements of the Projects and Present Status

Sl. No.	Environmental Regulatory Requirements	Status of Compliance
1	Environmental clearance from MoEF under the Environmental Impact Assessment Notification 1994	Distribution projects are not included in the Schedule of Projects requiring environmental impact assessment (EIA) and environmental clearances from MoEF. Hence project does not require EIA clearance.
2	Scrap batteries are to be disposed of as per the Batteries (Management and Handling) Rules	Scraped equipments are disposed through Metal Scrap Trading Corporation (MSTC), a Government of in Undertaking. Scrap batteries are not generated from the present sub-projects activities. Obtained authorization from MPPCB under Hazardous Waste (Management and Handling) Rules for the disposal of scrap batteries by sale to authorized persons.
3	Used / burned transformer oils to be disposed of in accordance with the Hazardous Waste (Management and Handling) Rules	Burnt/used oil is being disposed off through M/s. Divya Refineries Pvt. Ltd, Satna having valid authorization under Hazardous Waste Rules 1989 (3074/RO/MPPCB/HSMD/E/07 dated 29 November 2007) from MPPCB and Registration Certificate-Pass Book for Re-refining/recycling of hazardous wastes from CPCB. Obtained authorization from MPPCB under Hazardous Waste (Management and Handling) Rules for the disposal of burnt/used oil through sale to authorized persons.
4	Avoid equipments using PCBs and CFCs Ozone Depleting Substances Rules	The equipments to be purchased under the project do not use PCB or CFC

4. The used oil/burned oil generated from the discarded equipment as well as from the existing facilities are being reprocessed through authorized recycler and reused in our transformers and disposed to outside agencies. The State Pollution Control Board had issued authorization to DISCOM-E for the disposal of hazardous wastes including the used batteries through sale to authorized reprocessors / refiners registered with MoEF/CPCB. The scrap materials from the existing sub-stations are being disposed through MSTC, a Government of India Undertaking and having ISO certification. MSTC auctions the hazardous scrap materials only to agencies having authorization from MPPCB and registration with MoEF. Scrap materials generated from the present sub-project activities do not contain scrap batteries. The new sub-stations being established or the existing sub-stations do not generate any trade effluent or air pollutant into the atmosphere. Hence the consent of the MPPCB is not required for establishing and operating the sub-stations.

3. Compliance status with the environmental covenants

5. DISCOM-E is implementing projects under Tranche IV approved under loan agreement no. 2347. According to the loan agreement, the EA should ensure that sub-projects are not located within national park and wildlife sanctuaries and monuments of cultural and historical importance should be avoided. The subprojects were designed after detailed field surveys to ensure strict compliance with the above conditions. The sub-projects sites are not passing through any wildlife sanctuary or national park. No sensitive area or monuments of cultural and historical importance is affected by the project activities. The projects are being planned, designed, and implemented in complying with the other conditions of the loan agreement. The environmental compliance requirements as per the Loan Agreement and its compliance status is summarized and presented in Table 3.1.

Table 3.1: Environmental Compliance Requirements as per Agreement and Present Status

Sl. No.	Loan Agreement Reference	Environmental Compliance Requirements	Compliance Status
1	Schedule 5, item 26 of Loan Agreement	Implement the project strictly in compliance with IEE, EARF, ADB's Policy and environmental regulations of the country	Complied with the extent as reported in column 3 of Table 2.1
2	Schedule 5, item 27 of Loan Agreement	IEE with EMP shall be prepared. None of the sub-projects falls under category A or B sensitive. Approved IEE and EMP are to be followed during the design, construction and operation phases of the project. EMP should form part of bidding document	IEE with EMP has been developed. All the sub-projects fall under Category B. Special Conditions of contract Clause 9.8 and 9.9 were added to the General Conditions of Contract detailed in section 7 of the bid document.
3	Loan Agreement Schedule 5, item 28	Monitor, audit and report twice a year on the implementation of EMP	The contractor was made responsible for implementation, monitoring and reporting of the EMP by adding clause 9.8 and 9.8 to the GCC. This is the first

			report and action has been taken to submit the half yearly report in time in future.
4	Loan Agreement Schedule 5, item 29	Ensure that sub-projects are not located within national parks and wildlife sanctuaries	Detailed surveys were carried out before finalizing the sub-project locations and ensured that no encroachment into national parks and wildlife sanctuaries.
5	Loan Agreement Schedule 5, item 29	Ensure that monuments of cultural or historical importance are avoided and the developed EMP with adequate budget is implemented for the sub-project	Detailed surveys were carried out before finalizing the sub-project locations and ensured that no monuments of cultural or historical importance are affected. EMP with adequate budget was developed during the project formulation stage and the approved EMP was made part of the contract document
6	Schedule 5, item 33 of Loan Agreement	EA shall prepare quarterly progress reports and submit these reports to ADB within 30 days of the end of each quarter. These reports shall provide a narrative description of progress of compliance with environmental and social requirements including EMP and RF.	Environment and Social Cell has been created. The Cell will be entrusted to take action to add a brief summary of compliance with environment and social requirements in the quarterly reports in future

6. The sub-projects were identified and project prepared in complying with the EARF. Initial Environmental Examination (IEE) was carried out for the sub-projects and an EMP developed prior to the signing of Loan Agreement. The EMP approved by ADB was included in the bid document and the responsibility of EMP implementation and monitoring of EMP implementation were entrusted with the contractor of the project. The implementation of the EMP by the contractor will be monitored by the field officers of the Project Implementation Unit (PIU). Environment and Social Cell was created at the Head Quarters of DISCOM-E on 10 November 2009 to overview and audit the implementation of EMP by the contractor and to co-ordinate activities related to the EMP implementation and monitoring at various levels. The Environment and Social Cell started functioning at the Head Office from November 2009 onwards. A monitoring system will be developed and the implementation of EMP will be monitored on regular basis. Documentation of monitoring activities at various level will be ensured during implementation in future.

7. As majority of the works under the project are renovation and/or upgradation of the existing system, much environmental impacts are not experienced during the implementation of the sub-projects. No complaints about environmental impact caused by the sub-project activities were received so far. Hence the grievance redress committee was not constituted. Action is being taken to constitute grievance redress committee at each circle level with

representation from the stakeholders to address complaints, if any, raised by the public. Complaint register will be maintained at each local project office for registering the complaints.

8. As per Schedule 5, item 32 of the Loan Agreement, all future sub-projects are to be planed and implemented in accordance with the EARF approved for the project. The initial examination was carried out for the project and an EMP was prepared for the project. The EARF also requires EA to take certain measures for the efficient monitoring and evaluation of compliance with the environmental requirements of the project. The detailed alignment survey reports were scrutinized by the project staff of DISCOM-E and ensured that the sub-project activities will not have any impact on the environment. In addition, the EARF requires the EA to take measures as detailed in Table 3.2 while planning and implementing this Tranche. The status of implementation and proposal for improvements are also detailed in column 4 of Table 3.2.

Table 3.2: Requirements under EARF and its Compliance Status

Sl.No.	EARF Reference	Compliance Requirement	Compliance Status / Future Action
1	F, Para 18	Environmental and Social Management Unit will be created within the DISCOM headed by concerned head of the company which will be accountable and responsible for implementation of EMP.	Environment and Social Cell was created at the Head Quarters of DISCOM-E on 10 November 2009 to overview and audit the implementation of EMP by the contractor and to co-ordinate activities related to the EMP implementation and monitoring at various levels
2	G, Para 20	A Grievance Redressal Committee (GRC) will be constituted in each sub-project location to address all concerns and grievances of the local communities and affected parties.	No complaints received so far and hence not constituted. Action is being taken to constitute the committee immediately.
3	H, Para 21	An independent monitoring agency will be hired by the EA for undertaking external monitoring of all projects within three months of loan approval.	Action is being taken to engage an independent agency for undertaking external monitoring of implementation of the sub-projects under this Tranche.

9. DISCOM-E, through its PMU and PIU is supervising the implementation of all the sub-projects adopting best available construction practices and ensuring minimum or no impact to the environment. Hence there was no complaint from the public against the project activities. Even then, DISCOM-E will take immediate steps as detailed above to improve the implementation of EMP more effectively.

4. Compliance status with environmental management and monitoring plan

10. Major activities being implemented under Tranche IV of the project are renovation and upgradation of existing distribution system and thereby enhancing the capacity and efficiency of the distribution networks in the project

area. For the sub-project activities, the land available with the Government or DISCOM is being utilized. No land acquisition is required under this Tranche. Main activities are supply and erection of transformers, meters and other equipments. Hence not much civil construction works are to be carried out. Therefore not much environmental issues are created during the implementation of the Tranche. The contractors entrusted with the implementation of the sub-projects under this Tranche were instructed to adopt the best available technologies and construction practices and thereby ensuring with the mitigation measures specified in the EMP. The mitigation measures suggested in the EMP and its implementation status are presented in Table 4.1.

Table 4.1: Environment Management Plan and the Status of Implementation

Sl. No	Mitigation Measures	Status of Implementation	Measures proposed for Improvement
1	PCBs not used in transformers or other project facilities or equipments Processes, equipment and systems not to use chlorofluorocarbons (CFCs), including halogen Use of PCBs and CFCs in the existing systems should be phased out and to be disposed of in a manner consistent with the requirements of the government	Transformers or other project facilities or equipments do not use PCBs or CFCs. Phased out materials are disposed off through approved agencies as per the authorization issued by MPPCB under the hazardous Wastes Rules. Latest BIS or equivalent international standard is specified for all equipments and project facilities.	---
2	Careful route selection to avoid existing settlements	As part of the detailed survey and line alignment selection, consultations with local people were carried out.	---
3	Involuntary resettlement or land acquisition	Involuntary resettlement or land acquisition not required for this project. No action required.	---
4	Avoid encroachment into precious ecological areas by careful site and alignment selection	No ecologically sensitive area involved. No action required.	---
5	Avoid encroachment into forestland.	No forestland is involved enroute the line. No action required.	---
6	Avoid encroachment into farmland	Detailed survey and line alignment selection were made with minimum impact or no impact on farmland. No claim/complaint received about the impact on farmland.	Compensation will be paid, in case of any encroachment into farmland.
7	Better design to ensure noise will not be a nuisance	The transformers and equipments required for the project will not create noise. Latest BIS or equivalent international standard is specified for all equipments and project facilities. No action required	---
8	Appropriate placement of poles to avoid	In majority of the cases, the line alignment finalized along	---

	drainage/channel interference	the existing line without affecting the natural drainage During detailed survey, consultations were made with local people.	
9	Equipment specification with respect to potential pollutants	Equipments purchased under the project do not contain PCB or CFC. Latest BIS or equivalent international standard is specified for all equipments and project facilities.	---
10	Construction technique and machinery selection to minimize noise disturbance	No heavy equipments used in the construction Best and modern construction practices followed by the contractor No work carried out during night hours.	---
11	Construction activities to be scheduled to avoid disturbance to farming activity	Works were carried out after harvesting to avoid any damage to farming activities Contractor is made responsible for ensuring avoidance of disturbance to farming activities. No complaint from farmers regarding damage of farming activities	Complaint monitoring system will be developed and implemented to improve the complaint handling mechanism. Compensation will be given in case of any disturbance to farming activities in future.
12	Construction equipment to be well maintained and turn of the plant not in use to avoid noise, vibration and operator safety.	EMP included in the bid document and the contractor uses equipments and vehicles complying with environmental standard No heavy equipment/vehicle is employed in the construction works. Project works are being carried out only during daytime	Contractor has to obtain prior permission from the Project Managers for working in nighttime, if urgency arises in future.
13	Existing roads and tracks used for construction and maintenance access to the line	EMP included in the bid document. The contractor has not constructed any new access road for these project activities.	----
14	Marking of vegetation to be removed prior to site clearance and strict control on clearance activities to ensure minimal clearances.	EMP included in the bid document Marking of vegetation to be cleared is being done during the detailed survey and line alignment selection. No trees cut/removed for the project.	Compensatory afforestation, in case of any trees or plants cut or removed in future.
15	Trees allowed growing up to a height within the ROW by maintaining adequate clearance between the top of tree and the regulator as per the regulations. Trees that can survive	EMP included in the bid document. No trees cut/removed for the project As existing LT lines are converted into HT lines, the trimmings of branches of trees	Monitoring and record keeping will be improved.

	pruning should be pruned instead of clearing.	are to be required only as operation and maintenance activity.	
16	Construction workers prohibited from harvesting wood in the project area	Included on the bid document No labour camps established for the project Contractor employs local labours generally	---
17	Dispose scrap materials such as batteries, transformers, conductors, capacitors etc in environmentally sound manner	Obtained authorization from MPPCB for the disposal of hazardous materials and scrap batteries. Scraped equipments are disposed through Metal Scrap Trading Corporation (MSTC) Used /burnt oil are disposed off through agency having valid authorization from MPSPCB	----
18	Tree clearances for easement establishment to only involve cutting trees off at ground level	EMP included in the bid document. No trees cut/removed for the project	---
19	Excavated earth to be stored and reused for back filling	Adopting good construction practices Incorporated in contract document Only minor civil construction works involved.	---
20	Fuels and other hazardous materials to be stored above high flood level	Adopt good construction practices. Incorporated in contract document.	---
21	Noisy construction activities shall be carried out during day time	Adopting good construction practices Incorporated in contract document. Project works are being carried out only during daytime	Contractor has to obtain prior permission from the Project Managers for working in nighttime, if urgency arises.
22	Construction workforce facilities to include proper sanitation, water supply and waste disposal facilities	No workers camp established Local workers were employed as far as possible No complaints received so far	--
23	Existing irrigation facilities are to be maintained Use existing access roads for transportation of materials Protect/preserve top soil and reinstate after construction completed Repair/reinstate damaged bunds etc after construction	Adopted good construction practices Incorporated in contract document Only minor civil construction works involved.	---
24	Take measures to prevent erosion and /or silt run off Limit site clearing to work area Regeneration of vegetation to stabilize work areas on completion	Adopted good construction practices Incorporated in contract document Only minor civil construction works involved.	---

	Avoidance of excavation in wet season. Water courses protected from siltation through use of bunds and sediments ponds.		
25	Careful construction practices to avoid loss to neighboring properties Productive land to be reinstated after construction Compensation for loss of production	Incorporated in contract document and implemented through contractor No complaints received regarding loss of neighbouring land uses.	---
26	Existing borrow sites will be used to source aggregates therefore no need to develop new sources for aggregates.	Incorporated in contract document and implemented through contractor No borrow site developed for the project.	---
27	Ensure health and safety of workers	Incorporated in contract document and contractor is providing measures as per the existing laws. No complaint from workers received regarding the facilities provided	----
28	Training to the DISCOM environmental monitoring personnel	Time to time the persons involved in field were educated regarding environmental issues	Proper record of training will be maintained A plan for training the staff and workers will be drawn up and implemented
29	Effective environmental monitoring system using checklist	Environmental Cell formed and monitoring the progress of implementation of EMP is being carried out	Check list will be prepared and maintained by the contractor and the DISCOM
30	Creation of Environment and Social Cell at headed by Chief Officer of DISCOM for implementation and monitoring of EMP	Environmental and Social Cell created as per per Order No.DISCOM/EZ/WS/ADB/6623 dated 10-11-2009	The activities of Environmental and Social Cell will be streamlined.

11. The mitigation measures proposed in the EMP are generally followed by the contractor while implementing the sub-projects. Monitoring and recording of the progress of implementation requires improvement. In order to further improve the monitoring and reporting of implementation of EMP, the newly created Environment and Social Cell will closely monitor the physical progress of implementation of EMP by the Contractor. An Officer each from the field offices will be designated as Environmental Officer and he will be made responsible for monitoring and recording the progress in a systematic way. The Environment and Social Cell will overview and co-ordinate the monitoring activities. The contractor will also be instructed to designate an Officer as Environment Officer and he will be made responsible for ensuring the implementation of EMP. A check list system will be developed for improving the efficiency of the monitoring and will be followed at all levels. Proper training will be given to the staff of contractors and Officers of DISCOM in implementation and monitoring of EMP.

5. Approach and methodology for environmental monitoring of the project

12. The IEE has identified the major environmental issues likely to be occurred during the implementation of the project as air pollution due to release of chemicals and gases from equipments, encroachment into ecologically sensitive area, loss of agriculture, noise and vibration during construction and movement of vehicles, increase in air borne dust, trimming and cutting of trees, pollution from scrap transformers, batteries, spillage of fuel and transformer oil, contamination from disposal of wastes from labour camps, etc. The impacts due to the siting of the sub-project components and alignment of lines were minimised by consultation with the local authorities and people, forest, revenue and other concerned government agencies during the detailed site selection surveys. The alignments of the lines were finalized keeping adequate clearance from designated forest, national park and wildlife sanctuary. The contractor's detailed alignment survey reports were reviewed at the Project Office and ensured that the line alignments are not encroaching into any national park or wildlife sanctuary. The EMP prepared for the project was made part of the contract document and the contractor is entrusted with regular monitoring and reporting of implementation of EMP. The Environment and Social Cell created recently will take necessary action to strengthen the monitoring activities. As the civil construction works under the project are very low, the environmental pollution warranting monitoring of ambient air quality, surface water quality and noise level were not experienced. Environmental quality monitoring will be conducted only at places where public complaint arises. Complaints from the affected person were identified as the performance indicator. No complaints were received so far against the alignment selection and impact due to the construction activities under the project. So no environmental quality monitoring was carried out. In order to streamline the monitoring system, the grievance redress committee will be constituted soon with stakeholder's participation. Contractor will be responsible for handling public complaints regarding environmental/social related matters. All public complaints will be entered 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. The register of all complaints is to be transferred to the concerned Project Manager of DISCOM within 48 hrs of their receipt, with the action taken by the contractor on the complaints. All the complaints received will be placed before the grievance redress committee and the decision of the committee will be implemented. The complaint register shall be placed at a convenient place, easily accessible by the public.

6. Monitoring of environmental receptors/ attributes

13. As discussed above, the chances of environmental pollution caused by the project activities are very low. No heavy vehicles or equipments are engaged for the civil construction activities. Hence not much noise or dust pollution was created during the construction activities. Major activities under the project are being carried out on open land. No sensitive establishment or residential building located near to the site. Most of the works were carried out within the existing substations or all along the existing lines. The sub-project activities do not cause any air or noise pollution to the people of the locality. No complaints were

received so far against the site selection or damages or nuisance caused due to the construction activities. Hence no ambient environmental quality monitoring was carried during the periods under consideration. In case any work in future has to be carried out near to any sensitive establishment or through residential complex, baseline as well as real time environmental quality monitoring will be arranged through agencies approved by the Madhya Pradesh State Pollution Control Board.

14. The physical progress of implementation of the EMP was monitored through the contractor. The Environment and Social Cell recently created will closely monitor the compliance of the contractor in implementing the EMP. An environmental performance monitoring and reporting system will be developed and implemented to ensure that the works under this Tranche will be carried out without causing any environmental problem to the people living adjacent to the project sites.

7. Any other environmental aspects, impacts observed during implementation

15. The sub-project activities, especially the segregation of approximately 751 km of 11kV line to separate agricultural feeders from village feeders has to be carried out partly through agricultural fields. The works can be carried out only after the harvesting. The contractor is taking care to avoid any damage to the agriculture. In order to meet the time schedule, the contractor may carry out the works prior to the harvesting leading to crop damage. The Environment and Social Cell will be more vigilant and ensure that the work will be carried out only after harvesting.

16. Though the mitigation measures suggested in the EMP are being implemented as part of the project, proper documentation is lagging. The documentation of EMP implementation at contractor's level will be streamlined with the introduction of checklist system and providing training. The functioning of the Environment and Social Cell will improve the monitoring system and ensure effective implementation of EMP.

8. Grievance Redress Committee and complaints received from public and actions taken thereof

17. As per the EARF, a grievance redress committee with representation from all stakeholders for the project to address grievances of APs concerning resettlement, environment and other social issues will have to be created. Since no complaints were received so far, the creation of grievance redress committee was delayed. Action is being taken to create a grievance redress committee at each circle level with representation from local authorities, affected parties, and well-reputed persons from health, education sectors. This committee will address the project related grievances of local communities and the affected parties and will provide them a public forum to raise their concern or objections. A senior official from DISCOM-E at circle level will represent EA. The grievance redress committee will be functional at each circle level so as to ensure easy access to communities and affected parties.

9. Follow-up actions and conclusions

18. The project started implementation during March 2008 without much background preparation for implementation of EMP. Hence more attention was given for the identification of sub-projects and implementation of the project in a time bound manner. The EMP prepared for the project was made part of the bid document and the contractor was made responsible for the implementation of EMP. The bid conditions require the contractor to adopt best construction practices which include most of the mitigation measures suggested in the EMP. Environment and Social Cell was constituted on November 2009 for closely monitor the implementation of EMP by the contractor. The project activities will be carried out without affecting the agricultural activities and crop damage. The bid document requires the contractor to pay compensation in case of any crop damage. A grievance redress committee will be constituted with due representation to the people residing near to the project site. Complaints, if any, received will be recorded and the complaint together with the corrective action taken by the contractor will be placed before the committee immediately. The contractor will implement the decision taken by the committee. Proper training on environmental issues during project implementation and EMP implementation will be organized for the staff and officers of the contractor and implementing agency. A checklist system will be developed and implemented for improving the monitoring and reporting of EMP implementation. The responsibility of each level of officers of the contractor and field offices will be fixed and implemented.

19. The Implementing Agency, DISCOM-E, will give more attention towards the implementation of EMP and project will be implemented in compliance with the environmental regulations of the country and environment covenant of Loan Agreements.

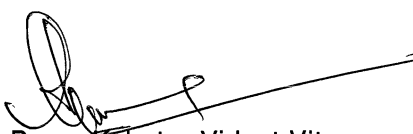
Signed by:

Monitoring agency:

Madhya Pradesh Poorv Kshetra Vidyut Vitaran
Company Limited (DISCOM-E), Jabalpur

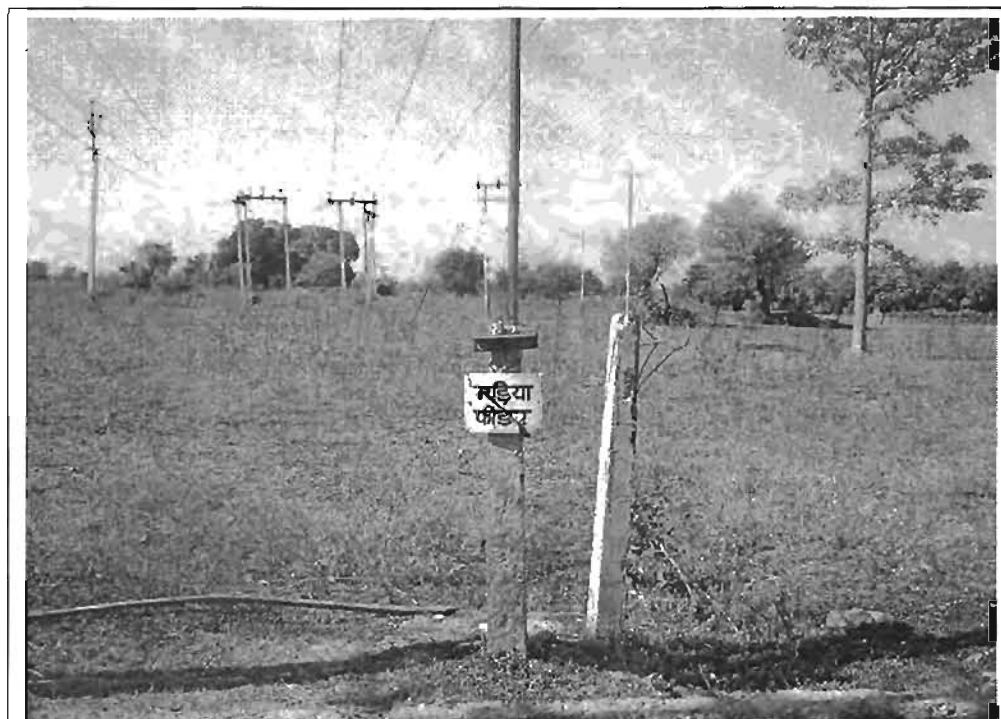
Authorized signatory from
Implementing
Agency /Executing Agency:

Madhya Pradesh Poorv Kshetra Vidyut Vitaran
Company Limited (DISCOM-E), Jabalpur

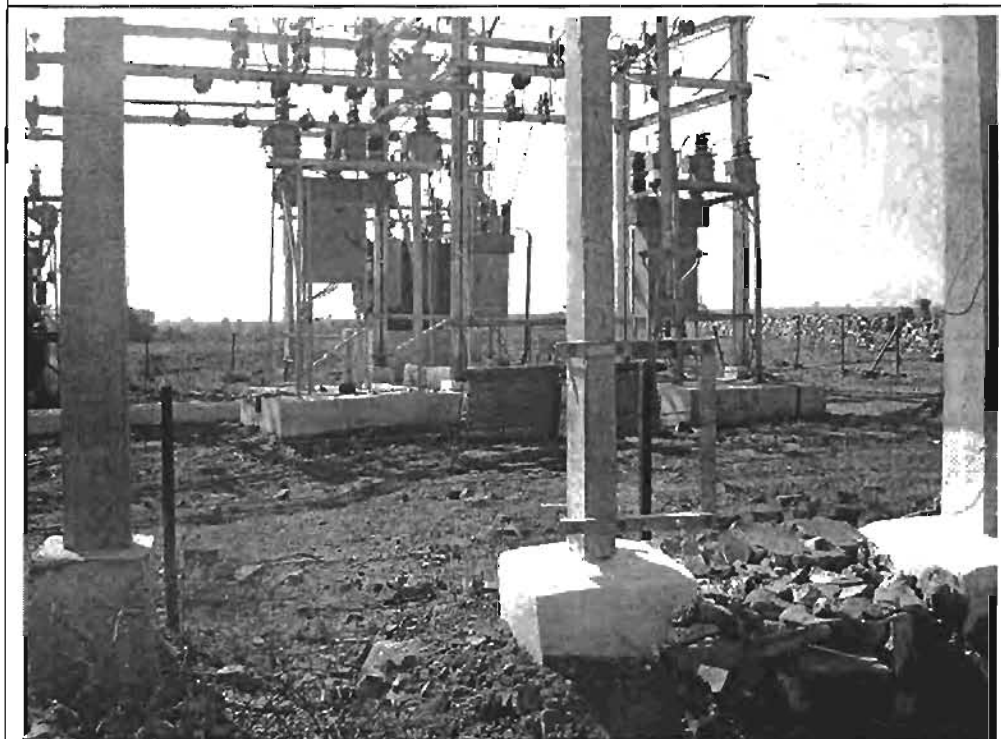

Addl. Chief Engineer (ADB)
Executive Head of the Project
Implementing Authority

APPENDIX 1

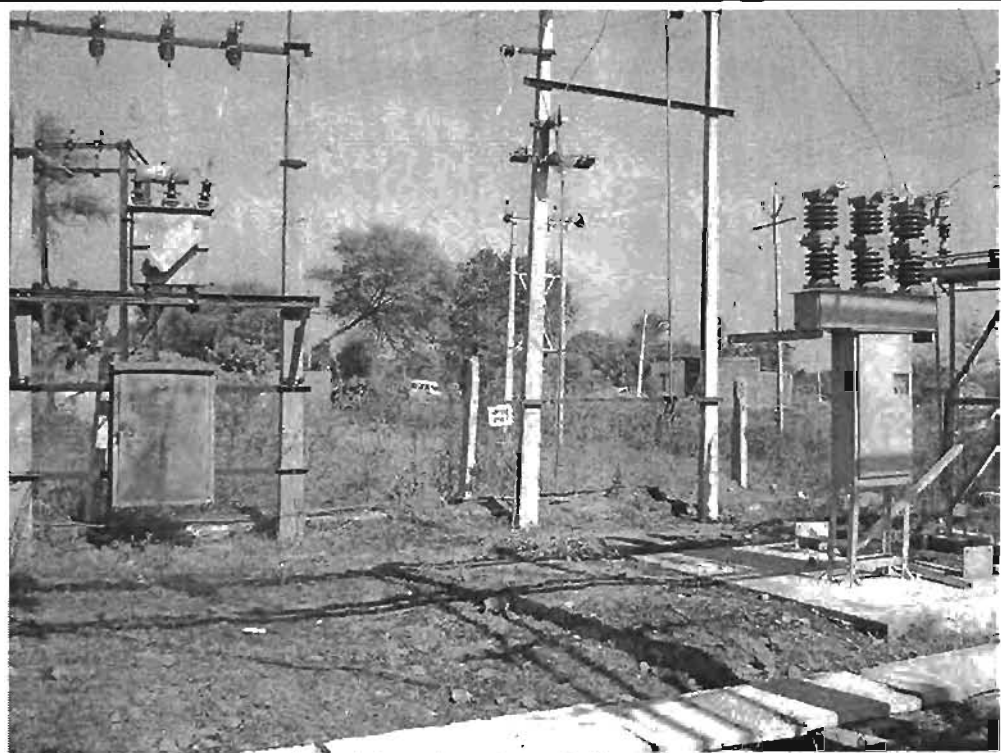
PHOTOS SHOWING THE PROJECT IMPLEMENTATION



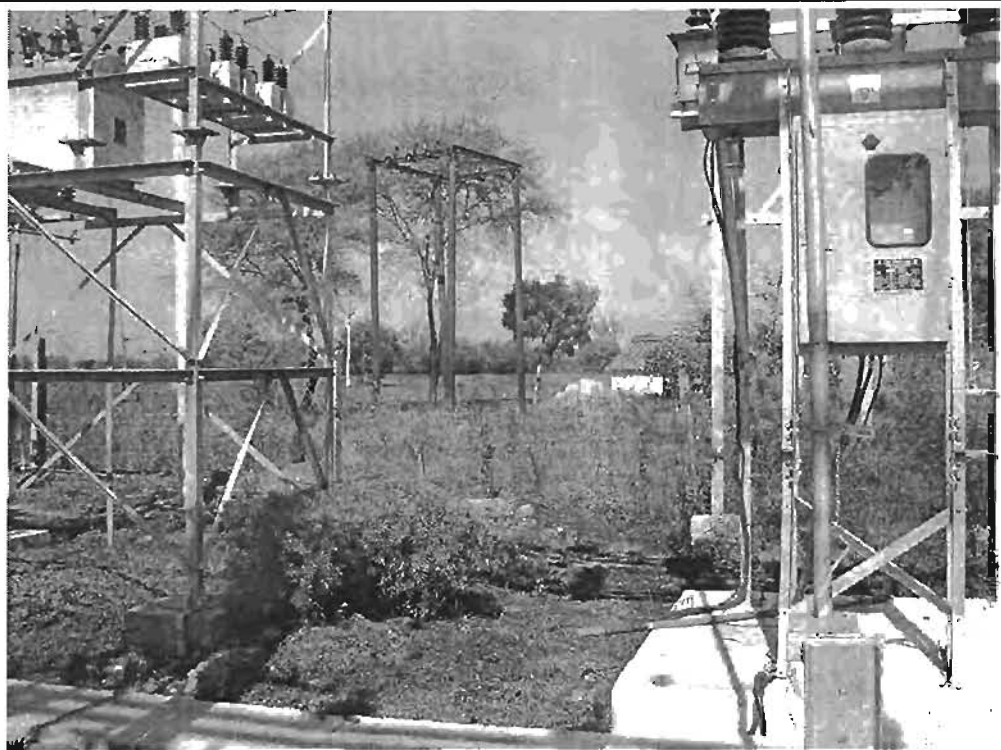
Natia Feeder



Chauna – Installation of New Transformer



Tinsi Feeder- Juna Substation



Chorai Sub-station

APPENDIX 2

Map Showing Project Location

