



Monitoring report form (Version 03.1)

Monitoring report

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|--|--|
| Title of the project activity | 9.6 MW Wind Energy Project at Jamvadi & Navagam & Kalavad, Jamnagar, Gujarat, India of Rohit Surfactants Pvt. Ltd. |
| Reference number of the project activity | 4470 |
| Version number of the monitoring report | 01 |
| Completion date of the monitoring report | 12/03/2013 |
| Registration date of the project activity | 08/09/2011 |
| Monitoring period number and duration of this monitoring period | Monitoring period No: 01 Duration: 08/09/2011 to 31/12/2012 (Both days Included) |
| Project participant(s) | Rohit Surfactants Pvt. Ltd. |
| Host Party(ies) | India |
| Sectoral scope(s) and applied methodology(ies) | Sectoral scope 01 and applied methodology is AMS I –D, Grid connected renewable electricity generation ,Version 16 |
| Estimated amount of GHG emission reductions or net anthropogenic GHG removals by sinks for this monitoring period in the registered PDD | 23,698 tCO ₂ e (481 days) |
| Actual GHG emission reductions or net anthropogenic GHG removals by sinks achieved in this monitoring period | 19,866 tCO ₂ e (481 days) |

SECTION A. Description of project activity**A.1. Purpose and general description of project activity**

The project activity involves installation of 12 Wind Electric Generators (WEGs) with a total capacity of 9.6 MW located at Jamnagar District, Gujarat State, India by Rohit surfactants Pvt. Ltd. The wind farm harnesses wind energy potential in the Jamnagar district and intends to promote renewable energy by addressing the causative factors of low utilisation of renewable energy resources.a. The project activity is in line with the sustainable development priority of the country.

All the WEGs are connected to the regional grid and as per the Power Purchase Agreement ("PPA") the generated electricity is being sold to Gujarat Urja Vikas Nigam Limited (GUVNL). Enercon India Ltd. (EIL) is the equipment supplier and operations & maintenance contractor for the project activity

Details of actual implementation status are as mentioned in table below:

| WEG Identification Number | Village | Date of Commissioning |
|---------------------------|---------|-----------------------|
| EIL/800/07-08/0927 | Jamvadi | 18/03/2008 |
| EIL/800/07-08/0928 | Jamvadi | 18/03/2008 |
| EIL/800/07-08/0929 | Jamvadi | 18/03/2008 |
| EIL/800/07-08/0930 | Jamvadi | 18/03/2008 |
| EIL/800/07-08/0931 | Jamvadi | 18/03/2008 |
| EIL/800/07-08/0932 | Jamvadi | 18/03/2008 |
| EIL/800/07-08/0933 | Jamvadi | 18/03/2008 |
| EIL/800/07-08/01029 | Navagam | 26/03/2008 |
| EIL/800/07-08/01030 | Navagam | 26/03/2008 |
| EIL/800/07-08/01031 | Navagam | 26/03/2008 |
| EIL/800/07-08/01032 | Navagam | 26/03/2008 |
| EIL/800/07-08/01033 | Navagam | 26/03/2008 |

During the monitoring period (08/09/2011- 31/12/2012) the project activity was operated and monitored in accordance with the applicable baseline and monitoring methodology AMS I-D, Version 16 and registered PDD.

All the WEGs are in operation and No abnormal circumstance occurred during this monitoring period. Enercon operation and maintenance activities are ISO 9001:2008 certified and all the events are recorded in the log book available at the project site. As a part of regular maintenance the machines are stopped for mechanical and electrical maintenance. The major events (Break down/ shut down) are provided in the emission reduction calculation sheet. Details are being provided by O & M contractor.

Total emission reductions for the monitoring period (08/09/2011 - 31/12/2012) Both days inclusive are 19,866 tCO₂e.

A.2. Location of project activity

Project activity is located at

Village : Jamvadi & Navagam

Taluka : Kalavad,

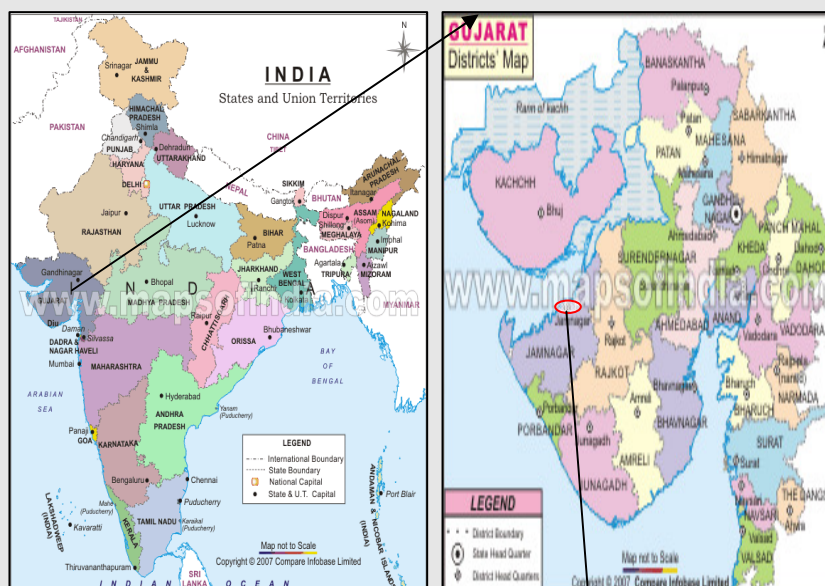
District: Jamnagar,

State: Gujarat

Country : India

Below table mentioned WEG wise location details:

| Sr. No. | Details of site of installation | | | WTG ID commissioning | GPS Coordinates |
|---------|---------------------------------|---------|----------|----------------------|---------------------------|
| | Name of village | Taluka | District | | |
| 1 | Jamvadi | Kalavad | Jamnagar | EIL/800/07-08/0927 | N22 07 13.2 – E70 18 39.3 |
| 2 | Jamvadi | Kalavad | Jamnagar | EIL/800/07-08/0928 | N22 07 19.5 – E70 18 39.5 |
| 3 | Jamvadi | Kalavad | Jamnagar | EIL/800/07-08/0929 | N22 07 25.8 – E70 18 36.1 |
| 4 | Jamvadi | Kalavad | Jamnagar | EIL/800/07-08/0930 | N22 07 32.3 – E70 18 36.2 |
| 5 | Jamvadi | Kalavad | Jamnagar | EIL/800/07-08/0931 | N22 08 12.1 – E70 18 20.2 |
| 6 | Jamvadi | Kalavad | Jamnagar | EIL/800/07-08/0932 | N22 08 18.1 – E70 18 18.4 |
| 7 | Jamvadi | Kalavad | Jamnagar | EIL/800/07-08/0933 | N22 08 25.2 – E70 18 16.1 |
| 8 | Navagam | Kalavad | Jamnagar | EIL/800/07-08/01029 | N22 03 27.6 – E70 16 53.9 |
| 9 | Navagam | Kalavad | Jamnagar | EIL/800/07-08/01030 | N22 03 22.4 – E70 16 54.0 |
| 10 | Navagam | Kalavad | Jamnagar | EIL/800/07-08/01031 | N22 03 14.4 – E70 17 01.8 |
| 11 | Navagam | Kalavad | Jamnagar | EIL/800/07-08/01032 | N22 03 08.4 – E70 17 03.9 |
| 12 | Navagam | Kalavad | Jamnagar | EIL/800/07-08/01033 | N22 03 02.4 – E70 17 06.3 |



Project
activity

A.3. Parties and project participant(s)

| Party involved ((host) indicates a host Party) | Private and/or public entity(ies) project participants (as applicable) | Indicate if the Party involved wishes to be considered as project participant (Yes/No) |
|--|---|---|
| India | Private entity : Rohit Surfactants Pvt. Ltd. (RSPL) | |

A.4. Reference of applied methodology

Type I – Renewable Energy Projects

AMS I.D – Grid connected renewable electricity generation, Version 16,

Sectoral Scope 01- Energy Industries (Renewable-/non-renewable sources)

The Tools used :

Tool to calculate the emission factor for an electricity system. Version 2/EB 50/Annex 14

A.5. Crediting period of project activity

08 September 2011 - 07 September 2021 (Fixed)

SECTION B. Implementation of project activity**B.1. Description of implemented registered project activity**

Project activity is implemented and operated as per the registered project activity. The project activity proposes to install total 12 WEGs of 800 kW each leading to the total capacity of 9.6 MW.

The project participant uses proven technology for wind power generation. This technology is supplied by ENERCON India Ltd (EIL). All the WEGs are connected to the regional grid and as per the Power Purchase Agreement ("PPA") the generated electricity is being sold to Gujarat Urja Vikas Nigam Limited (GUVNL). Enercon India Ltd. (EIL) is the equipment supplier and operations & maintenance contractor for the project activity.

Technical Specifications of turbines are as mentioned below:

| | |
|----------------------------|--|
| Turbine | Enercon |
| Rated Power | 800 kW |
| No. of Blades | 3 |
| Tower | Tubular |
| Turbine Type | Gearless horizontal |
| Power regulation | Independent electro-mechanical pitch system for each blade |
| Cut in wind speed | 3 m/s |
| Rated wind speed | 12 m/s |
| Cutout wind speed | 28 – 34 m/s |
| Extreme wind speed | 59.5 m/s |
| Rated rotational speed | 31.5 rpm |
| Operating range rot. Speed | 16 – 31.5 rpm |
| Orientation | Upwind |
| No. of blades | 3 |

| | |
|----------------|--|
| Blade Material | Glass Fiber reinforced Epoxy |
| Gear box type | Gear less |
| Generator type | Synchronous generator |
| Braking | Aerodynamics |
| Output voltage | 400 V |
| Yaw system | Active yawing with 4 electric yaw drives with brake motor and friction bearing |
| Tower | Tubular |

Project Implementation status is as mentioned in table below:

| WEG Identification Number | Village | Date of Commissioning |
|---------------------------|---------|-----------------------|
| EIL/800/07-08/0927 | Jamvadi | 18/03/2008 |
| EIL/800/07-08/0928 | Jamvadi | 18/03/2008 |
| EIL/800/07-08/0929 | Jamvadi | 18/03/2008 |
| EIL/800/07-08/0930 | Jamvadi | 18/03/2008 |
| EIL/800/07-08/0931 | Jamvadi | 18/03/2008 |
| EIL/800/07-08/0932 | Jamvadi | 18/03/2008 |
| EIL/800/07-08/0933 | Jamvadi | 18/03/2008 |
| EIL/800/07-08/01029 | Navagam | 26/03/2008 |
| EIL/800/07-08/01030 | Navagam | 26/03/2008 |
| EIL/800/07-08/01031 | Navagam | 26/03/2008 |
| EIL/800/07-08/01032 | Navagam | 26/03/2008 |
| EIL/800/07-08/01033 | Navagam | 26/03/2008 |

During this monitoring period, the wind farm had a good running, smooth data transfer and grid connection, and no special events happened. Details regarding major shutdown and breakdown is provided in emission reduction sheet. Details are provided by O & M contractor.

B.2. Post registration changes

B.2.1. Temporary deviations from registered monitoring plan or applied methodology

The project is implemented as per the registered PDD and no deviation has been applied to this monitoring period.

B.2.2. Corrections

The project is implemented as per the registered PDD and no corrections have been applied to this monitoring period.

B.2.3. Permanent changes from registered monitoring plan or applied methodology

The project is implemented as per the registered PDD and no changes have been applied to this monitoring period.

B.2.4. Changes to project design of registered project activity

The project design of the project activity is as per registered PDD. No changes have been made to project design of registered project activity.

B.2.5. Changes to start date of crediting period

There has been no request for change in start date of crediting period.

B.2.6. Types of changes specific to afforestation or reforestation project activity

Not Applicable.

SECTION C. Description of monitoring system

Monitoring of emission reductions will be carried out following the guidance provided in the applicable methodology for the project activity i.e. AMS-ID version 16, which requires monitoring of the following:

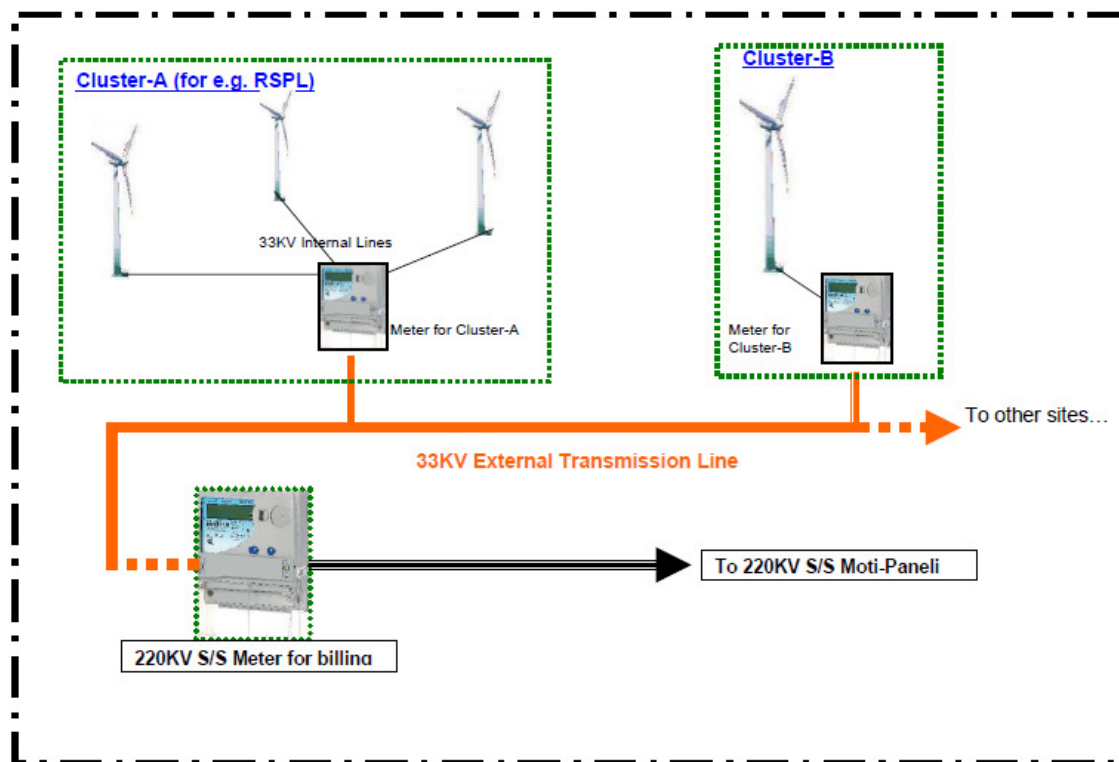
- Quantity of net electricity supplied to the grid from the project activity; and
- CO₂ emission factor of the grid electricity (Ex ante determination of grid emission factor has been chosen).

The general conditions set out for metering, recording, meter readings, meter inspections, Test & Checking and communication shall be as per the PPA (power purchase agreement) with GUVNL.

Reading and correction of meters:

- a) The WEGs of a single customer (RSPL in this case) at a particular site are connected to a 33 kV cluster meter which in turn connects to a feeder that ultimately leads to the shared main GETCO meter at the 220 kV substation. Data monitoring takes place at the 220 kV substation and at each WEG (through the SCADA system)
- b) Site technician will collect the generation readings from the WEGs every day and will prepare the daily generation report. Through these collective reports of everyday, monthly generation figures are available.
- c) Cluster meter readings are also taken daily on the same day the WEG meter readings are taken to get the exact generation recording of these meter.
- d) On the billing day decided by GEDA/GETCO/EIL, the reading of the 220 kV substation meter is taken at the same time of daily WEG readings by calculating in the pro-rata basis, the generated units are being allocated to individual customers according to the generated units
- e) The emission reduction calculations are done on the basis of the GETCO Main meter reading (net electricity exported to the grid) after deducting imports from the grid as mentioned in the share certificate issued by GEDA on monthly basis. The following figure illustrates the metering arrangement for the RSPL project activity.

ELECTRICITY SHARE ALLOCATION PROCEDURE FOR WEC GENERATION



- 1 -

- f) Whenever there is a major difference between the readings of the Main meter (220 kV substation meter and the 33kV cluster at Enercon Substation) at wind farm end, the following steps shall be taken.
- i. Checking of CT and PT connections
 - ii. Testing of accuracy of meters at site and at GETCO meter (220 kV substation meter)
- If the difference exists even after such checking or testing, then the defective meter shall be replaced with a correct meter.
- g) In case of conspicuous failures like burning of meter and erratic display of metered parameters and when the error found in testing of meter is beyond the permissible limit of error provided in the relevant standard, the meter shall be immediately replaced with a correct meter.
- h) Sealing and maintenance of meters:
- i. The GETCO meter (220 kV substation meter) shall be sealed in the presence of representatives of RSPL / Enercon and GETCO.
 - ii. Any meter seal(s) shall be broken only by the GETCO representative in the presence of Enercon/RSPLs representative whenever the main metering system or the 33kV metering system is to be inspected, tested, adjusted, repaired or replaced.
 - iii. The GETCO meter at the substation will be calibrated once in a year. The calibration of the meters installed in an individual WEG will take place on yearly basis in accordance with Enercon's operation & maintenance manual which is consistently followed at all Enercon sites across the world.
- i) Records: Enercon will maintain an accurate and up-to-date operating log at the project site with records of:
- i. 24 Hours logs of real and reactive power generation, frequency, transformer tap position, bus

voltage(s), Main meter and other meter readings and any other data mutually agreed.

ii. Any unusual conditions found during operation/inspections

iii. All the records will be preserved for 2 years after the end of the crediting period.

j) The billing will be on monthly basis. Enercon/RSPL shall raise invoice and submit to GUVNL for payment based on joint meter reading as certified by GEDA at the end of each month for the energy supplied

k) Billing for the failure period:

i. In the event that any GETCO meter fails to register or upon being tested, is found not to be accurate within ± 0.2 class the energy injected in the grid, shall for the period be measured on the basis of the value registered by the corresponding meter at the feeder end.

ii. In the event that both GETCO meter and the corresponding meter at the feeder end fail to register, or upon being tested, be found not to be accurate within $\pm 0.2 / 0.5$ the energy injected in the grid, shall for the period be adjusted by immediately restoring and recalibrating the GETCO meter and the corresponding cluster meter (33 kV substation) at the meter and the correction applied to the consumption registered by the GETCO meter.

iii. The period referred to in the two points above is the actual period during which inaccurate measurements were made if such period can be determined or, if not readily determinable, the shorter of:

i. The period since the immediately preceding test of the relevant Main meter; or

ii. One hundred and eighty (180) days immediately preceding the test at which the relevant Main meter was determined to be defective or inaccurate.

The project is operated and managed by Enercon (India) Ltd. The operational and management structure is as mentioned in Annex 3.

SECTION D. Data and parameters

D.1. Data and parameters fixed ex ante or at renewal of crediting period

| Data / Parameter: | Operating margin CO ₂ emission factor in year y - EF _{grid,OM, y} |
|---------------------|---|
| Unit: | tCO ₂ /MWh |
| Description: | Operating Margin Emission factor of the NEWNE grid |
| Source of data: | CO ₂ Baseline Database for the Indian Power Sector, User Guide, Version 5.0 dated November 2009 – from Central Electricity Authority (CEA) |
| Value(s) applied: | 1.0050 |
| Purpose of data: | Calculations of Baseline emissions |
| Additional comment: | . This data has been directly referred from the registered PDD. |

| Data / Parameter: | Build margin CO ₂ emission factor in year y – EF _{grid,BM, y} |
|---------------------|--|
| Unit: | tCO ₂ /MWh |
| Description: | Built Margin Emission factor of the NEWNE grid |
| Source of data: | CO ₂ Baseline Database for the Indian Power Sector, User Guide, Version 5.0 dated November 2009 – from Central Electricity Authority (CEA) It is fixed ex-ante and will be constant throughout the crediting period |
| Value(s) applied: | 0.6752 |
| Purpose of data: | Calculations of Baseline emissions |
| Additional comment: | This data has been directly referred from the registered PDD. |

| | |
|--------------------------|---|
| Data / Parameter: | Combined margin CO₂ emission factor in year y $EF_{CO_2, grid, y}$ |
| Unit: | tCO ₂ /MWh |
| Description: | The Emission factor of the NEWNE grid |
| Source of data: | Calculated as the weighted average of the build margin emission factor (25%) and operating margin emission factor (75%). It is fixed ex-ante and will be constant throughout the crediting period |
| Value(s) applied: | 0.9225 (calculated) |
| Purpose of data: | Calculations of Baseline emissions |
| Additional comment: | This data has been directly referred from the registered PDD. |

D.2. Data and parameters monitored

| | |
|--|--|
| Data / Parameter: | EG_{BL, y} |
| Unit: | MWh |
| Description: | Quantity of net electricity supplied to the grid as a result of the implementation of the CDM project activity in year y |
| Measured/ Calculated / Default: | Calculated from Measured value |
| Source of data: | Share certificate issued by GETCO monitored from the main meter |
| Value(s) of monitored parameter: | 21,535.059 |
| Monitoring equipment: | As discussed in Annexure 1 |
| Measuring/ Reading/ Recording frequency: | Monitoring continuous and Reported monthly. The data is recorded everyday and monthly values are reported in the monthly share certificates issued by GETCO |
| Calculation method (if applicable): | Net electricity generated will be calculated from the readings of export and import indicated by the main meter (220 kv substation meter) connected to the incoming feeder of GUVNL. The procedures for metering will be as per the provisions of the power purchase agreement. The WEGs of a single customer (RSPL in this case) at a particular site are connected to a cluster meter (33 kV) which in turn connects to a feeder that ultimately leads to the shared main GETCO meter at the 220 kV substation maintained by Enercon India Limited. Data monitoring takes place at the cluster meter (33 kV) and GETCO meter (220 kV) at the substation. The electricity metered at the GETCO meter is proportionally divided among the customers connected to the meter on the basis of the pro-rata readings taken at the cluster meter (33 kV). The emission reduction calculations are done on the basis of the GETCO Main meter reading (net electricity exported to the grid) after deducting imports from the grid as mentioned in the share certificate issued by GEDA on monthly basis. |
| QA/QC procedures: | Regular calibration of all the meters undertaken yearly and faulty meters will be replaced immediately. |
| Purpose of data: | Baseline calculation |
| Additional comment: | The data will be kept for two years after the end of the crediting period or the last issuance of CERs for this project activity, whichever occurs later |

| | |
|--|---|
| Data / Parameter: | EG_{y, Export} |
| Unit: | MWh |
| Description: | Quantity of electricity exported to GUVNL facility |
| Measured/ Calculated / Default: | Measured |
| Source of data: | Share certificate issued by GETCO monitored from the main meter |
| Value(s) of monitored parameter: | 21,989.403 |
| Monitoring equipment: | Annexure 1 |
| Measuring/ Reading/ Recording frequency: | Monitoring continuous and Reported monthly. The data is recorded everyday and monthly values are reported in the monthly share certificates issued by GETCO |
| Calculation method (if applicable): | Electricity exported to GUVNL will be measured at the main meter connected to the incoming feeder of GUVNL. The procedures for metering will be as per the provisions of the power purchase agreement |
| QA/QC procedures: | Annual calibration of all the meters will be undertaken and faulty meters will be duly replaced immediately. |
| Purpose of data: | Baseline calculation |
| Additional comment: | The data will be kept for two years after the end of the crediting period or the last issuance of CERs for this project activity, whichever occurs later |

| | |
|--|--|
| Data / Parameter: | EG_{y, Import} |
| Unit: | MWh |
| Description: | Quantity of electricity imported from GUVNL facility |
| Measured/ Calculated / Default: | Measured |
| Source of data: | Share certificate issued by GETCO monitored from the main meter |
| Value(s) of monitored parameter: | 454.344 |
| Monitoring equipment: | As discussed in Annexure 1 |
| Measuring/ Reading/ Recording frequency: | Monitoring continuous and Reported monthly. The data is recorded everyday and monthly values are reported in the monthly share certificates issued by GETCO |
| Calculation method (if applicable): | Electricity imported to GUVNL will be measured at the main meter connected to the incoming feeder of GUVNL. The procedures for metering will be as per the provisions of the power purchase agreement. |
| QA/QC procedures: | Annual calibration of all the meters will be undertaken and faulty meters will be duly replaced immediately. |
| Purpose of data: | Baseline calculation |
| Additional comment: | The data will be kept for two years after the end of the crediting period or the last issuance of CERs for this project activity, whichever occurs later |

| | |
|--------------------------|-----------------------------------|
| Data / Parameter: | EG_{y, WEG} |
| Unit: | MWh |
| Description: | Electricity generated by each WEG |

| | |
|--|--|
| Measured/ Calculated / Default: | Measured |
| Source of data: | Daily generation reports provided by Enercon India Limited |
| Value(s) of monitored parameter: | 20,917.674 |
| Monitoring equipment: | Monitored through inbuilt WTG integrated electronic meter |
| Measuring/ Reading/ Recording frequency: | Monthly |
| Calculation method (if applicable): | WEG is equipped with an integrated electronic meter. These meters are connected to the Central Monitoring Station (CMS) of the entire wind farm through communication cables (SCADA system). The generation data of individual WEG can be monitored as a real-time entity at CMS. This data for each individual WEG will be recorded daily |
| QA/QC procedures: | Annual calibration of all the meters will be undertaken and faulty meters will be duly replaced immediately. |
| Purpose of data: | This data is not used for the calculation of emission reductions per say but would act as a backup data for the net electricity generated. This data will also be recorded daily. |
| Additional comment: | The data will be kept for two years after the end of the crediting period or the last issuance of CERs for this project activity, whichever occurs later |

| | |
|--|---|
| Data / Parameter: | EG_{CM} |
| Unit: | MWh |
| Description: | Electricity generated at the Cluster Meter(CM) |
| Measured/ Calculated / Default: | Calculated from Measured Values. |
| Source of data: | Daily generation reports provided by Enercon India Limited |
| Value(s) of monitored parameter: | 22,309.502 |
| Monitoring equipment: | As discussed in Annexure 2 |
| Measuring/ Reading/ Recording frequency: | Measured & Recording Continuously and Reporting Daily |
| Calculation method (if applicable): | The individual WEGs at a particular site connect to a meter at the cluster meter (33 kV) where the secondary metering is done and reported in the daily generation report. |
| QA/QC procedures: | Annual calibration of all the meters will be undertaken and faulty meters will be duly replaced immediately. |
| Purpose of data: | This data is not used for the calculation of emission reductions per say but would act as a backup data for the net electricity generated. This data will also be recorded daily. |
| Additional comment: | The data will be kept for two years after the end of the crediting period or the last issuance of CERs for this project activity, whichever occurs later |

D.3. Implementation of sampling plan

Not Applicable

SECTION E. Calculation of emission reductions or GHG removals by sinks**E.1. Calculation of baseline emissions or baseline net GHG removals by sinks****Baseline Emissions:**

BE_y is calculated by multiplying the net quantity of electricity supplied to the grid by this project activity ($EG_{BL,y}$) with the CO₂ emission factor for the grid ($EF_{CO_2, grid, y}$) as follows:

$$BE_y = EG_{BL, y} * EF_{CO_2, grid, y}$$

Where:

$EF_{CO_2, grid, y}$ = Baseline emission factor in tCO₂/MWh = 0.9225 tCO₂/MWh¹

$EG_{BL, y}$ = Net electricity supplied to the regional grid in year y = $EG_{y, Export} - EG_{y, Import}$ (as mentioned in GEDA share certificates)

¹ Emission Factor calculation is provided in Annex 3 and section B.4.1

$$\begin{aligned}
 EG_{BL, y} &= EG_{v, Export} - EG_{v, Import} \\
 &= 21,989.403 - 454.344 \\
 &= 21,535.059 \text{ MWh}
 \end{aligned}$$

| Month | $EG_{BL, y}$ $= EG_{v, Export}$ $- EG_{v, Import}$ | $EG_{v, Export}$ | $EG_{v, Import}$ | $EF_{CO2, grid, y}$ | $BE_y =$ $EG_{BL, y} * EF_{CO2, grid, y}$ |
|--|--|--------------------|------------------|---------------------|--|
| | | kWH | kWH | | MWh |
| 08 September 2011 to 30 September 2011 | 5,42,313 | 5,50,379 | 8,066 | 0.9225 | 500 |
| 01 October 2011 to 31 October 2011 | 5,92,447 | 5,92,891 | 444 | 0.9225 | 547 |
| 01 November to 30 November 2011 | 7,78,258 | 7,82,854 | 4,596 | 0.9225 | 718 |
| 01 December 2011 to 31 December 2011 | 12,02,229 | 12,21,615 | 19,386 | 0.9225 | 1,109 |
| 01 January 2012 to 31 January 2012 | 11,91,529 | 12,03,109 | 11,580 | 0.9225 | 1,099 |
| 01 February 2012 to 29 February 2012 | 13,12,586 | 13,18,996 | 6,410 | 0.9225 | 1,211 |
| 01 March 2012 to 31 March 2012 | 12,33,031 | 12,37,446 | 4,415 | 0.9225 | 1,137 |
| 01 April 2012 to 30 April 2012 | 13,85,740 | 13,97,572 | 11,832 | 0.9225 | 1,278 |
| 01 May 2012 to 31 May 2012 | 17,69,095 | 18,20,173 | 51,078 | 0.9225 | 1,632 |
| 01 June 2012 to 30 June 2012 | 23,59,041 | 24,55,175 | 96,134 | 0.9225 | 2,176 |
| 01 July 2012 to 31 July 2012 | 23,11,718 | 24,55,175 | 1,43,457 | 0.9225 | 2,133 |
| 01 August 2012 to 31 August 2012 | 23,65,651 | 24,42,086 | 76,435 | 0.9225 | 2,182 |
| 01 September 2012 to 30 September 2012 | 18,00,282 | 18,04,164 | 3,882 | 0.9225 | 1,661 |
| 01 October 2012 to 31 October 2012 | 6,84,016 | 6,84,244 | 228 | 0.9225 | 631 |
| 01 November to 30 November 2012 | 7,55,891 | 7,57,095 | 1,204 | 0.9225 | 697 |
| 01 December 2012 to 31 December 2012 | 12,51,232 | 12,66,429 | 15,197 | 0.9225 | 1,154 |
| Total | 2,15,35,059 | 2,19,89,403 | 4,54,344 | | 19,866 |

$$\begin{aligned}
 BE_y &= EG_{BL, y} * EF_{CO2, grid, y} \\
 &= 21,535.059 * 0.9225 \\
 &= 19,866 \text{ tCO}_2\text{e}
 \end{aligned}$$

| Monitored Data | | | |
|--|---|--|------------|
| Month | Electricity generated at Cluster Meter EG_{CM} | Electricity generated by each WEG $EG_{v, WEG}$ | Days |
| | kWH | kWH | |
| | | | |
| 08 September 2011 to 30 September 2011 | 5,62,515 | 5,69,810 | 23 |
| 01 October 2011 to 31 October 2011 | 5,98,033 | 6,06,751 | 31 |
| 01 November to 30 November 2011 | 7,91,788 | 8,00,283 | 30 |
| 01 December 2011 to 31 December 2011 | 12,32,667 | 12,46,321 | 31 |
| 01 January 2012 to 31 January 2012 | 12,13,789 | 12,27,657 | 31 |
| 01 February 2012 to 29 February 2012 | 14,25,800 | 13,49,530 | 29 |
| 01 March 2012 to 31 March 2012 | 12,45,305 | 12,58,389 | 31 |
| 01 April 2012 to 30 April 2012 | 14,11,089 | 14,25,772 | 30 |
| 01 May 2012 to 31 May 2012 | 18,46,491 | 18,82,724 | 30 |
| 01 June 2012 to 30 June 2012 | 14,25,800 | 25,13,782 | 31 |
| 01 July 2012 to 31 July 2012 | 24,85,328 | 24,88,434 | 30 |
| 01 August 2012 to 31 August 2012 | 24,53,200 | 18,52,611 | 31 |
| 01 September 2012 to 30 September 2012 | 18,46,035 | 8,93,125 | 31 |
| 01 October 2012 to 31 October 2012 | 7,05,758 | 7,13,955 | 31 |
| 01 November to 30 November 2012 | 17,72,510 | 7,80,605 | 30 |
| 01 December 2012 to 31 December 2012 | 12,93,395 | 13,06,925 | 31 |
| Total | 2,23,09,502 | 2,09,16,674 | 481 |

E.2. Calculation of project emissions or actual net GHG removals by sinks

This project activity is grid connected wind power generation. Hence there is no project emission from the project activity. There are no GHG emissions or leakage within the project boundary.

E.3. Calculation of leakage

There are no GHG emissions or leakage within the project boundary.

E.4. Summary of calculation of emission reductions or net anthropogenic GHG removals by sinks

| Item | Baseline emissions or baseline net GHG removals by sinks (t CO ₂ e) | Project emissions or actual net GHG removals by sinks (t CO ₂ e) | Leakage (t CO ₂ e) | Emission reductions or net anthropogenic GHG removals by sinks (t CO ₂ e) |
|--------------|--|---|-------------------------------|--|
| Total | 19,866 | 00 | 00 | 19,866 |

E.5. Comparison of actual emission reductions or net anthropogenic GHG removals by sinks with estimates in registered PDD

| Item | Values estimated in ex-ante calculation of registered PDD | Actual values achieved during this monitoring period |
|---|---|--|
| Emission reductions or GHG removals by sinks (t CO₂e) | 23,698 (=17,983/365 *481) | 19,866 |

E.6. Remarks on difference from estimated value in registered PDD

The actual emission reduction achieved during the current monitoring period (549 day) is lower than estimated in PDD.

E.7. Actual emission reductions or net anthropogenic GHG removals by sinks during the first commitment period and the period from 1 January 2013 onwards

| Item | Actual values achieved up to 31 December 2012 | Actual values achieved from 1 January 2013 onwards |
|---|---|--|
| Emission reductions or GHG removals by sinks (t CO₂e) | 19,866 | 00 |

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Document information

| <i>Version</i> | <i>Date</i> | <i>Description</i> |
|---|-----------------|--|
| 03.1 | 2 January 2013 | Editorial revision to correct table in section E.5. |
| 03.0 | 3 December 2012 | Revision required to introduce a provision on reporting actual emission reductions or net anthropogenic GHG removals by sinks for the period up to 31 December 2012 and the period from 1 January 2013 onwards (EB70, Annex 11). |
| 02.0 | 13 March 2012 | Revision required to ensure consistency with the "Guidelines for completing the monitoring report form" (EB 66, Annex 20). |
| 01 | 28 May 2010 | EB 54, Annex 34. Initial adoption. |
| Decision Class: Regulatory | | |
| Document Type: Form | | |
| Business Function: issuance | | |
| Keywords: monitoring report, performance monitoring | | |

Annexure 1

Details of Main meters at Substation:

| Main Meter | Meter1 | Meter 2 | Meter 3 | Meter 4 |
|----------------------|------------|------------|------------|-------------------------|
| | | | | |
| Sr. No | GJB0175 | GJB04176 | GJB01470 | KAB11082 |
| | | | | |
| Accuracy | 0.2s | 0.2s | 0.2s | 0.2s |
| | | | | |
| Last Calibration | 17-01-2012 | 17-01-2012 | 17-01-2012 | 17-01-2012 |
| Previous Calibration | 17-01-2011 | 17-01-2011 | 17-01-2011 | 17-01-2011 |
| Previous Calibration | 22-01-2010 | 22-01-2010 | 22-01-2010 | Installed on 29-05-2010 |

Annexure 2**Details of Cluster Meters**

| Cluster Meter | Meter1 | Meter 2 | Meter 3 |
|----------------------|---------------|----------------|----------------|
| | | | |
| Accuracy | 0.5s | 0.5s | 0.5s |
| | | | |
| Last Calibration | 28-12-2012 | 28-12-2012 | 28-12-2012 |
| Previous Calibration | 28-12-2011 | 28-12-2011 | 28-01-2011 |
| Previous Calibration | 02-08-2010 | 02-08-2010 | 02-08-2010 |

Annexure 3
Operational and management structure

