

<p style="text-align: center;"><b>MONITORING REPORT (CDM-MR)</b> <b>Adopted Template Published in EB 54, Annex 34</b></p>
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**Monitoring Report**  
**Version 03 dated 09/12/2010**  
**Babanpur, Killa and Sahoke Mini Hydroelectric Projects**  
**Reference No. 0329**  
**Fourth Monitoring Report covering 01/07/2008 to 31/03/2010 (both days including)**

**SECTION A. General description of the project activity**

**A.1. Brief description of the project activity :>>**

>>Three Mini Hydroelectric Projects (MHP) aggregating to 3.75 MW at Babanpur, Killa and Sahoke on the Kotla Branch Canal, District Sangrur, Punjab, India have been set up. Mini Hydroelectric Project at Babanpur (1MW) was commissioned in July 2004, Killa (1.75MW) was commissioned in November 2005 and Sahoke (1MW) was commissioned in October 2006. The plants are operating as described in the PDD.

The purpose of the project activity is to generate electricity by utilizing water flowing through the existing canal system as a renewable energy resource to meet the ever-increasing demand of energy in the region. The development of the project activity contemplates the production of clean hydroelectric power that will contribute to reduce CO<sub>2</sub> emissions, which would have occurred otherwise, in absence of these projects.

1 MW hydroelectric power plant at Babanpur, 1.75 MW hydroelectric power plant at Killa and 1 MW hydroelectric power plant at Sahoke of this project activity generate electricity and sell it to the state utility i.e. Punjab State Electricity Board.

These three plants are of low head, canal drop based mini hydroelectric projects (project activity). The projects are canal based renewable hydroelectric generating plants, which includes forebay, intake, power house, draft tube, turbine and tailrace. The component plants do not involve any type of displacement, rehabilitation or relocation.

The projects are generating electricity successfully by converting the potential of kinetic energy of the canal water and the renewable electricity produced is fed into the Punjab State Electricity Board Grid thereby replacing the equivalent amount of electricity produced from thermal stations and thus reducing green house gas emission.

**Equipment Details:**

The projects were completed with major equipment supplied by the suppliers as under:

S.N.	MHP	Equipment	Quantity	Capacity	Manufacturer
1	Babanpur	Turbine & its accessories	2	500 kW	HPP Energy India Private Limited, New Delhi
		Induction Generator	2	500 kW	Kirloskar Electricals Co. Ltd.
2	Killa	Turbine & its accessories	2	875 kW	Boving Fouress Limited, Bangalore
		Synchronous Generator	2	875 kW	Marelli Motori(Italy)
3	Sahoke	Turbine & its accessories	1	1000 kW	Boving Fouress Limited, Bangalore
		Synchronous Generator	1	1000 kW	Marelli Motori(Italy)

The project activity was implemented and operated as planned and described in the Project Design Document (PDD).

During the present monitoring period i.e. 01/07/2008 to 31/03/2010, the net power exported to the grid by the three plants is 40.407 Million kWh, which corresponds to 38,064 tCO<sub>2</sub> emission reduction in the monitoring period.

## **A.2. Project Participants**

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### **Kotla Hydro Power Private Limited**

The name of the Company has been changed from “Kotla Hydro Power Limited” to “Kotla Hydro Power Private Limited”. The fresh certificate of incorporation and Host Country approval dated April 02, 2007 for the same has been received by the project activity. The records at CDM registry with respect to the revised modalities of communication signed by the all Project Participant have been updated.

<b>Name of Party involved ((host) indicates a host Party)</b>	<b>Private and/or public entity(ies) project participants (as applicable)</b>	<b>Kindly indicate if the Party wishes to be considered as a project participant (Yes/No)</b>
India (host)	Private entity - Kotla Hydro Power Private Limited	No

## **A.3. Location of the project activity:**

>>

MHP Babanpur : The project is located at RD 86320 Kotla Branch Canal  
Town : Malerkotla  
District : Sangrur  
State : Punjab  
Country : India  
GPS Coordinates : 30°24 ' 51 N, 75°52 ' 41 E

MHP Killa : The project is located at RD 144580 on Kotla Branch Canal  
Town : Malerkotla  
District : Sangrur  
State : Punjab  
Country : India  
GPS Coordinates : 30°19 ' 37 N, 75°43 ' 30 E

MHP Sahoke : The project is located at RD 214800 on Kotla Branch Canal  
Town : Malerkotla  
District : Sangrur  
State : Punjab  
Country : India  
GPS Coordinates : 30°11 ' 16 N, 75°34 ' 39 E

## **A.4. Technical description of the project**

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The project activity consists of 3 small hydro power plants i.e. Babanpur, Killa & Sahoke utilizing the potential and kinetic energy of the canal water to generate electricity.

**Babanpur:** The powerhouse comprises of two induction generators of capacity 500 kW each coupled to two numbers of vertical Semi-Kaplan turbines. The power is generated at a voltage of 415V, which is further stepped-up to 11kV to match the nearest substation voltage level.


**Killa:** The powerhouse comprises of two synchronous generators of capacity 875 kW each coupled to two numbers of vertical Full-Kaplan turbines. The power is generated at a voltage of 6.6 kV, which is further stepped-up to 11kV to match the nearest substation voltage level.

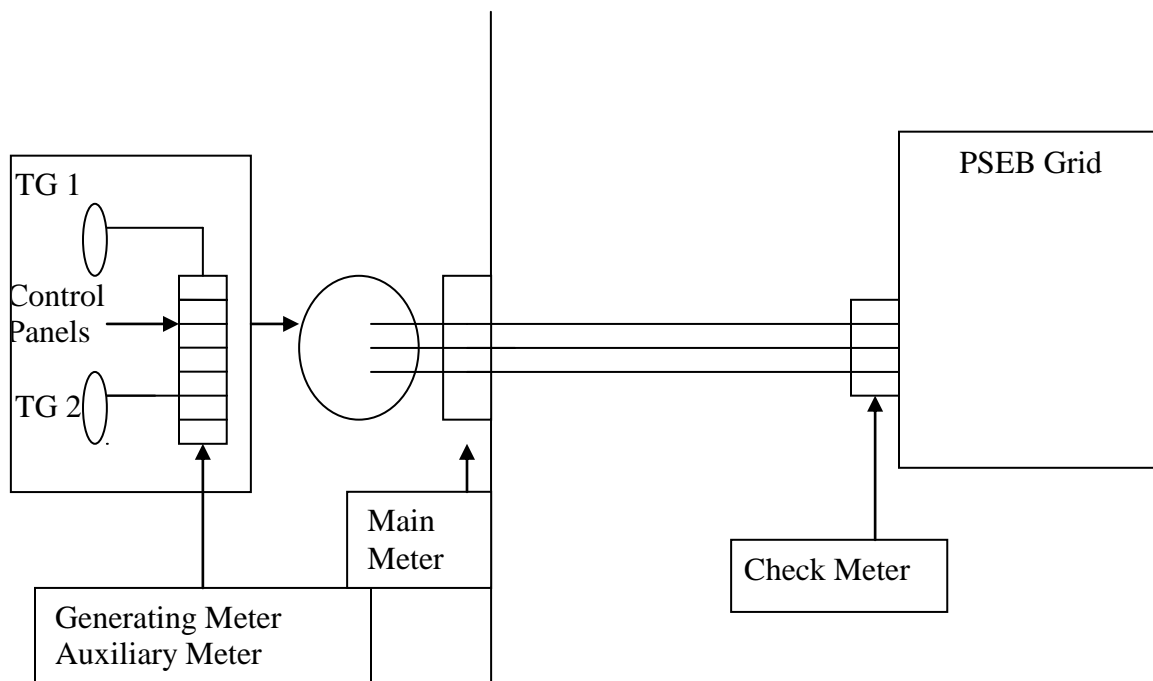
**MHP Sahoke:** The powerhouse comprises of one synchronous generators of capacity 1000 kW coupled to vertical Full-Kaplan turbines. The power is generated at a voltage of 6.6 kV, which is further stepped-up to 11kV to match the nearest substation voltage level.

The principal components of each scheme are:

- a) **Forebay and intake:** Forebay is partly trapezoidal and RCC trough section where the water is diverted towards the powerhouse upon closure of main canal gates via the intake.
- b) **Power House:** A semi outdoor type power house has been provided to house the turbines, generator, and related electro-mechanical equipment.
- c) **Draft Tube:** RCC draft tube has been provided to convey the tail water emerging from discharge side of the turbine to the main canal via tailrace channel.
- d) **Turbine:** Vertical Semi Kaplan with siphon intake has been provided at Babanpur while Vertical Full Kaplan has been provided at Killa and Sahoke.
- e) **Tailrace:** The discharge emerging out of the draft tubes is carried back to the main canal on downstream of the project by trapezoidal shaped tailrace channel connecting draft tubes exit to the main canal.
- f) **Switchyard:** Surface type switchyard has been provided with necessary equipment for interfacing with the grid.

415V/6.6 kV / 11 KV  
Transformer





**Note:** Control panels comprise of Relays, Breakers, Synchronous, Generation Meters and Auxiliary Meters.

**A.5. Title, reference and version of the baseline and monitoring methodology applied to the project activity**

>>  
 Type I : Renewal Energy Projects  
 Category : I.D. Renewable Electricity Generation for a Grid  
 Version : 07

**A.6. Registration date of the project activity:**

>>30/04/2006

**A.7. Crediting period of the project activity and related information (start date and choice of crediting period):**

>>  
 Crediting period for this project activity is 01/07/2004 to 30/06/2014 (Fixed).

Current monitoring report covers the fourth monitoring period associated with the project activity. Details of previous monitoring reports are given in the following table:

**Summary of Previous Monitoring Reports**

Monitoring	Monitoring Period (both days included)	Status
------------	----------------------------------------	--------

<b>Report</b>	<b>From</b>	<b>To</b>	
First	01/07/2004	31/03/2006	Successful Issuance
Second	01/04/2006	30/04/2007	Successful Issuance
Third	01/05/2007	30/06/2008	Successful Issuance

The current monitoring period covered in this monitoring report is from 01/07/2008 to 31/03/2010 (both days included). This monitoring report does not cover any period of time covered by the previous monitoring reports.

<b>A.8. Name of responsible person(s)/entity(ies):</b>
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>>

Name : Amit Kumar Agarwal  
Contact No. : 9910107544  
Email : akagarwal@polyplex.com

**SECTION B. Implementation of the project activity****B.1. Implementation status of the project activity**

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The projects were completed as planned and described in the Project Design Document (PDD).

The projects are in operation continuously (with outages – forced & planned) at Babanpur (1 MW) since July 2004, at Killa (1.75 MW) since November 2005 and at Sahoke (1 MW) since October 2006.

**Details of down time from 1st July 2008 to 31st March, 2010**

Project Site	Down Time (In Hrs.)
Babanpur	3309
Killa	3337
Sahoke	3358

**Breakup of Down Time**

Project Site	Down Time	Reason
Babanpur	118	Grid Failure
	78	Tripping/Maintenance/other breaks down
	3113	Low Discharge
Killa	142	Grid Failure
	126	Tripping/Maintenance/other breaks down
	3069	Low Discharge
Sahoke	181	Grid Failure
	426	Tripping/Maintenance/other breaks down
	2751	Low Discharge

**B.2. Revision of the monitoring plan**

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The monitoring plan has not been revised.

**B.3. Request for deviation applied to this monitoring period**

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Not applicable

**B.4. Notification or request of approval of changes**

&gt;&gt;

Not applicable

### SECTION C. Description of the monitoring system

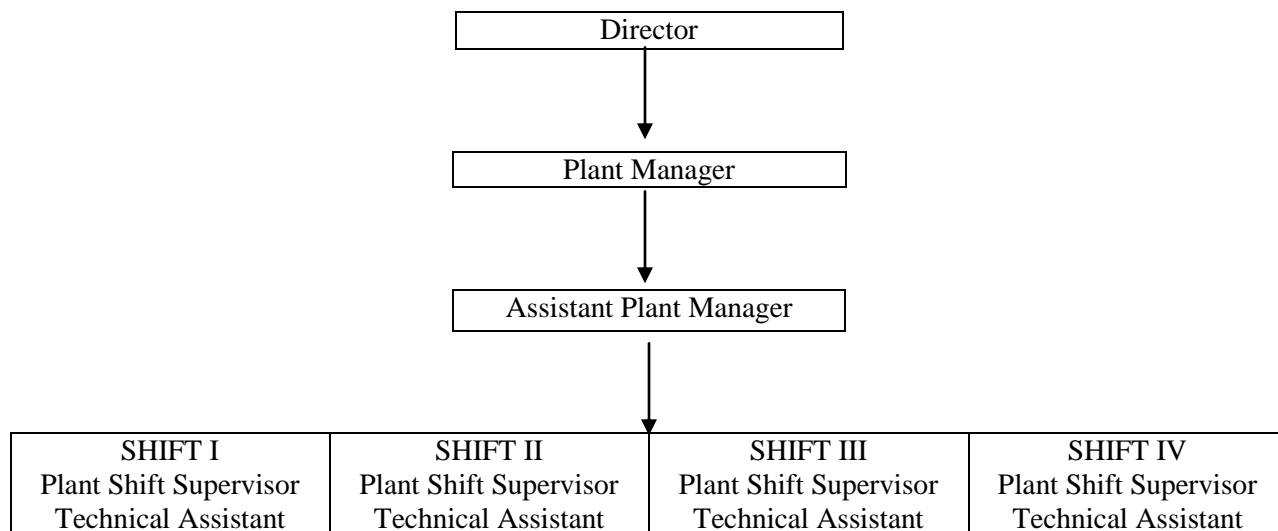
For the project activity, following parameters were monitored on a continuous basis:

#### **Energy:**

- i. The Energy exported (kWh) and Energy imported (kWh) at the interconnection point have been measured by the bidirectional meters (i.e. Trivector Meters) installed at the interconnection points at all 3 (three) project sites.
- ii. The Net Saleable Energy (Net electricity exported to the grid) has been calculated as a difference between energy exported and energy imported. It is based on monthly joint meter readings.
- iii. Monthly joint meter readings were taken at interconnection point and certified by representatives of Kotla Hydro Power Private Limited (KHPPL) and the purchaser i.e. Punjab State Electricity Board (PSEB).
- iv. The joint meter readings were used to raise invoice for sale of net energy to PSEB.
- v. The energy generated has been measured by the energy meters installed at the generation point on an hourly basis.
- vi. The auxiliary energy consumption has been measured by the auxiliary energy consumption meters installed at the plant on an hourly basis.
- vii. The data of the aforesaid parameters are recorded on hourly basis which are summed into a daily reading.
- viii. The hourly reading of electricity generation and auxiliary consumption were aggregated to daily and monthly readings.
- ix. Monthly reports stating the energy exported, energy imported, energy generated and auxiliary energy consumption were prepared by shift-in-charge and verified by plant managers.
- x. The finance department cross checked the data provided by plant managers.



The Organizational structure responsible for monitoring the various parameters as per Monitoring Plan is as below:-



The Hourly data is monitored and recorded in the log books by the Shift Staff comprising of Plant Shift Supervisor and Technical Assistant. The daily data is checked and countersigned by the Assistant Plant Manager. The daily and monthly data is checked and verified by the Plant Manager. The data is audited annually by the auditor of the Company having financial background.

#### SECTION D. Data and parameters

##### D.1. Data and parameters determined at registration and not monitored during the monitoring period, including default values and factors

<b>Data / Parameter:</b>	Grid Emission Factor
<b>Data Unit:</b>	kg of CO <sub>2</sub> / kWh
<b>Description:</b>	The Grid Emission Factor has been calculated as the weighted average of the operating Margin Emission Factor (EF <sub>OM</sub> ) and the Build Margin Emission Factor (EF <sub>BM</sub> ).
<b>Source of data used:</b>	Northern Region Grid's permission from Central Electricity Authority
<b>Value(s):</b>	0.942
<b>Data used for Baseline/Project/Leakage emission calculation)</b>	Baseline emission calculations
<b>Additional comment:</b>	This parameter is fixed ex-ante for the full crediting period

<b>D.2.1 Data and parameters monitored</b>				
<b>Data / Parameter:</b>	Energy exported			
Data unit:	kWh			
Description:	Energy Exported to the grid			
Measured /Calculated /Default:	Measured			
Source of data:	Main / Trivector Meter			
Value(s) of monitored parameter:	<b>Babanpur</b>	<b>Killa</b>	<b>Sahoke</b>	<b>Total</b>
	10,202,430	18,658,120	11,605,260	40,465,810
Indicate what the data are used for (Baseline/ Project/ Leakage emission calculations)	Baseline emissions			
Monitoring equipment (type, accuracy class, serial number, calibration frequency, date of last calibration, validity)	<b>Particulars</b>	<b>Babanpur</b>	<b>Killa</b>	<b>Sahoke</b>
	Type	L&T Electronic Bidirectional Trivector Meter	L&T Electronic Bidirectional Trivector Meter	L&T Electronic Bidirectional Trivector Meter
	Accuracy class	(±)0.50%	(±)0.50%	(±)0.50%
	Serial number	05271088	04223074	04223078
	Calibration frequency	6 month	6 month	6 month
	Calibrations during monitoring period	09/05/2008 11/10/2008 12/03/2009 01/09/2009 25/02/2010	09/05/2008 08/10/2008 13/03/2009 02/09/2009 25/02/2010	09/05/2008 11/10/2008 13/03/2009 02/09/2009 25/02/2010
	Validity	24/08/2010	24/08/2010	24/08/2010
Measuring/ Reading/ Recording frequency:	Monthly			
Calculation method (if applicable):	Not Applicable			
QA/QC procedures applied:	<p>As per the registered PDD the general principles for monitoring the energy exported to the grid are based on:</p> <p>Monthly joint meter reading of main meter installed at interconnection point shall be taken and signed by authorised official of KHPPL and PSEB on any day of the first week of every month as mutual consent. Records of this joint meter reading would be maintained by KHPPL.</p> <p>The principle of Frequency, Data recoding and Reliability as mentioned in the PDD are strictly adhered to. The Main Meters and Check Meters were subject to calibration every six months by Punjab State Electricity Board.</p>			

<b>D.2.2 Data and parameters monitored</b>				
<b>Data / Parameter:</b>	Energy imported			
<b>Data unit:</b>	kWh			
<b>Description:</b>	Energy imported from the grid			
<b>Measured /Calculated /Default:</b>	Measured			
<b>Source of data:</b>	Main / Trivector Meter			
<b>Value(s) of monitored parameter:</b>	<b>Babanpur</b>	<b>Killa</b>	<b>Sahoke</b>	<b>Total</b>
	16,180	21,830	20,040	58,050
<b>Indicate what the data are used for (Baseline/ Project/ Leakage emission calculations)</b>	Baseline emissions			
<b>Monitoring equipment (type, accuracy class, serial number, calibration frequency, date of last calibration, validity)</b>	<b>Particulars</b>	<b>Babanpur</b>	<b>Killa</b>	<b>Sahoke</b>
	Type	Electronic Bidirectional Trivector Meter	Electronic Bidirectional Trivector Meter	Electronic Bidirectional Trivector Meter
	Accuracy class	(±)0.50%	(±)0.50%	(±)0.50%
	Serial number	05271088	04223074	04223078
	Calibration frequency	6 month	6 month	6 month
	Calibrations during monitoring period	09/05/2008 11/10/2008 12/03/2009 01/09/2009 25/02/2010	09/05/2008 08/10/2008 13/03/2009 02/09/2009 25/02/2010	09/05/2008 11/10/2008 13/03/2009 02/09/2009 25/02/2010
	Validity	24/08/2010	24/08/2010	24/08/2010
<b>Measuring/ Reading/ Recording frequency:</b>	Monthly			
<b>Calculation method (if applicable):</b>	Not Applicable			
<b>QA/QC procedures applied:</b>	<p>As per the registered PDD the general principles for monitoring the energy imported from the grid are based on:</p> <p>Monthly joint meter reading of main meter installed at interconnection point shall be taken and signed by authorised official of KHPPL and PSEB on any day of the first week of every month as mutual consent. Records of this joint meter reading would be maintained by KHPPL.</p> <p>The principle of Frequency, Data recoding and Reliability as mentioned in the PDD are strictly adhered to. The Main Meters and Check Meters were subject to calibration every six months by Punjab State Electricity Board.</p>			

<b>D.2.3 Data and parameters monitored.</b>				
<b>Data / Parameter:</b>	Net saleable energy			
Data unit:	kWh			
Description:	Net saleable energy to grid			
Measured /Calculated /Default:	Calculated			
Source of data:	Main Meter / PSEB Monthly Bills			
Value(s) of monitored parameter:	<b>Babanpur</b>	<b>Killa</b>	<b>Sahoke</b>	<b>Total</b>
	10,186,250	18,636,290	11,585,220	40,407,760
Indicate what the data are used for (Baseline/ Project/ Leakage emission calculations)	Baseline emissions			
Monitoring equipment (type, accuracy class, serial number, calibration frequency, date of last calibration, validity)	As this is calculated, this section is not applicable for this monitoring parameter.			
Measuring/ Reading/ Recording frequency:	Monthly			
Calculation method (if applicable):	Net Saleable Energy = Energy exported – Energy imported			
QA/QC procedures applied:	Net saleable energy is the net exported energy to the grid which is the difference of energy exported and energy imported. Joint meters reading are taken from the main meter and check meter every month to arrive at net saleable energy. The main & check meters are subject to calibration every six months.			

<b>D.2.4 Data and parameters monitored</b>				
<b>Data / Parameter:</b>	Energy generated			
Data unit:	kWh			
Description:	Gross energy generated			
Measured /Calculated /Default:	Measured			
Source of data:	Generation Meters			
Value(s) of monitored parameter:	<b>Babanpur</b>	<b>Killa</b>	<b>Sahoke</b>	<b>Total</b>
	10,602,519	19,139,975	11,937,394	41,679,888
Indicate what the data are used for (Baseline/ Project/ Leakage emission calculations)	Baseline emissions			
Monitoring equipment (type, accuracy class, serial number, calibration frequency, date of last calibration,	<b>Particulars</b>	<b>Babanpur</b>	<b>Killa</b>	<b>Sahoke</b>

validity)	Type	Unit 1 & 2:Rishabb Digital Energy Meter	Unit 1: Minsun Digital Energy Meter Unit 2: Tiny Master Digital Energy Meter	Minsun Digital Energy Meter
	Accuracy class	(+) 0.5%	(+) 0.5%	(+) 0.5%
	Serial No. (Unit-I)	04/12/2288	6851019	68B0511
	Serial No. (Unit-II)	05/09/4126*	23653 TMD 107	————
	Calibration Frequency	6 month	6 month	6 month
	Calibration during monitoring period	15/01/2008 09/07/2008 03/01/2009 08/01/2009 07/07/2009 31/12/2009	15/01/2008 11/07/2008 08/01/2009 08/07/2009 01/01/2010	15/01/2008 10/07/2008 08/01/2009 07/07/2009 01/01/2010
	Validity	30/06/2010	30/06/2010	30/06/2010
Measuring/ Reading/ Recording frequency:		Hourly		
Calculation method (if applicable):		Not Applicable		
QA/QC procedures applied:		The readings of the energy generated are taken from the meters installed at generation point. These are subject to calibration every six months.		

\*Indicates a replacement of meter, detail are given in the following table:

Site	Meter Type	Old Meter No.	New Meter No.	Date of Change
Babanpur	Rishabb Digital Energy Meter Unit-II	04/01/1300A	05/09/04126	03/01/09

D.2.5 Data and parameters monitored	
Data / Parameter:	Auxiliary energy consumption
Data unit:	kWh
Description:	Auxiliary energy consumed for running the plant
Measured /Calculated /Default:	Measured
Source of data:	Auxiliary Meters

Value(s) of monitored parameter:	<b>Babanpur</b>	<b>Killa</b>	<b>Sahoke</b>	<b>Total</b>
	120,179	171,967	145,669	437,815
Indicate what the data are used for (Baseline/ Project/ Leakage emission calculations)	Baseline emissions			
Monitoring equipment (type, accuracy class, serial number, calibration frequency, date of last calibration, validity)	<b>Particulars</b>	<b>Babanpur</b>	<b>Killa</b>	<b>Sahoke</b>
	Type	Rishabb	Enercon	Enercon
	Accuracy class	(±)0.5%	(±)0.5%	(±)0.5%
	Serial no.	08/06/0915*	57343/1598-3804	54706/977-3004
	Calibration frequency	6 month	6 month	6 month
	Calibrations during monitoring period	15/01/2008 09/07/2008 03/09/2008 08/01/2009 07/07/2009 31/12/2009	15/01/2008 11/07/2008 08/01/2009 08/07/2009 01/01/2010	15/01/2008 10/07/2008 08/01/2009 07/07/2009 01/01/2010
	Validity	30/06/2010	30/06/2010	30/06/2010
Measuring/ Reading/ Recording frequency:	Hourly			
Calculation method (if applicable):	Not Applicable			
QA/QC procedures applied:	Auxiliary energy consumption readings are recorded at the auxiliary meters installed in the panel. These are subject to calibration every six months.			

\*Indicates a replacement of meter, detail are given in the following table:

Site	Meter Type	Old Meter No.	New Meter No.	Date of Change
Babanpur	Auxiliary Meter	04/01/1302	08/06/0915	03/09/2008

## SECTION E. Emission reduction calculation

### E.1. Baseline emissions calculation

>>

Code	Description	Formula	Unit	Value
A	Energy Exported		kWh	40,465,810
B	Energy Imported		kWh	58,050
C	Net Saleable Energy	$C = A - B$	kWh	40,407,760
D	Carbon Emission Factor as per the baseline adopted		kg CO <sub>2</sub> /kWh	0.942
E	Baseline Emissions	$E = (C * D) / 1000$	ton CO <sub>2</sub>	38,064

### E.2. Project emission calculation

>>

No project emissions are associated with the project activity during this monitoring period. This is also in line with the PDD and methodology.

### E.3. Leakage calculation

>>

As the energy generating equipment is not transferred from another activity or the existing equipment is also not transferred to another activity, leakage is not considered. The same is in line with the methodology and the registered PDD.

### E.4. Emission reductions calculation

>>

Baseline Emissions : 38,064  
Project Emissions : NIL  
Emissions Reductions : Baseline emissions – Project emission  
  
= 38,064  
= 38,064 tCO<sub>2</sub>

### E.5. Comparison of actual emission reductions with estimates in the CDM-PDD

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Item	Value applied in ex-ante calculation of the registered CDM-PDD	Actual values reached during the monitoring period
Emission reductions (tCO <sub>2</sub> )	40,292	38,064

### E.6. Remarks on difference from estimated value in the PDD

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The actual emission reductions achieved during this monitoring period is less than the estimated figure in the registered PDD.

### Annexure - I

The month wise data on energy generated is given hereunder. The monthly data is based on the hourly reading taken at the meters installed at the generation end

#### Energy Generated (kWh)

Billing Month	Year	Babanpur	Killa	Sahoke	Total
Jul	2008	586,739	921,888	575,284	2,083,911
Aug	2008	423,845	732,393	503,955	1,660,193
Sep	2008	590,599	1,030,021	594,393	2,215,013
Oct	2008	222,194	415,356	309,994	947,544
Nov	2008	258,003	548,020	0	806,023
Dec	2008	614,358	1,172,721	683,990	2,471,069
Jan	2009	484,504	895,222	554,475	1,934,201
Feb	2009	627,032	1,159,285	716,074	2,502,391
Mar	2009	542,730	908,258	728,615	2,179,603
Apr	2009	360,922	646,672	441,788	1,449,382
May	2009	770,305	1,361,798	860,000	2,992,103
Jun	2009	710,173	1,164,724	751,230	2,626,127
Jul	2009	619,579	1,155,168	737,060	2,511,807
Aug	2009	506,650	951,289	637,975	2,095,914
Sep	2009	510,466	972,193	666,031	2,148,690
Oct	2009	433,074	790,775	307,630	1,531,479
Nov	2009	504,856	962,917	743,961	2,211,734
Dec	2009	627,200	1,137,776	625,074	2,390,050
Jan	2010	204,593	396,149	372,779	973,521
Feb	2010	304,726	555,292	268,470	1,128,488
Mar	2010	699,971	1,262,058	858,616	2,820,645
<b>Total</b>		<b>10,602,519</b>	<b>19,139,975</b>	<b>11,937,394</b>	<b>41,679,888</b>



## Annexure - II

The month-wise data on auxiliary energy consumption is given hereunder. The monthly data is based on hourly reading taken at the auxiliary meters installed at the panel:

### Auxiliary Energy Consumption (kWh)

<b>Billing Month</b>	<b>Year</b>	<b>Babanpur</b>	<b>Killa</b>	<b>Sahoke</b>	<b>Total</b>
Jul	2008	8,819	11,218	8,715	28,752
Aug	2008	5,669	8,647	7,470	21,786
Sep	2008	5,102	9,664	7,870	22,636
Oct	2008	2,465	4,696	4,112	11,273
Nov	2008	2,294	4,543	1,639	8,476
Dec	2008	4,176	8,518	7,769	20,463
Jan	2009	2,247	7,214	6,827	16,288
Feb	2009	4,639	7,292	7,388	19,319
Mar	2009	6,219	8,077	7,478	21,774
Apr	2009	7,264	8,986	7,685	23,935
May	2009	9,463	10,997	9,910	30,370
Jun	2009	8,738	9,901	8,178	26,817
Jul	2009	9,590	11,232	8,600	29,422
Aug	2009	7,936	9,994	9,388	27,318
Sep	2009	6,840	8,463	7,596	22,899
Oct	2009	6,723	8,247	4,376	19,346
Nov	2009	6,421	7,900	7,381	21,702
Dec	2009	6,266	7,837	7,489	21,592
Jan	2010	2,387	5,347	5,364	13,098
Feb	2010	2,343	4,770	3,091	10,204
Mar	2010	4,578	8,424	7,343	20,345
<b>Total</b>		<b>120,179</b>	<b>171,967</b>	<b>145,669</b>	<b>437,815</b>

The energy generated data and auxiliary energy consumption data is not used for calculation of emission reductions as the calculation of emission reductions is based on Net Saleable energy i.e. the difference of energy exported and energy imported.

Month-wise data on Net Saleable Energy for the monitoring period is given as under:

As per the Project Design Document, Emission reductions are to be calculated based on the energy exported minus energy imported during shut-down and start-ups by the power plant.

**Net Saleable Energy (kWh)**

Billing Month	Year	Energy Exported				Energy Imported				Net Saleable Energy
		Babanpur	Killa	Sahoke	Total	Babanpur	Killa	Sahoke	Total	
Jul	2008	562,080	895,570	557,080	2,014,730	650	740	600	1,990	2,012,740
Aug	2008	406,100	714,320	488,960	1,609,380	1,980	2,700	1,340	6,020	1,603,360
Sep	2008	566,690	1,003,000	577,200	2,146,890	390	510	400	1,300	2,145,590
Oct	2008	213,110	404,810	301,480	919,400	2,860	3,890	2,240	8,990	910,410
Nov	2008	248,120	534,260	0	782,380	2,390	2,880	4,220	9,490	772,890
Dec	2008	592,870	1,144,370	665,100	2,402,340	190	180	140	510	2,401,830
Jan	2009	470,580	873,520	539,260	1,883,360	1,090	1,580	1,440	4,110	1,879,250
Feb	2009	609,050	1,131,990	696,440	2,437,480	80	40	40	160	2,437,320
Mar	2009	526,730	886,320	709,060	2,122,110	110	70	240	420	2,121,690
Apr	2009	345,380	628,620	426,980	1,400,980	490	490	380	1,360	1,399,620
May	2009	740,190	1,326,750	836,200	2,903,140	150	80	140	370	2,902,770
Jun	2009	682,700	1,134,720	730,680	2,548,100	80	90	100	270	2,547,830
Jul	2009	593,420	1,124,490	717,400	2,435,310	320	150	200	670	2,434,640
Aug	2009	485,030	926,380	618,500	2,029,910	40	40	180	260	2,029,650
Sep	2009	489,770	947,960	647,900	2,085,630	790	810	600	2,200	2,083,430
Oct	2009	415,580	771,140	299,820	1,486,540	20	50	2,840	2,910	1,483,630
Nov	2009	485,950	940,270	724,760	2,150,980	30	30	120	180	2,150,800
Dec	2009	604,770	1,110,170	607,020	2,321,960	50	40	200	290	2,321,670
Jan	2010	196,820	386,760	362,440	946,020	2,560	4,510	2,420	9,490	936,530
Feb	2010	293,730	541,750	261,480	1,096,960	1,760	2,790	2,180	6,730	1,090,230
Mar	2010	673,760	1,230,950	837,500	2,742,210	150	160	20	330	2,741,880
<b>Total</b>		<b>10,202,430</b>	<b>18,658,120</b>	<b>11,605,260</b>	<b>40,465,810</b>	<b>16,180</b>	<b>21,830</b>	<b>20,040</b>	<b>58,050</b>	<b>40,407,760</b>