



## Voluntary Carbon Standard Version 2007.1 Verification Report

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### Verification Report:

Name of Verification company:	Date of the issue:
<b>TÜV NORD CERT GmbH</b>	2011-05-24
Report Title:	Approved by:
10 MW bundled wind power project by Era Infra Engineering Limited.	Rainer Winter
Client:	Project Title:
Era Infra Engineering Limited.	10 MW bundled wind power project by Era Infra Engineering Limited.
Summary:	

Era Infra Engineering Limited has commissioned the TÜV NORD JI/CDM Certification Program to carry out the verification of the project - "10 MW bundled wind power project by Era Infra Engineering Limited", with regard to the relevant requirements of VCS 2007.1 Standard.

The project is a renewable energy project. It has been implemented to produce electricity by using wind which is a renewable source of energy. Total installed capacity of the project is 10 MW comprising of 8 WTGs of 1.250 MW each. 4 among which have been installed in Kutch district of Gujarat, 3 are in Sangli and one is in Dhule district of Maharashtra. Electricity from the project activity is supplied to the NEWNE Grid of India.

A risk based approach has been followed to perform this validation. In the course of the verification 15 Corrective Action Requests (CARs), (02) Clarification request were raised.

The verification is based on the Project Document (PD)<sup>/PD/</sup>, Validation report<sup>/VAL/</sup> monitoring report<sup>/MR1/MR2/</sup> and other supporting documents made available to the verifiers by project proponent.

As a result of the verification, the verifiers confirm that:  
The GHG emission reduction in the crediting period (2006.09.30 to 2009.08.31) is:  
38599 t CO<sub>2e</sub>.

Work carried out by:	Number of pages:
Mr. Pankaj Patel Mr. Hemang Shah Mr. Saroj Sahoo  TR: Ingo Klein & Samir Beqqal FA: Rainer Winter	21

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## 1. Introduction

### 1.1 Objective

The purpose of this verification, by independent checking of objective evidence, is as follows:

- to verify that the project is implemented as described in the project design document;
- to confirm that the monitoring system is implemented and fully functional to generate Voluntary Emission Reductions (VERs/VCUs<sup>1</sup>) without any double counting, and
- to establish that the data reported are accurate, complete, consistent, transparent and free of material error or omission by checking the monitoring records and the emissions reduction calculation.

### 1.2 Scope and Criteria

The verification of this VCS project is based on the VCS project description /PD/, Validation report<sup>/VAL/</sup>, Monitoring report<sup>/MR1/MR2/</sup> and supporting documents made available to the verifier and information collected through performing interviews during the on-site assessment. Furthermore publicly available information was considered as far as available and required.

The TÜV NORD JI/CDM CP has employed a risk-based approach in the verification, focusing on the identification of significant risks and reliability of project monitoring and generation of emission reductions.

As per the VCS policy Announcement on 19<sup>th</sup> March 2008, "the start date of the crediting period should be from 28<sup>th</sup> March 2006 or two years prior to the completion of the project validation whichever is later" and subsequent policy announcement on 10<sup>th</sup> September 2008, "VCS 2007.1 validations shall be completed within two years of the project start date, or shall be completed or contracted before 19 November 2008. In relation to contracts entered into before 19 November 2008, validation shall be completed by 19 November 2009 and proof of contracting prior to 19 November 2008 shall be provided." The validation report for the project is dated 16/11/2009 and the start date of the monitoring period is 30<sup>th</sup> September 2006 thus the project complies with the VCS rule for start date of monitoring period.

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<sup>1</sup> As per VCS, Verified Emission Reductions (VERs) are considered to be VCUs only after successful registration in an approved VCU Registry

### 1.3 VCS project Description

The project proponent, Era Infra Engineering Limited has envisioned to produce clean power from wind which is a renewable source of energy. For that purpose he has set up a bundled wind power project of a capacity of 10 MW which includes a 5 MW (4 Nos. x 1.250 MW) located at Kutch in the state of Gujarat and 5 MW (3 Nos. x 1.25 MW at Sangli and 1 Nos. x 1.25 MW at Dhule) located in the state of Maharashtra. The details of the each bundles with their locations and date of commissioning has been shown in the table below.

<b>Bundle</b>	<b>No. x Capacity (MW)</b>	<b>WTG Supplier</b>	<b>WTG Number</b>	<b>Date of Commissioning<sup>2</sup></b>	<b>Location</b>
<b>Bundle – I Sangli, Maharashtra</b>					
Sangli	1 x 1.250	Suzlon	G346	30.09.2006	Survey No. 540, Village - Birenwadi Tal. Tasgao, Sangli
	1 x 1.250	Suzlon	G348	30.09.2006	Survey No. 553, Village - Birenwadi Tal. Tasgao, Sangli
	1 x 1.250	Suzlon	G379	30.09.2006	Survey No. 1716, Village – Waifale, Tal. Tasgao, Sangli
<b>Bundle – II Dhule, Maharashtra</b>					
Dhule	1 x 1.250	Suzlon	J042	30.09.2006	Village - Dusane, (Brahamanwel) Tal. Sakri Distt. Dhule
<b>Bundle – III Kutch, Gujarat</b>					
Kutch	1 x 1.250	Suzlon	M18	31.03.2007	Survey No. 113,108,111, Village - Kadoli Tal. Abdasa Distt. Kutch
	1 x 1.250	Suzlon	M20	26.03.2007	Survey No. 113,108,111, Village - Kadoli Tal. Abdasa Distt. Kutch
	1 x 1.250	Suzlon	M21	26.03.2007	Survey No. 113,108,111, Village - Kadoli

<sup>2</sup> Commissioning Certificates GEDA and MSEDCL

					Tal. Abdasa Distt. Kutch
	1 x 1.250	Suzlon	M24	26.03.2007	Survey No. 113,108,111, Village - Kadoli Tal. Abdasa Distt. Kutch

The units installed in the Maharashtra region which are included in the bundle-I and bundle-II have been commissioned on 30<sup>th</sup> September 2006. So this has been considered as the start date of the project activity as this is the earliest date among the all.

#### 1.4 Level of assurance

The verification report is based on VCS PD<sup>PD/</sup>, Validation report<sup>VAL/</sup>, Monitoring report<sup>MR1/MR2/</sup> and other supporting documents made available to the verifier and information collected through performing interviews and during the on-site assessment. The verification opinion is assured provided the credibility of all above.

## 2. Methodology

The verification of the project was carried out from January 2009 to May 2011.

Preparations	:	2009-01-30 to 2009-02-06
On-site Verification	:	2009-03-12, 2009-03-19, 2009-03-21
(Draft) Reporting	:	2010-02-03
(Final) Reporting	:	2011-05-24

The verification consisted of the following steps:

- A desk review of the VCS PD<sup>PD/</sup>, Validation report<sup>VAL/</sup> and supporting documents with the use of the relevant sections of a customised protocol according to the VCS 2007.1;
- A desk review of the Monitoring Report<sup>MR1/MR2/</sup> and additional supporting documents which were submitted by the client. The relevant sections of the above mentioned customised protocol according to the VCS 2007.1 were used.
- Verification audit planning,
- On-Site assessment,
- Background investigation and follow-up interviews with personnel of the project developer,
- Verification reporting (Draft Verification Report and Final Verification Report).

The criteria of this verification include the relevant rules and steps as set out in the VCS 2007.1

### 3. Verification Findings

#### 3.1. Remaining issues, including any material discrepancy, from previous validation

The verification has been carried out based on the registered VCS PD<sup>/PD/</sup> and the validation report<sup>/VAL/</sup>. There is no remaining issue including any material discrepancy from the validation of the project.

#### 3.2. Project Implementation

The project activity is to produce clean power from wind energy. The project is a bundled wind project comprising of three bundles with a total capacity of 10 MW which includes a 5 MW (4 Nos. x 1.250 MW) located at Kutch in the state of Gujarat and 5 MW (3 Nos. x 1.25 MW at Sangli and 1 Nos. x 1.25 MW at Dhule) located in the state of Maharashtra .The bundles in the Maharashtra region were commissioned on 30th September 2006 and the units in the Kutch region of Gujarat have been commissioned on 26th March 2007 and 31st March 2007.The power produced from all the units are being evacuated to the NEWNE grid of India.

It was verified by the DOE that the actual project activity was implemented in accordance with the VCS PD<sup>/PD/</sup>. The verification team has verified the nameplates capacity of the turbines to be 1.250 MW during site visit.

Nevertheless, CAR 2.1-CAR 2.4 and CR 2.1 and 2.2 were raised and successfully closed.

CAR/CR	Reference	Summary of project owner response	Revised sections (as applicable)	Conclusion
CAR 2.1 Under the head, introduction, page 2 of the monitoring report the name of the regional grid should be mentioned.	/MR1/	The name of the regional grid is now included.	/MR2/	The name of the regional grid has been added to the concern section of revised monitoring report <sup>/MR2/</sup> . The CAR is closed.
CAR 2.2 In the table -1 under the head, project location of the monitoring report the numbers of the WTGs of the Kutch region has been shown as	/MR1/	The WTG numbers are corrected.	/MR2/	In revised monitoring report <sup>/MR2/</sup> the numbers of WTGs has been corrected under table-1 of the head project location and found ok.

CAR/CR	Reference	Summary of project owner response	Revised sections (as applicable)	Conclusion
SEL/1250/06-07/0461 etc. But in site visit the WTGs were noted to be numbered as M18, M20 etc...				CAR has closed.
CAR 2.3 Latitude and longitude described in the table-2 under the head of project location of the monitoring report should be in Degree, Minute and second format.	/MR1/	The same has been corrected in the MR 2.	/MR2/	The latitudes and longitudes in the respective table have been added in the revised monitoring report <sup>/MR2/</sup> correct format. CAR has closed.
CAR 2.4 In the diagram shown for the project boundary : <ul style="list-style-type: none"> <li>• 1.25 MW is the capacity of an individual WTG not the whole project activity.</li> <li>• Electricity import/export from/to the grid is not monitored at the transformer installed at WTG end as shown in the diagram for all the bundles .However it may be partly correct for the Gujarat region where transformer yard meter is there.</li> <li>• The common meters at the substation end should be indicated as export/import monitoring point electricity.</li> </ul>	/MR1/	Corrected	/MR2/	The project boundary diagrams for the three individual projects of the bundled project have been shown separately in the revised monitoring report <sup>/MR2/</sup> and found correct. CAR has been closed.



CAR/CR	Reference	Summary of project owner response	Revised sections (as applicable)	Conclusion
CR 2.1 Under the head of introduction on page-2 of the monitoring report it has been written that the social benefits indicators are monitored. But this is not a monitoring parameter. If it is being monitored then how? (Otherwise the statement could be removed.)	/MR1/	The same has been deleted in the MR 2.	/MR2/	The same has been found to be corrected in the revised monitoring report <sup>/MR2/</sup> .  The CAR is closed.
CR 2.2 On page 9 under the head, Routine Maintenance services, details of actual maintenance carried out should be given in the monitoring report.	/MR1/	Incorporated in the VCS <sup>MR /2/</sup> .	/MR2/	The details of the operation and maintenance has been added in the respective section of the revised monitoring report <sup>/MR2/</sup> and found OK.  The CAR has been closed.

### 3.3. Completeness of Monitoring

PP has submitted monitoring report<sup>/MR1/MR 2/</sup> describing various details of the project activity, monitored parameters, and ER calculations. The reporting<sup>/MR1/MR 2/ XLS1/XLS2/</sup> is in line with the requirements of the validated monitoring plan as well as with the applied methodology AMS I .D. version 13<sup>/AMS-ID/</sup>.

The reporting procedures reflect the requirements of the monitoring plan<sup>/PD/</sup>. The net electricity exported is recorded once every month and stored appropriately in the spread sheets during the whole monitoring period. These data form the basis of emission reduction calculation.

Following parameters of the project activity are required to be monitored as per the VCS PD<sup>/PD/</sup>.

- Net electricity supplied to the NEWNE electricity grid from Bundle I (Sangli, Maharashtra), GWh.
- Net electricity supplied to the NEWNE electricity grid from Bundle II (Dhule, Maharashtra), GWh.
- Net electricity supplied to the NEWNE electricity grid from Bundle III (Kutch, Gujarat), GWh.

Share of electricity certificate<sup>/CERT/</sup> issued monthly to each individual WTG/Client by the state utility (GEDA/MSEB) form the basis to record net electricity supplied to the regional grid.

Nevertheless, CAR 3.1-CAR 3.4 were raised and successfully closed.

CAR/CR	Reference	Summary of project owner response	Revised sections (as applicable)	Conclusion
CAR 3.1 In monitoring table 05, 06 and 07 on page 7-9 of Monitoring report the data source mentioned for the net electricity supplied to the grid is not inline with the registered VCS PD and the validation report. The only authenticate source for this data is the share of electricity certificate issued by a state agency to the client each month.	/MR1/	The same has been corrected in the revised MR.	/MR2/	The same has been verified to be corrected in the revised monitoring report <sup>/MR2/</sup> . The CAR is closed.
CAR 3.2 The description procedure provided in the monitoring tables should be as per the actual procedure which is followed at the site for monitoring. In the description for Maharashtra sites it is show that there are meters installed near to the WTGs where as it is not the case.	/MR1/	The description for the monitoring procedure has been revised.	/MR2/	The same has been changed in the revised monitoring report <sup>/MR2/</sup> and found correct.  The CAR has closed.
CAR 3.3 In the description procedure provided for the Kutch region, it is mentioned that there are check meters near to each WTG. While there is no such check meter. This should be corrected.	/MR1/	The description for the monitoring procedure has been revised.	/MR2/	The same has been changed in the revised monitoring report <sup>/MR2/</sup> and found correct.  The CAR has been closed.

CAR/CR	Reference	Summary of project owner response	Revised sections (as applicable)	Conclusion
CAR 3.4 On page-9, JMR and the common meter reading are the part of the monitoring procedure for the Kutch sites. But in the last Para of the monitoring procedure provided for Kutch region it is stated that most conservative value between these two sources will be considered for emission reduction calculation. This is not true. However it should be noted that only the units certified by statutory government body GEDA to the each WTG/PP should be the base to calculate the emission reduction. Monitoring report should be modified accordingly.	/MR1/	The description for the monitoring procedure has been revised.	/MR2/	The same has been changed in the revised monitoring report <sup>/MR2/</sup> and found correct.  The CAR has been closed.

### 3.4. Accuracy of Emission Reduction Calculations

For the calculation of baseline emissions the ex-ante determined value of Grid Emission Factor for current generation mix i.e. 906.2 tCO<sub>2</sub>/GWh is taken into account which is a validated value. This Grid emission factor was taken from the "CO<sub>2</sub> Baseline Database for Indian Power Sector" published by Central Electricity Authority, Ministry of Power, Government of India, version 3.0 during the registration of the Project. The registered VCS PD PD<sup>/PD/</sup> and the validation report<sup>/VAL/</sup> was verified by the DOE and the value taken for the grid emission factor found to be consistent.

The net power exported to the grid has been recorded from electricity share of certificates<sup>/CERT/</sup> issued by GEDA/MSEDCL every month to the PP. The share of electricity certificates<sup>/CERT/</sup> for the entire monitoring period has been verified by the DOE to confirm the input values considered for the emission reduction calculation.

#### **Baseline Emissions:**

The formula used for the determination of baseline emissions which is consistent with the baseline methodology and VCS PD:

$$BE_y = EG_y \times EF_{grid, y}$$

Baseline Emissions (tCO<sub>2</sub>/yr) = Net power exported to the grid in GWh x Grid Emission Factor (t CO<sub>2</sub>/GWh)

$$= 42.61 \text{ GWh} \times (905.89 \text{ tCO}_2/\text{GWh})$$

$$= 38599 \text{ tCO}_2 \text{ (Values are taken in round figures as per the excel sheet)}$$

The baseline emissions (BE) during the monitoring period are 38668.48 tCO<sub>2</sub>

**Project Emission & Leakage:**

In accordance with AMS I.D. (Version 13, date: EB 36), the project emission and leakage were ignored.

**Emission Reduction (ER<sub>y</sub>)**

Emission Reduction, ER<sub>y</sub> = baseline emission, BE<sub>y</sub>

$$= 38599 \text{ tCO}_2$$

Nevertheless, CAR 4.1-CAR 4.5 were raised and closed successfully.

CAR/CR	Reference	Summary of project owner response	Revised sections (as applicable)	Conclusion
CAR 4.1 In page-13 of the monitoring report it is mentioned that the generation from the units of the kutch region started from 30th September 2006 while these were commissioned in March 2007.	/MR1/	It is now corrected in the revised monitoring report.	/MR2/	The date has been corrected in the revised monitoring report <sup>/MR2/</sup> . The CAR is closed.
CAR 4.2 Under the head VCU (Voluntary Carbon Units) Calculations (page -14) <ul style="list-style-type: none"> <li>Formula used for ER<sub>y</sub> should be same as per the methodology including the leakage parameter. The leakage is taken as zero. The reference to the methodology should be provided.</li> <li>Baseline emissions are calculated separately for each bundle. (BE<sub>electricity</sub>). There is no such parameter defined in methodology. Baseline emission should be</li> </ul>	/MR1/	It is mentioned in the page # 13 of MR 2.	/MR2/	The formulae are now corrected in the revised monitoring report <sup>/MR2/</sup> . The baseline emission has been calculated by considering the sum of net generation from all the three bundles.  The CAR is closed.

CAR/CR	Reference	Summary of project owner response	Revised sections (as applicable)	Conclusion
<p>calculated by adding net electricity exported to the grid by the entire bundle. (EG<sub>v</sub>)</p>				
<p>CAR 4.3 As mentioned under head, Measures to ensure the Accuracy of Results in the monitoring report on page 11, not all the common meters (main meters and check meters) used at each sub stations are of 0.2% class. Meters at Vanku sub station is of 0.5 % class. Monitoring report should be corrected as per validated monitoring plan of VCS PD.</p>	/MR1/	The accuracy class is corrected in the monitoring report.	/MR2/	The accuracy class mentioned in the revised monitoring report <sup>/MR2/</sup> has been verified by the DOE to be correct. The CAR is closed.
<p>CAR 4.4</p> <ul style="list-style-type: none"> <li>• Out of 4 WTGs in the Kutch region one is being evacuated to the Vanku substation and the others are to the Suthri substation. The back up calculation for the net electricity generation from all the bundle filled in the table10 is required mentioning the production from each WTGs.</li> <li>• PP is requested to submit all the monthly share of electricity certificate issued by GEDA / MSEDCL. Emission reduction calculation shown in the excel sheet to be modified as per GEDA/MSEDCL share of electricity certificate for all WTG. Also crediting</li> </ul>	/MR1/	<ul style="list-style-type: none"> <li>• The table has been revised in the monitoring report.</li> <li>• All the crediting periods are synchronised as per the share of electricity certificate issued by MSEDCL and GEDA. The certificates</li> </ul>	/MR2/	<p>The table has been found to be correct in the revised monitoring report<sup>/MR2/</sup>. The CAR is closed.</p> <p>The GEDA/MSEDCL certificates are verified by the verification team. The values considered for emission reduction are found to be consistent with the monthly generation certificates.</p>

CAR/CR	Reference	Summary of project owner response	Revised sections (as applicable)	Conclusion
period to be synchronized with the dates of GEDA/MSEDCL share of electricity certificate.		are being submitted the DOE.		The CAR is closed.
CAR 4.5 On page 11, E <sub>Gy</sub> is described as "Net quantity of electricity supplied to the manufacturing facility by the project" is not as per validated VCS PD <sup>PD</sup> .	/MR1/	The description has been corrected in the revised monitoring report.	/MR2/	The same has been verified to be correct in the revised monitoring report <sup>/MR2/</sup> . The CAR is closed

### 3.5. Quality of Evidence to Determine Emission Reductions

The only key monitoring parameter with influence on the calculation of the emission reductions is the net power exported to the Grid. The power is measured with high accuracy and duly calibrated power meters installed at sub station. Meter reading is taken jointly by GEDA/MSEDCL representatives. Share of electricity certificate issued by GEDA/MSEDCL<sup>/CERT/</sup> form the basis of Emission reduction.

The grid emission factor, 905.89 tCO<sub>2</sub>/GWh is taken from the registered VCS PD<sup>PD/</sup> which has been fixed ex-ante for the calculation of emission reduction through out the crediting period.

All necessary monitoring instruments are installed. The measuring devices are well known and use the state of the art technology. The details of the meters were verified on the basis of physical verification during the site visit and from the Generation Certificates<sup>/CERT/</sup>. Calibration has been carried out as defined in the monitoring plan the records for the same were reviewed. The calibration certificates<sup>/CAL/</sup> submitted by the PP have been verified by the DOE and the meters are found to be accurate. Based on the same it is concluded that the recorded reading from the same are accurate enough. However, there were few intervals of the monitoring period during which the calibration of some of the energy meters was not valid. Thus, the PP had to go by the CDM Executive Board Guidelines, "Guidelines for assessing compliance with the calibration with the calibration frequency requirement", EB-52 annex- 60. As per the guideline, since the errors identified during the delayed calibration are within the maximum permissible error, the project proponent has considered the maximum permissible error in the readings. The detail of the meters with their calibration status has been adequately incorporated in the emission reduction calculation sheet<sup>/XLS2/</sup>. The

calculation approach has been verified by the verification team and found to be correct.

All relevant evidences were fully checked by the verification team during the on-site verification. All evidences are clearly identifiable and assessed to be correct.

The other data monitored for plausibility check were also checked during on-site verification. This data consists of power generation, tower shut down, grid availability and these are recorded in the daily log<sup>/LOG/</sup> maintained by O & M team. The data were checked by the verification team.

All records needed for monitoring are archived in line with the requirements of the monitoring plan<sup>/PD/</sup>. No significant, lack of evidence and missing data were detected during on-site verification<sup>/IM01/IM02/</sup>.

### 3.6. Management and Operational System

The allocation of responsibilities is documented in a written form and is followed as described in the VCS PD<sup>/PD/</sup>. Routines for the archiving of data are defined and documented. Calculations are laid down in the monitoring report is in line with VCS PD<sup>/PD/</sup>.

All monitored data are archived in electronic form. The data will be kept for the whole crediting period and additional 2 years as given in the VCS PD<sup>/PD/</sup>. The calibration status was not described in the MR1 thus CAR 6.1 was raised and was closed on the basis of Revised MR<sup>/MR2/</sup> which mentions the status of each equipment related to the monitoring parameters. The calibration certificates were checked and found OK.

Nevertheless, CAR 6.2 was raised and closed successfully.

CAR/CR	Reference	Summary of project owner response	Revised sections (as applicable)	Conclusion
CAR 6.1 The MR should provide the information on calibration status for the equipments included in the project activity.	/MR1/	The calibration status has been incorporated in the revised MR.	/MR2/	A separate section for the QA/QC has been added under the paragraph 7 of revised monitoring report <sup>/MR2/</sup> . The CAR is closed.
CAR 6.2 On page-6, under section "Sustainability Criteria," it is stated that Government of India has	/MR1/	The sentence has been removed in the revised monitoring report.	/MR2/	The sentence has been verified to be removed in the revised

CAR/CR	Reference	Summary of project owner response	Revised sections (as applicable)	Conclusion
stipulated sustainability indicators in the interim approval guidelines for VCS project which is not correct.				monitoring report <sup>/MR2/</sup> .  The CAR is closed.

**The net resultant value of VERs remained as 38,599 even after closure of the CARs and CRs issued during the verification.**



## 4. Verification conclusion

The scope of this verification covers the determination of voluntary greenhouse gas emission reductions generated by the above mentioned project. The verification is based on the registered VCS Project Description<sup>/PD/</sup>, validation report<sup>/VAL/</sup> Policy Announcement from VCS association on 19th March, 2008 and VCS 2007.1, monitoring report<sup>/MR01/MR02/</sup> and supporting documents made available to the verifiers by the project proponent.

As a result of the verification, the verifier confirms that:

- All operations of the project are implemented and installed as planned and described in the project description<sup>/PD/</sup>.
- The monitoring system is in place and functional.
- The installed equipment essential for generating emission reductions runs reliably.
- The GHG emission reductions are calculated without material misstatements in a conservative and appropriate manner.

All the documents checked during on-site visit and verification process will be kept confidential and will not be disclosed at any time other than the Project Proponent consent as required by VCSA.

Monitoring period: 2006-09-30 to 2009-08-31 including both days.

Verified emission reduction generated in the above mentioned monitoring period:

Baseline emissions (t CO <sub>2</sub> eqv.)	Project emissions (t CO <sub>2</sub> eqv.)	Leakage emissions (t CO <sub>2</sub> eqv.)	Net Emission reductions (t CO <sub>2</sub> eqv.)
<b>38599</b>	0	0	<b>38599 (rounded off)</b>

Year wise breakup of VER is as follows:

( September 06 – August 07)2006 : 9,639 tCO<sub>2</sub> eqv.  
 (September 07– August 08) 2007 : 14,257 tCO<sub>2</sub> eqv.  
 (September 08 – August09) 2008 : 14,702 tCO<sub>2</sub> eqv.

Total Monitoring period : 38599 t CO<sub>2</sub> eqv. (Rounded off)

Baroda, 2011-05-24

Essen, 2011-05-24




Pankaj Patel  
 TUV India Private Limited  
 Validation Team Leader

Rainer Winter  
 TÜV NORD II/CDM Certification Program  
 Final Approver

## Annexure 1:

### Abbreviations

CAR	Corrective Action Request
CDM	Clean Development Mechanism
CO <sub>2</sub>	Carbon dioxide
CO <sub>2e</sub>	Carbon dioxide equivalent
CR	Clarification Request
ER	Emission Reduction
GHG	Greenhouse gas(es)
EIEL	Era Infra Energy Limited
GEDA	Gujarat Energy Development Agency
MR	Monitoring Report
MP	Monitoring Plan
MSEDCL	Maharashtra State Electricity Distribution Company Ltd.
MW	Megawatt
PD	Project Document
PP	Project Participant
QA/QC	Quality Assurance / Quality Control
VCS	Voluntary Carbon Standard.
UNFCCC	United Nations Framework Convention on Climate Change
VER	Voluntary Emission Reduction

**Annexure 2:**

**Documents referred during the course of verification:**

Reference	Documents
/CAL/	Calibration Certificate of electricity meters covering the monitoring period
/CERT/	Electricity share of certificates issued to PP by GEDA/MSEDCL
/LOG/	Daily Log Book.
/MR1/	Draft Monitoring Report dated 16/09/2009
/MR2/	Final Monitoring Report dated 19/02/2010
/PD/	VCS project description dated 11/02/2009
/PHT/	Photographs of Project Site
/POT/	Proof of title ( <a href="http://www.v-c-s.org/docs/Program%20Guidelines%202007.pdf">http://www.v-c-s.org/docs/Program%20Guidelines%202007.pdf</a> ) equivalent to LoA from Host country.
/TS/	Technical specifications of instruments
/VAL/	Validation Report by TUV Nord dated 16/11/2009
/XLS1/	Excel calculation sheets provided by the project participant (related to MR1).
/XLS2/	Excel calculation sheets provided by the project participant (related to MR2).

**Background investigation and assessment documents**

Reference	Document
/AMS-I.D./	Grid connected renewable electricity Generation (Version 13: EB 36)
/CPM/	TÜV NORD JI / CDM CP Manual (incl. CP procedures and forms)
/PD/	Final Project Document for VCS project: '10 MW bundled wind power project by Era Infra Engineering Limited.
/VAL/	Validation Report for VCS project 10 MW bundled wind power project by

Reference	Document
	Era Infra Engineering Limited. issued by TUV NORD.
/VCS/	Voluntary Carbon Standard 2007.1
/VAL/	Validation report in accordance with VCS policy announcement dated 19th march 2008 of VCs 2007.1.

### Websites used

Reference	Link	Organisation
/UNFCCC/	<a href="http://cdm.unfccc.int">http://cdm.unfccc.int</a>	UNFCCC
/VCS/	<a href="http://www.v-c-s.org">http://www.v-c-s.org</a>	VCS
/IPCC/	<a href="http://www.ipcc-nggip.iges.or.jp">www.ipcc-nggip.iges.or.jp</a>	IPCC publications

### Interviewed Persons

Reference		Name	Organisation / Function
/IM01/	<input checked="" type="checkbox"/> Mr. <input type="checkbox"/> Ms.	Dwijal Mamtora	Suzlon Infrastructure Services Ltd. (SISL)
/IM01/	<input checked="" type="checkbox"/> Mr. <input type="checkbox"/> Ms	Vivek Rajmani	Suzlon Infrastructure Services Ltd. (SISL)
/IM01/	<input checked="" type="checkbox"/> Mr. <input type="checkbox"/> Ms	Jagannath Mali	Suzlon Infrastructure Services Ltd. (SISL)
/IM02/	<input checked="" type="checkbox"/> Mr. <input type="checkbox"/> Ms.	Chirag Gajjar	Deloitte Touche Tohmatsu India Private Limited.

Reference		Name	Organisation / Function
/IM02/	<input checked="" type="checkbox"/> Mr. <input type="checkbox"/> Ms.	Sumit Shrivastava	Deloitte Touche Tohmatsu India Private Limited.