

**MONITORING REPORT FORM (CDM-MR) \***  
**Version 01 - in effect as of: 28/09/2010**

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\* as contained within the document entitled "Guidelines for completing the monitoring report form (CDM-MR)" (EB 54 meeting report, annex 34)`

## MONITORING REPORT

Version Number: 3

Date 22/09/2011

**Title: 13.25 MW Wind Power Generation by RMTL, in Kutch, Gujarat**

**Reference number: 2247.**

**Monitoring Period : 1<sup>st</sup> Monitoring Report (from 25/03/2009 and last days 31/10/2010.)**

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

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

>>

1. *Purpose of the project activity and the measures taken to reduce greenhouse gas emissions:*

The purpose of the project activity is to generate clean and green energy. The project proponent has installed wind turbines having a total capacity of 13.25 MW. Eight wind turbines of 1.5MW each and one wind turbine of 1.25 MW have been installed in two sites- Suthri and Vanku, in Kutch region of Gujarat state in India.

2. *Brief description of the installed technology and equipments:*

The Wind Turbine Generators (WTGs) have been supplied by Suzlon. The following turbines have been installed.

WTG No.	Capacity (MW)
SEL/1250/05-06/0139	1.25
SEL/1500/06-07/0361	1.5
SEL/1500/06-07/0360	1.5
SEL/1500/06-07/0383	1.5
SEL/1500/06-07/0384	1.5
SEL/1500/06-07/0359	1.5
SEL/1500/06-07/0358	1.5
SEL/1500/06-07/0382	1.5
SEL/1500/06-07/0362	1.5
<b>Total</b>	<b>13.25</b>

For technical specification of the turbines please refer section A.4.

3. *Relevant dates for the project activity (e.g. construction, commissioning, continued operation periods, etc.).*

WTG No.	Date of Commissioning
SEL/1250/05-06/0139	31/03/2006
SEL/1500/06-07/0361	21/03/2007
SEL/1500/06-07/0360	22/03/2007
SEL/1500/06-07/0383	22/03/2007
SEL/1500/06-07/0384	22/03/2007
SEL/1500/06-07/0359	29/03/2007
SEL/1500/06-07/0358	30/03/2007
SEL/1500/06-07/0382	31/03/2007
SEL/1500/06-07/0362	30/06/2007

The WTGs have been in operation since commissioning.

4. *Total emission reductions achieved in this monitoring period.*

Total emission reductions achieved in this monitoring period is 34,556 tCO<sub>2</sub>

**A.2. Project Participants**

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**Private project participants:** Ratnamani Metals and Tubes Ltd (RMTL)

**Name of Party involved:** Government of India (Host Party)

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

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*Complete information of the location of the project activity:*

*Village:* Arikhana, Kamand, Suthri

*District:* Kutch

*State:* Gujarat

*Country:* India

*and GPS coordinates. :*

WTG Number	Capacity (MW)	Village Location	Latitude (N) (Deg min sec)	Longitude (E) (Deg min sec)
SEL/1250/05-06/0139	1.25	Vanku	N23 07 30.2	E68 49 42.2
SEL/1500/06-07/0361	1.5	Kamand	N23 03 10.0	E68 52 10.5
SEL/1500/06-07/0360	1.5	Arikhana	N23 03 28.0	E68 52 03.1
SEL/1500/06-07/0383	1.5	Suthri	N23 02 35.3	E68 52 19.6
SEL/1500/06-07/0384	1.5	Suthri-old	N23 02 56.6	E68 52 32.1
SEL/1500/06-07/0359	1.5	Arikhana	N23 02 40.5	E68 53 41.5
SEL/1500/06-07/0358	1.5	Suthri	N23 03 05.9	E68 52 56.6
SEL/1500/06-07/0382	1.5	Suthri-old	N23 00 02.6	E68 55 34.7
SEL/1500/06-07/0362	1.5	Suthri	N23 02 55.0	E68 54 19.6
<b>Total</b>		13.25		

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

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*Description of the technology applied in the project activity and detailed technical process, including diagrams.*

**Technical Specifications of the WTGs.**

Wind Turbine Generator Type	1.5 MW
Make	Suzlon
<b>Rotor</b>	
Rotor Diameter	82.0 m
Cut-in wind speed	4m/s
Rated wind speed	14m/s
Rotor swept area	5281 m <sup>2</sup>
Rotational Speed	16.30 rpm

Rotor material	GRP
Regulation	Pitch
<b>Gear Box</b>	
Type	3 Stage gear box, 1 planetary & 2 helical
Manufacturer	Winergy
Nominal load	1650 kW
Type of cooling	Oil cooling system
Gear ratio	95.09
<b>Generator</b>	
Type	Asynchronous generator 4 pole
Rotational Speed	1511 rpm
Rated output	1500 kW
Operational Voltage	690 V
Frequency	50 Hz
Insulation class	Class “H”
Protection	IP 54
Cooling system	Air cooled
<b>Safety system</b>	
Aerodynamic brake	3 times Independent systems pitch regulation
Mechanical brake	Spring powered disc brakes, hydraulically released, fail safe
Control unit	Microprocessor controlled, indicating actual operating conditions, UPS back up system
<b>Yaw Drive System</b>	4 active electrical yaw motors
Yaw bearing	Polyamide slide bearing

<b>Wind Turbine Generator Type</b>	<b>1.25 MW</b>
Make	Suzlon, S.64
<b>Rotor</b>	
Rotor Diameter	64 m
Cut-in wind speed	3 m/s
Rated wind speed	14 m/s
Rotor blades	3 no.
Rotor swept area	3217 m <sup>2</sup>
Rotational Speed	13.9 rpm
Rotor material	GRP
Regulation	Pitch regulated
<b>Gear Box</b>	
Type	3 Stage gear box, 1 planetary & 2 helical
Manufacturer	Winergy
Nominal load	1390 kW
Type of cooling	Oil cooling system
Gear ratio	74.917:1
<b>Generator</b>	
Type	Asynchronous generator 4 pole
Rotational Speed	1006/ 1506 rpm
Rated output	250/1250 kW
Rated Voltage	690 V
Frequency	50 Hz
Insulation class	Class “H”
Protection	IP 56
Cooling system	Air cooled
<b>Safety system</b>	
Aerodynamic brake	3 Independent systems with blade pitch
Mechanical brake	Spring powered disc brakes, hydraulically released, fail safe

Control unit	Microprocessor controlled, indicating actual operating conditions, UPS back up system
<b>Yaw Drive System</b>	4 active electrical yaw motors
Yaw bearing	Polyamide slide bearing

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

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As per the registered PDD the following reference documents have been referred to:

**Methodology: AMS ID ‘Grid connected renewable electricity generation’ Scope 1**  
Version 13, EB 36

**Methodology: ACM0002 “Consolidated baseline methodology for grid-connected electricity generation from renewable sources”**  
Version 07, Sectoral Scope: 01, EB 36

**“Tool to calculate the emission factor for an electricity system”**  
Version 01, EB 35

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

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25/03/2009

UNFCCC weblink: <http://cdm.unfccc.int/Projects/DB/RWTUV1222760737.24/view>

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

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Fixed crediting period was chosen at the time of registration

Start date of the crediting period: 25/03/2009.

There is no change in the start date of crediting period from the registered PDD.

Crediting period: 10 years from start date

**A.8. Name of responsible person(s)/entity(ies):**

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Mr. Vimal Katta

**Ratnamani Metals and Tubes Ltd**

17, Rajmugat Society, Naranpura Char Rasta

Ankur Road, Naranpura

Ahmedabad - Gujarat

Tel: 91-79-27415501/2/3/4

Mobile: 91- 9879556602

## **SECTION B. Implementation of the project activity**

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

>>

Start date of operation of the project activity is the commissioning dates of the individual WTGs of this project (refer section A.1. for Commissioning dates.)

The project has been in operation since commissioning.

#### **Breakdown details:**

A brief account of major breakdown details is given below.

<b>WTG</b>	<b>Breakdown Details</b>
SEL/1500/06-07/0383	The WTG suffered from blade problems from 25/07/2009 to 20/11/ 2009, after which optimization checks and other checks were performed between 21/11/2009 to 11/12/2009. It was also shutdown due to low electrical frequency from 28/07/2010 to 17/08/2010.
SEL/1500/06-07/0361	Underwent turbine optimization from 18/03/2010 till 30/03/2010.
SEL/1500/06-07/0384	Underwent electrical battery surveillance from 31/07/2010 till 12/08/2010
SEL/1500/06-07/0358	WTG faced transformer problems from 06/08/2010 to 15 /09/2010 and had low electrical frequency from 15/09/ 2010 to 26/10/2010.
SEL/1500/06-07/0359	Machine availability was severely affected by blade problems from 09/10/2009 to 21/11/2009, after which, optimization checks and other checks were performed between 21/11/2009 to 22/11/2009. The turbines also faced some electrical glitches from 05/09/2010 till 05/10/2010.
SEL/1500/06-07/0362	Machine availability was affected by a problem in the manual soft stop from 30/07/2009 to 06/08/2009 and then because of blade problems from 07/08/2009 to 14/11/ 2009, checks were performed from 15/11/2009 to 16/11/ 2009. The machine underwent preventive checks from 16/04/ 2010 to 18/04/2010 and then faced gear box and related problems from 19/04/ 2010 to 17/05/2010.

Events that may impact the applicability of the methodology have not occurred during this monitoring period.

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

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There is no revision in monitoring plan for this project activity.

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

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There is no request for deviation from this project activity for the current monitoring period.

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

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Notification in PDD was accepted by EB on dated 27/07/2011.

<http://cdm.unfccc.int/Projects/DB/RWTUV1222760737.24/view>

#### **SECTION C. Description of the monitoring system**

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##### **Monitoring plan as per the registered PDD:**

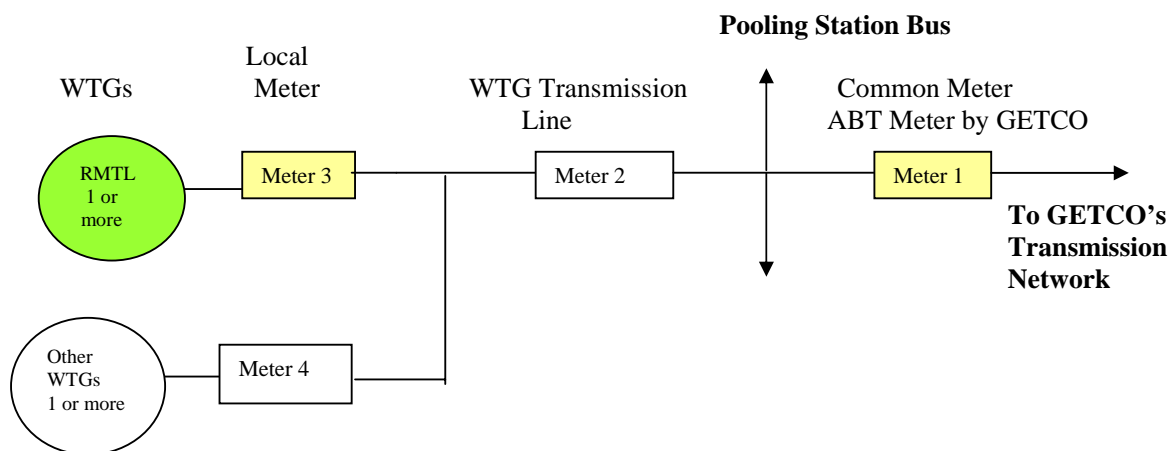
The project proponents have proposed a detailed procedure to ensure proper monitoring for the purpose of CDM activity.

The methodology requires monitoring of the electricity generation from the project activity. Analysis of daily power generation reports, performance report and monthly meter reading is handled by project proponent on a regular basis. The metering system includes a main meter and a back up meter, sealed in the presence of the representatives of the power producer and GETCO. The State Electricity Board personnel take readings of power generation every month; this data is used for the billing purposes.

The meter reading taken jointly at the appointed date and time is signed by the representatives of the GUVNL/ GETCO and the O&M service provider every month. The backup meter will be used in the period the main metering system is not in service. The project proponent ensures that the meters are repaired, re-calibrated or replaced immediately in case they are found to be outside the acceptable limits of accuracy or not functioning properly. The meters are calibrated at least once in three years as per the registered PDD.

The proponent keeps complete and accurate records and all other data required for the purpose of proper administration and operation of the windmills. The proponent also maintains an accurate and up-to-date operating log at the wind mill sites. The data will be kept for at least 2 years after the end of the crediting period or the last issuance of CERs for the project activity, whichever occurs later.

##### **Metering arrangement for Wind Farm**



##### **Data collection procedures**

The data that bears relevance to the energy generation from the project- the meter readings, are taken monthly by the representative of GEDA and the PP (currently Suzlon personnel- the O&M service provider) for calculating (as represented in the registered PDD) and reporting the Wind energy share

certificate. This is then forwarded to the owner of each WTG linked to the substation to credit their share. The service provider maintains all records as required and can forward the same to the PP if requested.

The web linked central monitoring system (CMS) of Suzlon downloads daily data of all the WTGs and this information is made available to the PP through their website. PP may request all other supporting documentation about their project to be presented to them in case of any aberrations.

The operation and maintenance team manages the farm, repairs in case of breakdown and ensures security on site. They have established emergency procedures. They also update the PP if any problems arise on site.

#### **Emergency preparedness:**

To ensure trouble free operations and efficient generations through all the wind turbines, PP has entered into a comprehensive long term Operation and Maintenance agreement with the manufactures of the turbines. The contractor Suzlon Infrastructure Services Limited, under the O&M contract with Ratnamani Metals and Tubes Ltd (RMTL) is responsible for the operation and maintenance of the project activity. The metering system also includes a back up meter apart from main meter. In case of any failure or error in the main meter, the reading from back up meter will be considered for monitoring.

### **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>	EFgrid, CM, y
Data unit:	tCO <sub>2</sub> / MWh
Description:	Combined Margin for WR grid
Source of data used:	Central Electricity Authority ,India
Value(s) :	0.898
Indicate what the data are used for (Baseline/ Project/ Leakage emission calculations)	Central Electricity Authority (India) is a government body and data published is in line with the methodological requirement. <a href="http://www.cea.nic.in/planning/c%20and%20e/user_guide_ver3.pdf">http://www.cea.nic.in/planning/c%20and%20e/user_guide_ver3.pdf</a>
Additional comment:	Fixed ex ante in the registered PDD

<b>Data / Parameter:</b>	EFgrid, OM,y
Data unit:	tCO <sub>2</sub> / MWh
Description:	Operating Margin for WR grid
Source of data used:	Central Electricity Authority ,India
Value(s) :	1.00
Indicate what the data are used for (Baseline/ Project/ Leakage emission calculations)	Central Electricity Authority (India) is a government body and data published is in line with the methodological requirement. <a href="http://www.cea.nic.in/planning/c%20and%20e/user_guide_ver3.pdf">http://www.cea.nic.in/planning/c%20and%20e/user_guide_ver3.pdf</a>
Additional comment:	Fixed ex ante in the registered PDD

<b>Data / Parameter:</b>	EFgrid, BM,y
Data unit:	tCO <sub>2</sub> / MWh
Description:	Build Margin for WR grid
Source of data used:	Central Electricity Authority ,India
Value(s) :	0.59
Indicate what the data are used for (Baseline/ Project/ Leakage emission calculations)	Central Electricity Authority (India) is a government body and data published is in line with the methodological requirement. <a href="http://www.cea.nic.in/planning/c%20and%20e/user_guide_ver3.pdf">http://www.cea.nic.in/planning/c%20and%20e/user_guide_ver3.pdf</a>

Additional comment:	Fixed ex ante in the registered PDD
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<b>D.2. Data and parameters monitored</b>	
<b>Data / Parameter:</b>	GEN
Data unit:	kWh per annum
Description:	Net electricity supplied by WTGs per annum in the project activity
Measured /Calculated /Default:	Measured
Source of data:	Monthly certificates issued by GEDA/ Electricity meter installed by State Electricity Board at uploading station connected to WTGs
Value(s) of monitored parameter:	38482153 kWh for the given monitoring period (from 25/03/2009 to 31/10/2010). Approximately 24010232.21 kWh per annum
Indicate what the data are used for (Baseline/ Project/ Leakage emission calculations)	Baseline emissions calculations
Monitoring equipment (type, accuracy class, serial number, calibration frequency, date of last calibration, validity)	Please refer annex 1 for meter details:
Measuring/ Reading/ Recording frequency:	Meter readings for measuring this parameter are taken monthly.
Calculation method (if applicable):	
QA/QC procedures applied:	Meters were calibrated as per the monitoring plan. refer annexure 1

## **SECTION E. Emission reductions calculation**

### **E.1. Baseline emissions calculation**

>>

Calculations have been done as per the methodology and formula presented in the registered PDD.

#### **Baseline emission:**

$$BE = \text{GEN} \times \text{CM} / 1000$$

Where;

BE = Baseline emission in tCO<sub>2</sub>/MWh

GEN =Net electricity supplied by WTGs per annum in the project activity in kWh

CM = Combined margin of WR grid in tCO<sub>2</sub>/MWh”

The Baseline calculations with the formula used is available in the accompanying excel sheet.

#### **At Suthri Site**

Month	Net electricity supplied from 10.5 MW	Net electricity supplied from 1.5 MW	Net electricity supplied from suthri site
Dates	kWh	kWh	kWh
25/03/09 to 30/03/09*	*	*	286769*
31/03/09 to 24/04/09	1215999	177367	1393366
25/04/09 to 24/05/09	1939147	274582	2213729
25/05/09 to 24/06/09	3602362	501204	4103566
25/06/09 to 02/07/09	403076	70091	473167

03/07/09 to 24/07/09	1991596	274482	2266078
25/07/09 to 24/08/09	3722262	120762	3843024
25/08/09 to 30/09/09	1586953	0	1586953
01/10/09 to 24/10/09	570201	0	570201
25/10/09 to 24/11/09	807208	51082	858290
25/11/09 to 24/12/09	1734331	284153	2018484
25/12/09 to 24/01/10	1189905	214713	1404618
25/01/10 to 24/02/10	1211212	197139	1408351
25/02/10 to 31/03/10	1300346	207430	1507776
01/04/10 to 24/04/10	1204544	103427	1307971
25/04/10 to 31/05/10	3345362	290188	3635550
01/06/10 to 30/06/10	2120442	369533	2489975
01/07/10 to 31/07/10	2083273	341380	2424653
01/08/10 to 31/08/10	1119402	229669	1349071
01/09/10 to 30/09/10	294559	89591	384150
01/10/10 to 31/10/10	427866	68907	496773
<b>Total</b>	<b>31870046</b>	<b>3865700</b>	<b>36022515</b>

\* Share certificates are available for the period 25/02/2009 to 30/03/2009 but not specifically for the period 25/03/2009 to 30/03/2009. Daily generation logs of this period (from 25/03/2009 to 30/03/2009) are used to calculate the electricity supplied in the period. The calculation method is given in the accompanying calculation worksheet.

**At Vanku Site:**

Month	Net electricity supplied	Net electricity supplied from Vanku
Dates	kWh	kWh
25/03/09 to 30/03/09*	16274*	16274*
31/03/09 to 24/04/09	89858	89858
25/04/09 to 24/05/09	147391	147391
25/05/09 to 24/06/09	261383	261383
25/06/09 to 24/07/09	129978	129978
25/07/09 to 24/08/09	254548	254548
25/08/09 to 30/09/09	114686	114686
01/10/09 to 24/10/09	48907	48907
25/10/09 to 24/11/09	91834	91834
25/11/09 to 24/12/09	104695	104695
25/12/09 to 24/01/10	84951	84951
25/01/10 to 24/02/10	89929	89929
25/02/10 to 31/03/10	104517	104517
01/04/10 to 24/04/10	94378	94378
25/04/10 to 31/05/10	254859	254859
01/06/10 to 30/06/10	178217	178217
01/07/10 to 31/07/10	185743	185743
01/08/10 to 31/08/10	115544	115544
01/09/10 to 30/09/10	49775	49775
01/10/10 to 31/10/10	42171	42171
<b>Total</b>	<b>2459638</b>	<b>2459638</b>

\*Share certificates are available for the period 25/02/2009 to 30/03/2009 but not specifically for the period 25/03/2009 to 30/03/2009. Daily generation logs of this period (from 25/03/2009 to 30/03/2009) are used to calculate the electricity supplied in the period. The calculation method is given in the accompanying calculation worksheet.

**Total Baseline Emissions (BE)**

Month	Period	Net electricity supplied by WTGs in the project activity .
	Dates	kWh
Mar-09	25/03/09 to 30/03/09	303043
Apr-09	31/03/09 to 24/04/09	1483224
May-09	25/04/09 to 24/05/09	2361120
Jun-09	25/05/09 to 24/06/09	4364949
Jul-09	25/06/09 to 24/07/09	2869223
Aug-09	25/07/09 to 24/08/09	4097572
Sep-09	25/08/09 to 30/09/09	1701639
Oct-09	01/10/09 to 24/10/09	619108
Nov-09	25/10/09 to 24/11/09	950124
Dec-09	25/11/09 to 24/12/09	2123179
Jan-10	25/12/09 to 24/01/10	1489569
Feb-10	25/01/10 to 24/02/10	1498280
Mar-10	25/02/10 to 31/03/10	1612203
Apr-10	01/04/10 to 24/04/10	1402349
May-10	25/04/10 to 31/05/10	3890409
Jun-10	01/06/10 to 30/06/10	2668192
Jul-10	01/07/10 to 31/07/10	2610396
Aug-10	01/08/10 to 31/08/10	1464615
Sep-10	01/09/10 to 30/09/10	433925
Oct-10	01/10/10 to 31/10/10	538944
<b>Total</b>	<b>Total</b>	<b>38482153</b>

Net power supplied in the period: 38482153 kWh

Emission factor: 0.898 tCO<sub>2</sub>/ MWh (fixed ex ante as per registered PDD)

Total BE for this monitoring period: 34,556 tCO<sub>2</sub>

**E.2. Project emissions calculation**

>>

As per the registered PDD, “There is no emission due to the project activity and hence, Emission reduction

$$ER = BE - PE = BE - 0 = BE$$

Therefore, Total Project Emissions: PE=0.

**E.3. Leakage calculation**

>>

As per the registered PDD, as the energy generating equipment is not transferred from another activity or the existing equipment is transferred to another activity, hence leakage is not to be considered.

Therefore, Total Leakage: LE=0.

**E.4. Emission reductions calculation / table**

>>

Baseline Emission.	Total Project Emissions	Total Leakage	Total Emission reductions. (ER= BE-PE-LE)
tCO <sub>2</sub> e	tCO <sub>2</sub> e	tCO <sub>2</sub> e	tCO <sub>2</sub> e
<b>34,556</b>	<b>0</b>	<b>0</b>	<b>34,556</b>

Total CERs generated in this monitoring period: **34,556 tCO<sub>2</sub>**

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

>>

Item	Values applied in ex-ante calculation of the registered CDM-PDD	Actual values reached during the monitoring period
Emission reductions (tCO <sub>2</sub> e)	38,467 tCO <sub>2</sub> e*	34,556 tCO <sub>2</sub> e*

\*For the entire monitoring period under consideration (586 days).

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

>>

The emissions reductions achieved in this period are lower (by approximately 10.17%) than those predicted ex ante in the PDD, there is no increase in the actual emission reductions achieved during the current monitoring period. No Data/Parameter is different from the registered CDM PDD. There is no singular reason for the reduced emission reductions; it can be attributed to poor performance of the WTGs and climactic factors.

**Annex 1**

**Meter calibration details:**

**Sub Station meters' detail:**

Site	Meter Serial no	Type	Accuracy class	Calibration Frequency	Date of Calibration	Calibrati on result	Valid till	Interval during which the meters were used
Vanku	GJB00591	Secure energy meters	0.5s	once in 3 years	20-09-2006	Within limits of error	20-09-2009	Prior to the start of monitoring period to beyond the end of monitoring period
					29-11-2008	Within limits of error	29-11-2011	Prior to the start of monitoring period to beyond the end of monitoring period
					18-12-2009	Within limits of error	18-12-2012	Prior to the start of monitoring period to beyond the end of monitoring period
	GJB00592	Secure energy meters	0.5s		20-09-2006	Within limits of error	20-09-2009	Prior to the start of monitoring period to beyond the end of monitoring period
					29-11-2008	Within limits of error	29-11-2011	Prior to the start of monitoring period to beyond the end of monitoring period
					18-12-2009	Within limits of	18-12-2012	Prior to the start of monitoring period to

						error		beyond the end of monitoring period
	GJ-2123-A	ER 300 P	0.2s		22-10-2008	Within limits of error	21-10-2011	From 01/04/2010 till the end of monitoring period
	GJ-2150-A				22-10-2008	Within limits of error	21-10-2011	From 01/04/2010 till the end of monitoring period
Suthri	MSE64370	Secure energy meters	0.2s	once in 3 years	10-07-2006	Within limits of error	10-07-2009	Prior to the start of monitoring period till 03/07/2009
					18-11-2008	Within limits of error	18/11/2001 1	
	GJ-2104-A	ER 300 P			14-08-2008	Within limits of error	13-08-2011	From 01/04/2010 till the end of monitoring period
	GJB00669	Secure energy meters			29-04-2006	Within limits of error	29-04-2009	Prior to the start of monitoring period till 03/07/2009
					18-11-2008	Within limits of error	18-11-2011	
	GJ-2110-A	ER 300 P			08-03-2010	Within limits of error	07-03-2013	From 01/04/2010 till the end of monitoring period
	GJB00671	Secure energy meters			19-06-2009	Within limits of error	19-06-2012	From 03/07/2009 till 31/03/2010
	GJB00673				19-06-2009	Within limits of error	19-06-2012	From 03/07/2009 till 31/03/2010
	GJB00674				19-06-2009	Within limits of error	19-06-2012	From 03/07/2009 till 31/03/2010

The meter calibration is done once in three years as per the registered PDD.

**33 kV yard meters' detail:**

SITE	WTG Number	Year 2008				Year 2009			
		Placed on	Meter No.	Accuracy class	Calibration date	Placed on	Meter No.	Accuracy class	Calibration date
Suthri	SEL/1500/06-07/0383	22-09-2008	GJU04445	0.5 S	18-Sep-08	05-12-2009	GJB01348	0.5 S	30-Nov-09
Suthri	SEL/1500/06-07/0360	03-09-2008	GJU04451	0.5 S	30-Aug-08	01-09-2009	GJB01709	0.5 S	01-Sep-09
Suthri	SEL/1500/06-07/0361	05-08-2008	GJU04504	0.5 S	01-Aug-08	31-07-2009	GJB01624	0.5 S	20-Jul-09
Suthri	SEL/1500/06-07/0384	05-08-2008	GJU04511	0.5 S	04-Aug-08	03-08-2009	GJB00664	0.5 S	30-Jul-09
Suthri	SEL/1500/06-07/0358	23-09-2008	GJU03851	0.5 S	22-Sep-08	17-09-2009	GJU04500	0.5 S	12-Sep-09
Suthri	SEL/1500/06-07/0359	05-08-2008	GJU04509	0.5 S	04-Aug-08	03-08-2009	GJB01306	0.5 S	31-Jul-09
Suthri	SEL/1500/06-07/0382	05-08-2008	GJU04479	0.5 S	01-Aug-08	31-07-2009	GJB01627	0.5 S	20-Jul-09
Suthri	SEL/1500/06-07/0362	27-08-2008	GJU04488	0.5 S	23-Aug-08	21-08-2009	GJU03892	0.5 S	17-Jun-09
Vanku	SEL/1250/05-06/0139	01-07-2008	GJU03425	0.5 S	13-May-08	10-06-2009	GJU00856	0.5 S	13-Jan-09

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**History of the document**

Version	Date	Nature of revision
01	EB 54, Annex 34 28 May 2010	Initial adoption.
<b>Decision Class:</b> Regulatory <b>Document Type:</b> Guideline, Form <b>Business Function:</b> Issuance		

