

BUNDLED WIND POWER PROJECT IN TAMIL NADU MANAGED BY ENERCON INDIA LIMITED - II



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Summary:

SGS United Kingdom Ltd has performed the verification of the project “Bundled Wind Power Project in Tamil Nadu managed by Enercon India Limited - II” and VCS Project ID: 404 against VCS Standard Version 3.2. The verification includes confirming the implementation of the monitoring plan of the VCS Project Description version 02 dated 08/09/2009 and the application of the monitoring methodology as per ACM0002 version 10 valid from 11/06/2009. A site visit was conducted to verify the data submitted in the monitoring report.

This project activity is a bundled wind power generation project with total installed capacity of 36 MW. This project activity consists of the installation of 45 Wind Turbine Generators of capacity 800 kW each. The electricity generated from these wind mills is being supplied to the Southern Regional Grid; hence replacing fossil fuel dominated grid connected electricity generation.

The report describes a total of 07 findings which include:

- 04 Corrective Action Requests (CARs);
- 03 Clarification Requests (CLs);
- 00 Forward Action Requests (FARs); and

All findings have been closed satisfactorily and same has been discussed in section A.1 of this verification report.

SGS confirms that the project is implemented in accordance with the validated VCS Project Description. The monitoring system is in place and the emission reductions are calculated without material misstatements. Our opinion relates to the projects GHG emissions and the resulting GHG emission reductions reported and related to the valid and validated project baseline and monitoring and its associated documents. Based on the information seen and evaluated we confirm that the implementation of the project has resulted in **45,813 tCO₂e** emission reductions during period 16/09/2010 up to 15/11/2011.

Abbreviations

BEF	Baseline Emission Factor
CAR	Corrective Action Request
CDM	Clean Development Mechanism
CEA	Central Electricity Authority
CER	Certified Emission Reductions
CERC	Central Electricity Regulatory Commission
CL	Clarification Request
CMP	Conference of Parties Serving as Meeting of Parties
CO ₂	Carbon dioxide
EB	Executive Board
EIL	Enercon India Limited
EPC	Engineering, Procurement and Construction
FAR	Forward Action Request
GHG	Green House Gas
HTSC	High Tension Service Connection
ID	Identification
ISO	International Standards Organization
JMR	Joint Meter Reading
kW	Kilowatt
kWh	Kilowatt hour
MFR	Multi-Function Relay
MR	Monitoring Report
MW	Megawatt
MWh	Megawatt-hour
PDD	Project Design Document
PLF	Plant Load Factor
PP	Project Participant
PPA	Power Purchase Agreement
SCADA	Supervisory Control And Data Acquisition
SGS	SGS United Kingdom Limited
TNEB	Tamil Nadu Electricity Board
QA/QC	Quality Assurance and Quality Control
UNFCCC	United Nations Framework Convention on Climate Change
VVM	Validation and Verification Manual
WTG/WE	Wind Turbine Generator/Wind Energy Generator

VCS	Voluntary Carbon Standard
VCSA	Voluntary Carbon Standard Association
VCS PD	VCS Project Description
VCUs	Voluntary Carbon Units
VVM	Validation and Verification Manual

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1 INTRODUCTION

1.1 Objective

SGS United Kingdom Ltd has been contracted by Enercon (India) Limited to perform an independent verification of its project “Bundled Wind Power Project in Tamil Nadu managed by Enercon India Limited - II” against VCS Standard Version 3.2. The verifiers have reviewed the GHG data collected to date for the period between 16/09/2010 and 15/11/2011.

The purposes of this verification exercise are, by review of objective evidence, to independently review:

- Whether the project has resulted in emission reductions as declared by the organisation or GHG project’s GHG assertion;
The data reported are accurate, complete, consistent, transparent and free of material error or omission

1.2 Scope and Criteria

This engagement covers verification of emission reductions from anthropogenic sources of greenhouse gases included within the project boundary of “Bundled Wind Power Project in Tamil Nadu managed by Enercon India Limited - II”.

Our approach is risk-based, drawing on an understanding of the risks associated with reporting GHG emissions data and the controls in place to mitigate these. Our examination includes assessment, on a test basis, of evidence relevant to the amounts and disclosures in relation to the project’s GHG emission reductions for the defined reporting period.

The verification is not meant to provide any consulting towards the Client. However, stated requests for clarifications and/or corrective actions may provide input for improvement of the project design.

1.3 Level of assurance

The level of assurance of the verification report is reasonable assurance engagements as selected by the Client. Materiality for the project is 5%.

1.4 Summary Description of the Project

This engagement covers emissions and emission reductions from anthropogenic sources of greenhouse gases included within the project boundary of the following project and period.

Title of Project Activity:	Bundled Wind Power Project in Tamil Nadu managed by Enercon India Limited - II
Project ID	404
Monitoring Period Covered in this Report	16/09/2010 up to 15/11/2011
Project Proponent(s)	Enercon (India) Limited
Location of the Project Activity:	Pushpathur site in Dindigul district and Chinnakkampalayam in Erode district of Tamil Nadu, India

The project activity is located at Dindigul and Erode districts in the state of Tamil Nadu, India. The project activity consists of the installation of 45 WTGs of capacity 800 kW each invested by 05 investors. The electricity generated from these wind mills is being supplied to Tamil Nadu State grid which is integral part of Southern Regional Grid. The equivalent amount of electricity would have been generated through fossil fuel fired power plants connected to Southern Regional Grid resulting in higher GHG emissions in absence of the project activity. Hence generation of power through the project activity contributes to GHG emission reductions. The project activity is already commissioned^{/11/} and it is found to be running satisfactorily.

2 VALIDATION PROCESS, FINDINGS AND CONCLUSION

2.1 Validation Process

- This project activity is registered under VCS standard 2007.1. The part of the project activity i.e. WTGs owned by Bannari Aman was registered with the UNFCCC on 17/06/2011; hence VCS monitoring period considered for this component of the project activity is 16/09/2010 up to 16/06/2011. For other investors PP hasn't applied the project activity to any other GHG program; hence not registered under any other GHG program. Thus it is concluded that all the rules and validation requirements set by VCS are already taken care at the time of VCS validation of the project activity under 2007.1. Thus no further validation is required for the project activity.

2.2 Validation Findings

2.2.1 Gap Validation

This project activity is not registered under CDM; gap validation with reference to the cover page and sections 1.2, 1.3, 1.5, 1.6, 1.7, 1.9, 1.10, 1.12.1, 1.12.2, 1.12.3, 1.12.4 and 1.13 of the VCS Project Description template is not required as the project activity is registered under VCS 2007.1.

2.2.2 Methodology Deviations

Not applicable as no methodological deviations are found. Monitoring plan implemented at project site is in line with registered VCS PD/1/ as well as applied methodology/2/ for the project activity.

2.2.3 New Project Activity Instances

Not applicable as no new project activity instances are included in the project activity. During site visit to the project activity, it is confirmed that the implementation of the project activity is in accordance with the project description mentioned in registered VCS PD^{/1/}.

2.3 Validation Conclusion

Since the project activity is not registered under CDM or any other GHG program, except the part of the project activity i.e. WTGs owned by Bannari Aman which was registered with the UNFCCC on 17/06/2011; hence VCS monitoring period considered for this component of the project activity is 16/09/2010 up to 16/06/2011. Thus no further validation is required for the project activity. It is concluded that all the rules and validation requirements set by VCS are already taken care at the time of VCS validation of the project activity under 2007.1

(<https://vcsprojectdatabase2.apx.com/myModule/Interactive.asp?Tab=Projects&a=2&i=404&lat=10%2E534736&lon=77%2E422475&bp=1>) and it is also found in line with VCS version 3.2.

3 VERIFICATION PROCESS

3.1 Method and Criteria

SGS' approach to the verification is a two-stage process.

In the first stage, SGS completed a strategic review and risk assessment of the projects activities and processes in order to gain a full understanding of:

- Activities associated with all the sources contributing to the project emissions and emission reductions, including leakage if relevant;
- Protocols used to estimate or measure GHG emissions from these sources;
- Collection and handling of data;
- Controls on the collection and handling of data;
- Means of verifying reported data; and
- Compilation of the monitoring report.

At the end of this stage, SGS produced a Verification Checklist which, based on the risk assessment of the parameters and data collection and handling processes for each of those parameters, describes the verification approach and the sampling plan.

Using the Verification checklist, SGS verified the implementation of the monitoring plan and the data presented in the Monitoring Report for the period in question. This involved a site visit and a desk review of the monitoring report. This verification report describes the findings of this assessment.

3.2 Document Review

The VCS PD, the monitoring report submitted by the client and additional background documents related to the project performance were reviewed. A complete list of all documents reviewed is attached in section 0 of this report.

3.3 Interviews

The site visit to the project activity was conducted during the period from 20/02/2012 to 21/02/2012. During site visit to the project activity, personnel responsible for monitoring of the project activity, data collection and management, QA/QC procedure to be followed for the project activity is interview. Summary of the same is discussed in table as below;

Date	Name	Position	Short Description of Subject Discussed
20/02/2012 - 21/02/2012 onwards	Mr. Bhupendra Verma	Project Consultant – Enercon (India) Limited	• Plant Operations • Project boundary • Monitoring & Measuring System • Collections and recoding of data • Data archiving system • Calibration of measuring Equipments • Operation and Maintenance procedures • VCS monitoring & Reporting documentation • Quality Assurance-Management & Operating System

Date	Name	Position	Short Description of Subject Discussed
20/02/2012 - 21/02/2012 onwards	Mr. Jagdeesh Mohanta	Site In Charge – Enercon (India) Limited	• Training procedures • Plant Operations • Monitoring & Measuring System • Collections and recoding of data • Data archiving system • Calibration of measuring Equipments • Operation and Maintenance procedures • Quality Assurance-Management & Operating System • Training procedures

3.4 Site Inspections

As part of the verification, the following on-site inspections have been performed by all members of the assessment team.

Location: Pushpathur site in Dindigul district and Chinnakkampalayam in Erode district of Tamil Nadu, India, India	
Date: 20/02/2012 – 21/02/2012	
Coverage:	Source of Information / Persons Interviewed
Assessment of project boundary	Mr. Bhupendra Verma, Project Consultant – Enercon (India) Limited
Plant Operations	Mr. Jagdeesh Mohanta, Site In Charge – Enercon (India) Limited
Monitoring and measuring system • Collection of measurements • Observations of established practices Data Verification of monitoring parameters	Mr. Bhupendra Verma, Project Consultant – Enercon (India) Limited, Mr. Jagdeesh Mohanta, Site In Charge – Enercon (India) Limited
VCS monitoring and reporting documentation	Mr. Bhupendra Verma, Project Consultant – Enercon (India) Limited
Quality Assurance – Management and operating system	Mr. Jagdeesh Mohanta, Site In Charge – Enercon (India) Limited

3.5 Resolution of Any Material Discrepancy

As an outcome of the verification process, the team can raise different types of findings

In general, where insufficient or inaccurate information is available and clarification or new information is required the team shall raise a Clarification Request (CL) specifying what additional information is required.

Where a non-conformance arises the team shall raise a Corrective Action Request (CAR). A CAR is issued, where:

- The verification is not able to obtain sufficient evidence for the reported emission reductions or part of the reported emission reductions. In this case these emission reductions shall not be verified and certified;

- II. The verification has identified misstatements in the reported emission reductions. Emission reductions with misstatements shall be discounted based on the verifiers ex-post determination of the achieved emission reductions

The verification process may be halted until this information has been made available to the assessors' satisfaction. Failure to address a CL may result in a CAR. Information or clarifications provided as a result of a CL may also lead to a CAR.

FARs may be raised which are for the benefit of future projects and future verification actors. These have no impact upon the completion of the verification activity.

Corrective Action Requests and Clarification Requests are detailed in Verification Checklist. The Project Developer is given the opportunity to "close" outstanding CARs and respond to CLs and FARs.

4 VERIFICATION FINDINGS

4.1 Project Implementation Status

Implementation status of the project activity

Project activity is implemented and equipments are installed^{11/} as described in the registered VCS PD.

This is the third verification for the project activity. The project activity has been commissioned^{11/} and implemented satisfactorily. The same has been checked and verified during the site visit to the project activity.

Sr. No.	Name of Customers	HTSC No.	Commissioning Date	No. of M/C	Capacity (MW)
1	Premier Spg & Wvg Mills Pvt Ltd	D47	21/03/2007	10	8
2	Premier Spg & Wvg Mills Pvt Ltd	D49	21/03/2007		
3	Premier Spg & Wvg Mills Pvt Ltd	D52	26/03/2007		
4	Premier Spg & Wvg Mills Pvt Ltd	D54	26/03/2007		
5	Premier Spg & Wvg Mills Pvt Ltd	D79	25/04/2007		
6	Premier Spg & Wvg Mills Pvt Ltd	D80	25/04/2007		
7	Premier Spg & Wvg Mills Pvt Ltd	D81	25/04/2007		
8	Premier Spg & Wvg Mills Pvt Ltd	D82	09/05/2007		
9	Premier Spg & Wvg Mills Pvt Ltd	D83	09/05/2007		
10	Premier Spg & Wvg Mills Pvt Ltd	D84	11/05/2007		
11	Premier Fine Yarns Pvt Ltd	D26	26/02/2007	10	8
12	Premier Fine Yarns Pvt Ltd	D27	26/02/2007		

Sr. No.	Name of Customers	HTSC No.	Commissioning Date	No. of M/C	Capacity (MW)
13	Premier Fine Yarns Pvt Ltd	D28	26/02/2007		
14	Premier Fine Yarns Pvt Ltd	D29	26/02/2007		
15	Premier Fine Yarns Pvt Ltd	D30	27/02/2007		
16	Premier Fine Yarns Pvt Ltd	D30	27/02/2007		
17	Premier Fine Yarns Pvt Ltd	D32	07/03/2007		
18	Premier Fine Yarns Pvt Ltd	D32	07/03/2007		
19	Premier Fine Yarns Pvt Ltd	D33	07/03/2007		
20	Premier Fine Yarns Pvt Ltd	D34	07/03/2007		
21	Coimbatore Twisted (Premier Mills)	D37	14/03/2007	1	0.8
22	Coimbatore Polytex (Premier Mills)	D38	14/03/2007	10	8
23	Coimbatore Polytex (Premier Mills)	D43	21/03/2007		
24	Coimbatore Polytex (Premier Mills)	D43	21/03/2007		
25	Coimbatore Polytex (Premier Mills)	D44	21/03/2007		
26	Coimbatore Polytex (Premier Mills)	D45	21/03/2007		
27	Coimbatore Polytex (Premier Mills)	D68	29/03/2007		
28	Coimbatore Polytex (Premier Mills)	D73	30/03/2007		
29	Coimbatore Polytex (Premier Mills)	D74	30/03/2007		
30	Coimbatore Polytex (Premier Mills)	D75	30/03/2007		

Sr. No.	Name of Customers	HTSC No.	Commissioning Date	No. of M/C	Capacity (MW)
31	Coimbatore Polytex (Premier Mills)	D78	16/04/2007		
32	Bannari Amman Spinning Mills	1067	17/01/2006	14	11.2
33	Bannari Amman Spinning Mills	1068	17/01/2006		
34	Bannari Amman Spinning Mills	1069	17/01/2006		
35	Bannari Amman Spinning Mills	1070	17/01/2006		
36	Bannari Amman Spinning Mills	1070	17/01/2006		
37	Bannari Amman Spinning Mills	1071	17/01/2006		
38	Bannari Amman Spinning Mills	1072	17/01/2006		
39	Bannari Amman Spinning Mills	1072	17/01/2006		
40	Bannari Amman Spinning Mills	1073	17/01/2006		
41	Bannari Amman Spinning Mills	1077	01/02/2006		
42	Bannari Amman Spinning Mills	1077	01/02/2006		
43	Bannari Amman Spinning Mills	1086	08/02/2006		
44	Bannari Amman Spinning Mills	1106	08/03/2006		
45	Bannari Amman Spinning Mills	1106	08/03/2006		
	Total			45	36

The WTGs have been commissioned during the period of 17/01/2006 to 11/05/2007 as mentioned in the monitoring report^{3.3/} and this has been cross verified with the commissioning certificates^{11/}. The monitoring report for the third monitoring period is in compliance with the monitoring plan of the registered VCS PD.

The start date of this monitoring period is 16/09/2010 which is found to be consistent with end date of second monitoring period i.e. 15/09/2010 as mentioned on VCS project webpage. This is checked and confirmed from:

<https://vcsprojectdatabase2.apx.com/myModule/Interactive.asp?Tab=Projects&a=2&i=404&lat=10%2E534736&lon=77%2E422475&bp=1>.

During site visit to the project activity, the 14 WTGs owned by Bannari Amman Spinning Mills are registered as CDM project (UN Ref. No. 4877) on 17/06/2011. Hence, emission reduction due to this component of the project activity is only considered up to 16/06/2011.

A verification site visit to the project activity has been carried out by members of the verification team during the period from 20/02/2012 - 21/02/2012. The Operation and Implementation of the project activity have

been checked and the same has been confirmed during the site visit to the project activity. It is also found to be consistent with the registered VCS PD^{/1/}.

The monitoring report version 04 dated 05/05/2012^{/3.3/} has been checked for consistency with the registered VCS PD^{/1/}; it is found to be consistent. The PP has considered the monitoring parameters in the monitoring report as per the registered monitoring plan^{/1/} except deviation discussed below. The recording frequency and completeness of the data for the monitoring period have been checked and it is found to be appropriate as per the registered monitoring plan^{/1/}.

The locations of the monitoring instruments i.e. energy meters have been checked and confirmed during the site visit to the project activity conducted during the period from 20/02/2012 - 21/02/2012. The same is found to be appropriate and consistent with the registered VCS PD^{/1/}.

Comparison of actual emission reductions with the same projected in the registered VCS PD:

The actual verified emission reductions for the current monitoring period (16/09/2010 up to 15/11/2011) for the project activity is 45,813 tCO₂ which is found to be lesser as compared to estimated emission reductions of 80,403 tCO₂ (considering 426 days of monitoring period) as per registered VCS PD^{/1/}. This difference between estimated and actual emission reductions was due to the variability in the wind pattern (i.e. PLF) during the current monitoring period. This was checked and confirmed during the site visit conducted and in the emission reduction spreadsheet^{/4/} submitted for the project activity.

Corresponding to paragraphs 200 to 203 of VVM 1.2, the verification team confirms that the monitoring has been carried out in accordance with the approved methodology ACM0002 version 10, which was applied to the project activity. This is found to be appropriate and it is accepted.

Discussion on CAR/CL:

CAR #1 was raised to ask PP to clarify below points;

1. Project ID mentioned on page 1 of MR was inconsistent with VCS project webpage
2. Contact details provided for project participant on page 1 of MR was not found to be in line with guidelines provided in VCS MR template available on <http://v-c-s.org/program-documents>.
3. Italic indicative guidelines from MR template wasn't found to be removed. Also font, font size and color were not in line with indicative guidelines as per MR template.

In response, PP submitted revised MR^{/3.3/} with project ID and contact details mentioned consistent with VCS project webpage. Also PP removed italic guidelines and PP revised text in all section of the MR with font Arial 10, regular, black throughout the MR. This is found to be appropriate and it is accepted. Thus **CAR #1** is closed out.

CL #2 was raised to ask PP to clarify below points;

1. Documentary evidences against start date of the project activity weren't submitted.
2. Section 2.1 of VCS MR version 01 doesn't include shutdown/runtime details of the WTGs involved in the project activity and it is not in line with indicative guidelines available in VCS MR template.
3. Information on occurrence of events that may impact the GHG emission reductions and monitoring in current monitoring period considered for the project activity.
4. VCS PD has mentioned start date as 08/03/2006 and MR as 17/01/2006.
5. VCS PD has mentioned only 11/05/2007 date as commissioning date for all WTGs owned by Premier Spg & Wvg Mills Pvt Ltd. However, MR mentions different dates for the same.

In response PP submitted revised MR^{/3.3/} with shut down hours mentioned in section 2.1 of the MR and revised MR clearly confirms that there were no occurrence of events that may impact the GHG emission reductions and monitoring in current monitoring period considered for the project activity. Also PP submitted commissioning certificates as evidences against start date of the project activity. This is found to be appropriate and it is accepted. Also it is understood that start date of the project activity was erroneously mentioned as 08/03/2006 whereas first WTG involved in the project activity was commissioned on 17/01/2006. Also VCS PD mentions commissioning date for each investor as date of commissioning of last WTG. However, commissioning dates mentioned for all the WTGs involved in the project activity are checked

and confirmed from commissioning certificates for the project activity. This is found to be appropriate and it is accepted. Thus **CL #2** is closed out.

CAR #5 was raised to ask PP to clarify the appropriateness of actual PLF achieved mentioned in section 5 of the VCS MR version 01. In response, PP corrected the value of actual PLF achieved in line with number of days involved in the current monitoring period. This is found to be appropriate and it is accepted; thus **CAR #5** was closed out.

During site visit, it is understood that the subproject of Bannari Amman Spinning Mills (for 14 machines) was registered as CDM project (UN Ref. No. 4877) on 17/06/2011. Hence, VCU has been considered up to 07th June 2011 only. However this information was put in section 2.3 of the MR; hence **CL #3** was raised to ask PP to clarify the implication of the same. In response PP removed the same from section 2.3 (i.e. Grouped Project). This is found to be appropriate and it is accepted; thus **CL #3** is closed out.

Detailed discussion on above CAR/CLs can be referred in section A.1 of this verification report.

Remaining Issues from Previous Validation or Verification

This is the third verification for the project activity. During the current verification assessment of the project activity, project validation report and previous verification reports^{/9/} have been checked and reviewed by the verification team. There are no pending or open issues observed for the project. The monitoring methodology observed to be followed in the current monitoring period is in accordance with the registered monitoring plan^{/1/}.

Compliance of the monitoring plan with the monitoring methodology

The monitoring plan of the registered project is in accordance with the applied methodology ACM0002 version 10^{/2/}.

The project had been registered with the large scale approved baseline and monitoring methodology ACM0002, "Consolidated baseline methodology for grid-connected electricity generation from renewable sources," version 10 valid from 11/06/2009^{/2/}. The monitoring plan implemented for the current verification is in accordance with the registered monitoring plan^{/1/}. The registered monitoring plan has been checked and it is found to be consistent with the requirements of applied monitoring methodology ACM0002 version 10 valid from 11/06/2009^{/2/}. Also the project boundary was found to be consistent with the registered VCS PD^{/1/}. It was checked and confirmed during the site visit that there is no other additional source of GHG emissions which are attributable to the project activity.

This is in line with paragraphs 199 – 202 of Validation and verification manual, version 01.2.

Implementation Status of the Monitoring Plan and Completeness of Monitoring

Monitoring of reductions in GHG emissions to result from the project have been implemented in accordance with the monitoring plan contained in the VCS PD. The monitoring mechanism is effective and reliable.

The project activity was registered under VCS 2007.1 with VCS project ID 404^{/9/}. The monitoring report version 01^{/3/} as well as final monitoring report version 04^{/3.3/} for the current verification mentions the monitoring period from 16/09/2010 up to 15/11/2011. During the site visit, personnel involved at various levels of operation of the project activity have been interviewed. It has been confirmed that the onsite personnel are conscious of the importance of monitoring related activities. The onsite verification of measurement records also substantiate consistency in recording and reporting of the monitored data.

The following parameters have been verified for current monitoring period:

(1) Net electricity supplied to the grid by the Project, EG_y, net

This parameter is being calculated based on the measured values of export and import at TNEB's meter at respective HTSC^{/6/}. The value of this parameter is being sourced from Statements of electricity generation^{/6/} and it is further crosschecked with invoices^{/5/} raised by individual investors involved in the project activity.

This parameter is being used for the calculation of the emission reductions for the project activity. This is found to be consistent with the monitoring methodology as per registered VCS PD^{/1/}; hence this is accepted. Since TNEB is the third party government agency; this parameter has been considered from the Statements of electricity generation^{/6/} for emission reductions calculations for the project activity. The value of this parameter for the current monitoring period is **49,429.587 MWh**.

(2) Electricity exported to the grid by the project activity in year y, EG_{Export}

This parameter is a measured parameter and the value of this parameter is being used for calculation net electricity supplied to grid by project activity. As per the registered VCS PD, this parameter is being monitored at energy meter located at TNEB's HTSC. Electricity is being measured hourly and same is being recorded monthly. PP reported electricity exported to the grid by the project activity on monthly basis. This is in line with the applied methodology ACM0002 version 10. Joint Meter Reading is being taken on a monthly basis and it is signed by TNEB's and EIL's. The value of this parameters is directly sourced from Statements of electricity generation^{/6/} and this is further crosschecked with invoices^{/5/} raised by individual investors involved in the project activity. The value of this parameter for the current monitoring period is **49,692.788 MWh**.

(3) Electricity imported from the grid, EG_{Import}

This parameter is a measured parameter and the value of this parameter is being used for calculation net electricity supplied to grid by project activity. As per the registered VCS PD, this parameter is being monitored at energy meter located at TNEB's HTSC. Electricity is being measured hourly and same is being recorded monthly. PP reported electricity imported from the grid by the project activity on monthly basis. This is in line with the applied methodology ACM0002 version 10. Joint Meter Reading is being taken on a monthly basis and it is signed by TNEB's and EIL's. The value of this parameters is directly sourced from Statements of electricity generation^{/6/} and this is further crosschecked with invoices^{/5/} raised by individual investors involved in the project activity. The value of this parameter for the current monitoring period is **263.201 MWh**.

The registered VCS PD^{/1/} mentions that calibration/testing of monitoring equipments installed for the project activity will be done annually. During the site visit to the project activity, it is observed that Tamil Nadu Generation and Distribution Corporation Limited is carrying out calibration of these energy meters annually. Also CEA Notification No. 502/70/CEA/DP&D dated 17/03/2006^{/16/} which is considered as national standard mentions that *"All interface meters shall be tested at least once in five years."* Hence annual calibration frequency considered for the project activity is found to be conservative. This is found to be appropriate and it is accepted. The test results are found to be within the permissible limit and they are found to be accepted. However, delay in calibration is observed for the months of October 2010 to November 2010 and October 2011 to November 2011 considering the annual calibration frequency. Thus the project participant applied the maximum permissible error of 0.5% conservatively to the whole monitoring period in line with paragraph 4 (a) of EB 52 Annex 60 i.e. Guidelines for assessing compliance with the calibration frequency requirements. This is found to be appropriate and it is accepted.

Project participant had proposed deviation to exclude monitoring parameter EG_{Gross, y} i.e. electricity generation at controller from section 3.2 of the monitoring report. Since emission reductions calculations are based net electricity supplied to grid by the project activity which is being calculated as difference of electricity exported and electricity imported by the project activity. These controllers doesn't require any calibration as they are microprocessor based intelligent controller controlling entire operation of turbine and it is calculating energy generation with basic signal of CT and PT connected to through I/O gateway. Thus calibration is not possible for controller meters. This is checked and confirmed during interview with the EPC contractor at the time of verification site visit to the project activity. Also this is confirmed from sectoral expertise involved for the project activity; hence this is accepted. Proposed deviation mentions that the VCS PD mentions about the apportioning procedure to calculate net electricity supplied to grid by the project activity which is found to be inconsistent with the observations made during site visit to the project activity. During site visit to the project activity, it is understood that net electricity supplied grid is being calculated as difference electricity exported and electricity imported as discussed above. Since these deviations from the

registered monitoring plan don't impact emission reduction calculations for the project activity in anyway, same are accepted.

Discussion on CAR/CL:

CAR #4 was raised to ask PP to clarify why complete calibration details are not included in section 3.3 of the MR. In response, PP submitted revised MR^{3.3/} with latest calibration details mentioned in section 3.3. Same is checked and it is found to be appropriate. CAR #4 was further extended to ask PP to clarify the appropriateness of accuracy class of a few meters as 0.2s against the same mentioned in registered VCS PD as 0.5s. In response, PP clarified that the meters employed are of different accuracy class of 0.2s or 0.5s as some of the meters are found to be replaced by new meter with better accuracy class of 0.2s. Also The Gadget of India (Registered NO. DL (N) – 04/0007/2003 – 15) dated 26/07/2010 which is a gadget for metering regulations in India clearly mentions that for voltage of 650 V up to 33 kV, 0.5s and better is recommended. Hence it is accepted. This is found to be appropriate and it is accepted; thus **CAR #4** is closed out.

CAR #7 was raised to ask PP to clarify below points;

1. Net export values considered for the project activity was not found to be in line start and end date of current monitoring period.
2. Net electricity exported for the month of September 2011 for HTSC D-32 (Premier Fine Yarns Pvt Ltd) was not found to be in line with Statement of electricity generation for the month of September 2011 for HTSC D-32.
3. Appropriate units for monitored data was absent in the ER sheet submitted for the project activity.

In response, PP submitted revised ER sheet with correct value of net export for the month of September 2011 for HTSC D-32 and appropriate units mentioned. Also net export values are found to be in line with start and end date of the monitoring period. This is found to be appropriate and it is accepted; thus **CAR #7** is closed out.

Detailed discussion on above CAR can be referred in section A.1 of this verification report.

Accuracy of Equipment

During the verification assessment of the project activity accuracy and calibration of all the metering and plant installations have been checked and found appropriate. The details of monitoring equipments involved in the project activity and their calibration details are mentioned in below table;

Sr. No.	Name of Investors	HTSC No.	Meter No.	Past Calibration	Dates of Calibration Certificates	Recent Calibration	Dates of Calibration Certificates	Accuracy Class
1	Premier Spg & Wvg Mills Pvt Ltd	D47	04863754	12/10/2010	22/10/2010	28/01/2012	01/02/2012	0.5s
2	Premier Spg & Wvg Mills Pvt Ltd	D49	04890022	12/10/2010	22/10/2010	28/01/2012	01/02/2012	0.5s
3	Premier Spg & Wvg Mills Pvt Ltd	D52	TN902732	12/10/2010	22/10/2010	09/12/2011	01/02/2012	0.2s
4	Premier Spg & Wvg Mills Pvt Ltd	D54	04865534	12/10/2010	22/10/2010	28/01/2012	01/02/2012	0.5s

5	Premier Spg & Wvg Mills Pvt Ltd	D79	04865507	12/10/2010	22/10/2010	28/01/2012	01/02/2012	0.5s
6	Premier Spg & Wvg Mills Pvt Ltd	D80	TNB02400	12/10/2010	22/10/2010	28/01/2012	01/02/2012	0.5s
7	Premier Spg & Wvg Mills Pvt Ltd	D81	04865535	12/10/2010	22/10/2010	28/01/2012	01/02/2012	0.5s
8	Premier Spg & Wvg Mills Pvt Ltd	D82	04865504	12/10/2010	22/10/2010	27/01/2012	01/02/2012	0.5s
9	Premier Spg & Wvg Mills Pvt Ltd	D83	04865503	12/10/2010	22/10/2010	27/01/2012	01/02/2012	0.5s
10	Premier Spg & Wvg Mills Pvt Ltd	D84	04865505	12/10/2010	22/10/2010	27/01/2012	01/02/2012	0.5s
11	Premier Fine Yarns Pvt Ltd	D26	TN902742	12/10/2010	22/10/2010	22/11/2011	01/02/2012	0.2s
12	Premier Fine Yarns Pvt Ltd	D27	04865401	12/10/2010	22/10/2010	27/01/2012	30/01/2012	0.5s
13	Premier Fine Yarns Pvt Ltd	D28	10287910	12/10/2010	22/10/2010	27/01/2012	30/01/2012	0.5s
14	Premier Fine Yarns Pvt Ltd	D29	HT5100083	12/10/2010	22/10/2010	27/01/2012	30/01/2012	0.5s
15	Premier Fine Yarns Pvt Ltd	D30	HT5110137	12/10/2010	22/10/2010	27/01/2012	30/01/2012	0.5s
16	Premier Fine Yarns Pvt Ltd	D30	HT5110137	12/10/2010	22/10/2010	27/01/2012	30/01/2012	0.5s
17	Premier Fine Yarns Pvt Ltd	D32	04863757	12/10/2010	22/10/2010	27/01/2012	30/01/2012	0.5s
18	Premier Fine Yarns Pvt Ltd	D32	04863757	12/10/2010	22/10/2010	27/01/2012	30/01/2012	0.5s
19	Premier Fine Yarns Pvt Ltd	D33	04863762	12/10/2010	22/10/2010	27/01/2012	30/01/2012	0.5s
20	Premier Fine Yarns Pvt Ltd	D34	04865400	12/10/2010	22/10/2010	27/01/2012	30/01/2012	0.5s
21	Coimbatore Twisted (Premier Mills)	D37	04863761	18/10/2010	22/10/2010	27/01/2012	01/02/2012	0.5s

22	Coimbatore Polytex (Premier Mills)	D38	04865383	18/10/2010	22/10/2010	27/01/2012	01/02/2012	0.5s
23	Coimbatore Polytex (Premier Mills)	D43	04865533	18/10/2010	22/10/2010	27/01/2012	01/02/2012	0.5s
24	Coimbatore Polytex (Premier Mills)	D43	04865533	18/10/2010	22/10/2010	27/01/2012	01/02/2012	0.5s
25	Coimbatore Polytex (Premier Mills)	D44	04865526	18/10/2010	22/10/2010	27/01/2012	01/02/2012	0.5s
26	Coimbatore Polytex (Premier Mills)	D45	04865528	18/10/2010	22/10/2010	27/01/2012	01/02/2012	0.5s
27	Coimbatore Polytex (Premier Mills)	D68	04865501	18/10/2010	22/10/2010	28/01/2012	01/02/2012	0.5s
28	Coimbatore Polytex (Premier Mills)	D73	04959599	18/10/2010	22/10/2010	28/01/2012	01/02/2012	0.5s
29	Coimbatore Polytex (Premier Mills)	D74	04865530	18/10/2010	22/10/2010	27/01/2012	01/02/2012	0.5s
30	Coimbatore Polytex (Premier Mills)	D75	TN901783	18/10/2010	22/10/2010	18/10/2011	22/10/2011	0.2s
31	Coimbatore Polytex (Premier Mills)	D78	208320441	18/10/2010	22/10/2010	28/01/2012	01/02/2012	0.5s
32	Bannari Amman Spinning Mills	1,067	04721986	09/10/2010	18/10/2010	25/01/2012	31/01/2012	0.5s
33	Bannari Amman Spinning Mills	1,068	TN900964	06/10/2010	12/10/2010	25/01/2012	31/01/2012	0.5s
34	Bannari Amman Spinning Mills	1,069	04725673	06/10/2010	12/10/2010	25/01/2012	31/01/2012	0.5s
35	Bannari Amman Spinning Mills	1,070	04725674	09/10/2010	12/10/2010	25/01/2012	31/01/2012	0.5s

36	Bannari Amman Spinning Mills	1,070	04725674	09/10/2010	12/10/2010	25/01/2012	31/01/2012	0.5s
37	Bannari Amman Spinning Mills	1,071	02373937	09/10/2010	12/10/2010	25/01/2012	31/01/2012	0.5s
38	Bannari Amman Spinning Mills	1,072	04721860	09/10/2010	12/10/2010	25/01/2012	31/01/2012	0.5s
39	Bannari Amman Spinning Mills	1,072	04721860	09/10/2010	12/10/2010	25/01/2012	31/01/2012	0.5s
40	Bannari Amman Spinning Mills	1,073	TN902837	09/10/2010	12/10/2010	25/11/2011	02/12/11	0.2s
41	Bannari Amman Spinning Mills	1,077	04721982	06/10/2010	12/10/2010	25/01/2012	31/01/2012	0.5s
42	Bannari Amman Spinning Mills	1,077	04721982	06/10/2010	12/10/2010	25/01/2012	31/01/2012	0.5s
43	Bannari Amman Spinning Mills	1,086	04725696	06/10/2010	12/10/2010	25/01/2012	31/01/2012	0.5s
44	Bannari Amman Spinning Mills	1,106	04726631	09/10/2010	12/10/2010	25/01/2012	31/01/2012	0.5s
45	Bannari Amman Spinning Mills	1,106	04726631	09/10/2010	12/10/2010	25/01/2012	31/01/2012	0.5s

The installation and working condition of the plant equipments and meters were checked during the site visit for the project activity and it was found to be satisfactory. During site visit, it is understood that meters are found to be changed for HTSC Numbers D26, D28, D30, D52, D75, 1068 and 1073 in the current monitoring period considered for the project activity. Appropriateness of the same has been checked and confirmed from documents from TNEB^{17/} mentioning about meter change details. This is found to be appropriate and it is accepted. It is also evident from the above table that calibrations for all monitoring equipment involved in the project activity are valid for current monitoring period. Delay in calibration is observed for the period of months of October 2010 to November 2010 and October 2011 to November 2011 considering the annual calibration frequency and maximum permissible error of 0.5% is applied to both electricity exported and imported by the project activity in line with paragraph 4 (a) of EB 52 Annex 60 i.e. Guidelines for assessing compliance with the calibration frequency requirements. Since new meters installed are of better accuracy class 0.2s as compared to the same mentioned in registered VCS PD as 0.5s. During the site visit to the project activity, there are meters involved in the project activity with accuracy classes of 0.2s as well as 0.5s which is found to be consistent with the registered VCS PD^{1/}. The Gadget of India (Registered NO. DL (N) – 04/0007/2003 – 15) dated 26/07/2010^{13/} which is a gadget for metering regulations in India clearly mentions that for voltage of 650 V up to 33 kV, 0.5s and better is recommended. Hence, the accuracy classes of 0.5s of energy meters installed at sites are found to be appropriate and it is accepted.

As per Para 205 c), VVM, version 01.2, the verification team is able to confirm that the accuracy of equipment used for monitoring is in accordance with the relevant guidance provided by the CDM Executive Board and it is controlled and calibrated in accordance with the monitoring plan;

- (i) Monitoring results are consistently recorded as per approved frequency;

- (ii) Quality assurance and quality control procedures have been applied in accordance with the monitoring plan.

Data from External Sources

Since, the combined margin grid emission factor was calculated based on ex-ante approach indicated by Tool to calculate emission factor of an electricity system, the value of “**Operating Margin Emission Factor of Southern Regional Electricity Grid, $EF_{OM,y}$** ” will remain ex-ante as **0.998157 tCO_{2e}/MWh** throughout the crediting period and same has been considered from the registered VCS PD^{/1/}. The basis for the same was “CO₂ Baseline Database for Indian Power Sector”, version 4.0 published by the Central Electricity Authority, Ministry of Power, Government of India. The “CO₂ Baseline Database for Indian Power Sector” is available at www.cea.nic.in/reports/planning/cdm_co2/cdm_co2.htm. This is found to be appropriate and it is accepted.

The value of “**Build Margin Emission Factor of Southern Regional Electricity Grid, $EF_{BM,y}$** ” is **0.7133 tCO_{2e}/MWh** considered from the registered VCS PD^{/1/} and same will remain ex-ante throughout the crediting period. The basis for the same was “CO₂ Baseline Database for Indian Power Sector”, version 4.0 published by the Central Electricity Authority, Ministry of Power, Government of India. The “CO₂ Baseline Database for Indian Power Sector” is available at www.cea.nic.in/reports/planning/cdm_co2/cdm_co2.htm. This is found to be appropriate and it is accepted.

The “**Combined Margin Emission Factor of Southern Grid, $EF_{CM,y}$** ” has been fixed ex-ante during the validation stage^{/1/} as **0.92694 tCO_{2e}/MWh** and it is applicable for the crediting period considered for the project activity

4.2 Accuracy of GHG Emission Reduction or Removal Calculations

Accuracy of GHG Emission Reduction or Removal Calculations

The calculation of the emission reductions is found to be correct. The details of the reported and the verified values for all parameters are listed in section 4.2.2 of this report, ‘Calculation of Emission Reductions’.

The net electricity supplied to grid by the project activity is used for the emission reduction calculations. The project participant has provided a complete set of data for the specified monitoring period of 16/09/2010 up to 15/11/2011. The values of parameters reported in the ER spreadsheet^{/4/} by the PP and the same were checked and confirmed with the same mentioned in the Statement of Electricity Generation issued by TNEB^{/6/} and invoices raised by the project participant^{/5/}. The values are found to be consistent and accurate.

The formula and method used to calculate the baseline emissions are appropriate. Since the project is a wind power generation project, project emissions and leakage emissions are not involved in the project activity. This is found to be in line with the approved methodology ACM0002 version 10 and as defined in the registered VCS PD^{/1/}.

Calculation of Emission Reductions or Removals

Parameter	Reported Value	Verified Value
Net electricity supplied to the grid by the Project, $EG_{y, net}$ (MWh)	49,684.872	49,429.587
Electricity exported to the grid by the project activity in year y, EG_{Export} (MWh)	49,946.868	49,692.788
Electricity imported from the grid, EG_{Import} (MWh)	261.996	263.201
Combined Margin Emission Factor of Southern Grid, $EF_{CM,y}$ (tCO _{2e} /MWh)	0.92694	0.92694

Grid emission factor is determined ex-ante and fixed throughout the crediting period.

The emission reduction is calculated as follows:

$$\begin{aligned}
 \text{Baseline emission} &= \text{Net electricity supplied to the grid by the Project, } EG_{y, \text{ net}} \text{ (MWh)} \times \text{Combined} \\
 &\quad \text{Margin Emission Factor of Southern Grid, } EF_{\text{CM}, y} \text{ (tCO}_2\text{e /MWh)} \\
 &= 49,429.587 \times 0.92694 \\
 &= 45,813 \text{ t CO}_2\text{e}
 \end{aligned}$$

As per methodology, leakage emissions and project emissions are zero.

Thus emission reductions are calculated as follow:

$$\begin{aligned}
 \text{Emission reductions} &= \text{Baseline emissions} - \text{Project emissions} - \text{Leakage emissions} \\
 &= 45,813 - 0 - 0 \\
 &= \mathbf{45,813 \text{ tCO}_2\text{e}}
 \end{aligned}$$

Vintage-wise VERS

Vintage	VERs (tCO₂e)
16/09/2010 to 31/12/2010	7,541
01/01/2011 to 15/11/2011	38,272
Total	45,813

4.3 Quality of Evidence to Determine GHG Emission Reductions or Removals

Critical parameters used for the determination of the Emission Reductions are discussed in section 3.4 above. All the data recorded is in compliance with the monitoring report.

The data pertaining to the parameters mentioned in section 4.2.2 of this report are maintained in the identified records^{/6/, /5/, /7/}. The external sources data have been discussed in section 4.1.6 of this report. All the data is in compliance with the figures stated in the updated monitoring report version 4 dated 05/05/2012^{/3,3/} and the ER calculation excel spreadsheet^{/4/}.

According to the registered VCS PD, the verification team has checked the Electricity Generation Statements^{/5/} signed by TNEB's and Enercon's officials. The same have being cross checked against the invoices raised to TNEB by individual investors.

The verification team reviewed the comparison of the actual VERs claimed in the monitoring period with the same estimated in the VCS PD; the same has been discussed in section 4.1.1 above.

Corresponding to the paragraph 206 of VVM version 1.2, it has been ensured that:

1. The data used for the determination of the emission reductions are available and monitored in accordance with the registered monitoring plan.
2. The appropriate methods and formulae for calculating baseline emissions, project emissions and leakage have been properly followed the applied methodology and registered VCS PD;
The emission factor of Southern Regional Grid determined ex-ante during validation of the project activity. The same is applied in the current monitoring report and the calculations have been justified.

4.4 Management and Operational System

The company involved in the project have quality assurance system ISO 9001:2008^{/14/} (<http://www.enerconindia.net/background-note.jsp>) implemented; therefore the assessment team can confirm that the management system the VCS project is in place; with the responsibilities properly identified and in place.

The company involved has assigned personnel with proper roles and responsibilities in the project and the same is as per the registered VCS PDD^{/1/}. During the site visit, the roles and responsibility for data monitoring and management have been checked. It was also found during the interview with plant personnel that project has a defined well responsibility matrix and execution system to ensure the quality of VCS monitoring system. The same was found acceptable; therefore the assessment team can affirm that the management system of the VCS project is in place; with the responsibilities properly identified and in place.

In order to verify data quality, the company involved in the project works in accordance with a quality assurance procedure of Standard Operating Procedure which establishes the operational and management structure implemented.

Discussion on CAR/CL:

CL #6 was raised to ask PP to clarify below points;

1. Section 3.3 of VCS MR version 1 doesn't describe procedures for handling internal auditing and non-conformities. Also line diagram indicating GHG collection and management system was not found to be included in section 3.3 of VCS MR version 01.
2. ISO certificate of EPC contractor for the project activity is not submitted.

In response, PP submitted manual on O&M and training procedure. Same was checked and found to be appropriate. Also PP submitted ISO certificate for Enercon (India) Limited who is also acting as EPC contractor for the project activity. This is found to be appropriate and it is accepted; thus **CL #6** is closed out.

Detailed discussion on above CL can be referred in section A.1 of this verification report.

5 VERIFICATION CONCLUSION

The scope of the verification

We, SGS have been engaged by Enercon (India) Limited to certify that the greenhouse gas (GHG) emission reductions reported for the "Bundled Wind Power Project in Tamil Nadu managed by Enercon India Limited - II" for the period from 16/09/2010 up to 15/11/2011 in the verification report and the monitoring report 04 dated 05/05/2012 are eligible for registration as Voluntary Carbon Units.

This engagement covers the verification of emission reductions from anthropogenic sources of greenhouse gases included within the project boundary of the "Bundled Wind Power Project in Tamil Nadu managed by Enercon India Limited - II", as well as an additional confirmation of the compliance of the VCS PD with the requirements of VCS Standard version 3.2.

Our approach is risk-based, drawing on an understanding of the risks associated with reporting GHG emissions data and the controls in place to mitigate these. Our examination includes assessment, on a test basis, of evidence relevant to the amounts and disclosures in relation to the project's GHG emission reductions for the defined reporting period.

The verification is not meant to provide any consulting towards the Client. However, stated requests for clarifications and/or corrective actions may provide input for improvement of the project design.

Conclusions of the verification

(a) SGS is an entity accredited by the United Nations Framework Convention on Climate Change (UNFCCC) to undertake certification and verification services in the sector in which the Project is undertaken. The accreditation is accepted by VCSA as indicated in Clause 5 of VCS Program Guide Version 3.2.

(b) The monitoring report, together with other information examined, was prepared as per the VCS Monitoring Report Template, Version 3.0.

(C) The information in the monitoring report together with other information examined by the assessment team, including all the information necessary to determine that the emission reductions achieved have been determined correctly.

(d) Based on the examination of the monitoring report and other relevant information, the project meets all the requirements of the VCS Standard Version 3.2.

(e) Based on our examination of the monitoring report and other relevant information, the claiming emission reductions during the monitoring period from 16/09/2010 up to 15/11/2011 are verified as 45,813 tonnes CO₂ equivalent.

Liability statement with regards to the accuracy of the verification statement

The management of Enercon (India) Limited is responsible for the preparation of the GHG emissions data and the reported GHG emissions reductions. SGS is responsible for verification and confirming emission estimates for the project, as described in the monitoring report.

Our certification approach draws on an understanding of the risks associated with reporting GHG emissions data and the controls in place to mitigate these. Our examination includes an assessment of evidence, through desk review, and where necessary, interviews, stakeholder discussions and site visits, relevant to certifying the rightfulness of the amounts and disclosures in relation to the Project's GHG emission reductions.

We planned and performed our work to obtain the information and explanations that we considered necessary to provide sufficient evidence for us to give reasonable assurance that the amount of GHG emission reductions for the given period, prepared on the basis of the monitoring report, are fairly stated.

This assessment included:

- Collection of evidence supporting the reported data;
- Checking whether the provisions of the Monitoring Plan in the registered VCS PDD, were consistently and appropriately applied;
- Site visit and interview of relevant staff.

We have verified whether the information included in the monitoring report representing the emission reductions achieved has been determined correctly for the given period from the baseline figure.

Certification statements

Based on process and procedures conducted, in our opinion, the monitoring report version 04 dated 05/05/2012 on emission reductions for "Bundled Wind Power Project in Tamil Nadu managed by Enercon India Limited - II" during the reporting period from 16/09/2010 up to 15/11/2011 is materially correct and is a fair representation of the GHG data and information and the emission reductions are fairly stated. All relevant facts have been found correct by our examination. The GHG emission reductions calculation is correct.

Therefore, SGS is able to certify that the project is in full compliance with the VCS Standard Version 3.2, and the quantity of the reported emission reductions during below reporting period are completely, comparably, accurately and correctly reported.

(1) Reporting period: From 16/09/2010 up to 15/11/2011

Verified GHG emission reductions or removals in the above reporting period:

GHG Emission Reductions or Removals	tCO ₂ e
Baseline Emissions	45,813
Project Emissions	0
Leakage	0
Net GHG emission reductions or removals	45,813

Statement of Confidentiality

SGS will hold all information confidential until the client instructs otherwise or until it has been released in accordance with the VCS Standard Version 3.2 requirements.

Signed on behalf of the Verification Body by Authorized Signatory

SGS United Kingdom Limited

Dated: 11/05/2012

14/05/2012

Signature:

Signature:



Lead Assessor

Vikas Bankar

Technical Reviewer

Ramkrishna Patil

Annex 1: Document References

/1/	Registered VCS PD version 02 dated 08/09/2009
/2/	ACM0002 version 10 valid from 11/06/2009
/3/	Monitoring report version 01 dated 11/01/2012
/3.1/	Monitoring report version 02 dated 07/02/2012
/3.2/	Monitoring report version 03 dated 04/04/2012
/3.3/	Monitoring report version 04 dated 05/05/2012
/4/	Emission Reductions calculation excel sheet
/5/	Invoices for project activity raised by project participant to TNEB for current monitoring period
/6/	Statement of Electricity Generation by TNEB for all WTGs involved in the project activity
/7/	SCADA system reading for project activity and total generation of all wind mills and log book records
/8/	CEA data for emission factor www.cea.nic.in/reports/planning/cdm_co2/cdm_co2.htm
/9/	VCS Project Site: https://vcsprojectdatabase2.apx.com/myModule/Interactive.asp?Tab=Projects&a=2&i=404&lat=10%2E534736&lon=77%2E422475&bp=1 Validation Report dated 10/11/2009 First Verification Report dated 11/01/2010 Second Verification Report dated 19/01/2011
/10/	Calibration Certificates for the meters installed at each HTSC
/11/	Commissioning Certificates from Tamil Nadu Electricity Board
/12/	Power Purchase Agreement signed between Entities involved (other investors) and TNEB
/13/	The Gadget of India (Registered NO. DL (N) – 04/0007/2003 – 15) dated 26/07/2010
/14/	ISO 9001: 2008 Certificate (Ref. QS-898HH) dated 08/02/2010
/15/	Validation and Verification Manual, version 1.2
/16/	CEA Notification No. 502/70/CEA/DP&D dated 17/03/2006
/17/	Documents from TNEB mentioning about change in meter including details of old meter, new meter and meter replacement date; - Document Ref: EE/WFP/AEE/MRT/Udt/F.WFSC.NO D 26/D.NO.:2962/11, Date:02/12/11 - Document Ref: EE/WFP/AEE/MRT/Udt/F.WFSC.NO D 28/D.NO.:414/11,

	Date:23/03/11
•	Document Ref: EE/WFP/AEE/MRT/Udt/F.WFSC.NO D 30/D.NO.:1250/11, Date:20/05/11
•	Document Ref: EE/WFP/AEE/MRT/Udt/F.WFSC.NO D 52/D.NO.:3002/11, Date:19/12/11
•	Document Ref: EE/WFP/AEE/MRT/Udt/F.WFSC.NO D 75/D.NO.:2755/11, Date:22/10/11
•	Document Ref: EE/WFP/AEE/MRT/Udt/F.WFSC.NO U 1068/D.NO.:3060/10, Date:19/11/10
•	Document Ref: EE/WFP/AEE/MRT/Udt/F.WFSC.NO U 1073/D.NO.:2960/11, Date:02/12/11

Annex 2: Overview of Findings

Findings Overview Summary

	CARs	CLs	FARs
Total Number raised	04	03	-

Date:	21/02/2012		Raised by:	Vikas Bankar	
Type:	CAR	Number:	01	Reference:	Project Information (Page 1), Section 1.1
Lead Assessor Comment:				Date: 21/02/2012	
PP is requested to check appropriateness of project ID mentioned on page 1 of the MR version 01 in line with VCS project webpage_ .					
PP is requested to clarify the appropriateness of contact details provided in line with guidelines provided in VCS MR template available on http://v-c-s.org/program-documents .					
PP is requested to remove italic indicative guidelines as per MR template from VCS MR version 01.					
Project Participant Response:				Date: 07/03/2012	
Project ID has been rectified in revised MR (Version 2)					
Revised MR (Version 2) has been updated with contact details including the email id.					
Indicative guidelines have been removed in revised MR (Version 2)					
Documentation Provided as Evidence by Project Participant:					
Revised MR (Version 2)					
Information Verified by Lead Assessor:					
Revised MR version 02 dated 07/03/2012 is checked for appropriateness of incorporation of above mentioned queries.					
Reasoning for not Acceptance or Acceptance and Close Out:				Date: 28/03/2012	
Page 1 of revised MR version 02 now mentions correct project ID 404 for the project activity and it is found to be consistent with project database. This is found to be appropriate and it is accepted.					
Section for contact details on page 1 of revised MR version 02 now mentions email id of project participant which is found to be in line with MR completion guidelines; hence this is accepted.					
Italic guidance is removed from the MR version 02. This is found to be appropriate and it is accepted.					
Thus CAR #1 is closed out.					
Acceptance and Close out by Lead Assessor:				Date: 28/03/2012	

Date:	21/02/2012		Raised by:	Vikas Bankar	
Type:	CL	Number:	02	Reference:	Section 1.5, 1.7, 2.1
Lead Assessor Comment:				Date: 21/02/2012	
PP is requested to submit documentary evidences against start date of the project activity mentioned in section 1.5 and commissioning dates in section 1.7 and 2.1 of VCS MR version 01.					
Section 2.1 of VCS MR version 01 doesn't include shutdown/runtime details of the WTGs involved in the project activity. Please clarify the same in line with indicative guidelines available in VCS MR template available on http://v-c-s.org/program-documents .					
Please clarify occurrence of events that may impact the GHG emission reductions and monitoring in current monitoring period considered for the project activity.					
Project Participant Response:				Date: 07/03/2012	
Documentary evidence as commissioning certificate against start date and commissioning dates of project					

activity have been submitted to DOE	
There have not been any special events comprising of major overhauls and downtime of project activity during the said monitoring period; thus there has not been any change in the operation of project activity during the monitoring period. Also, there have not been any events that may impact the GHG emission reductions and monitoring in current monitoring period. The MR has been updated accordingly.	
Documentation Provided as Evidence by Project Participant:	
Revised MR (Version 2)	
Information Verified by Lead Assessor:	
Commissioning Certificates for the project activity is checked for appropriateness of start date of the project activity and commissioning dates of all WTGs involved in the project activity	
Revised MR version 02 is checked for appropriateness of project start date in section 1.5 and shutdown/runtime details in section 2.1.	
Reasoning for not Acceptance or Acceptance and Close Out:	Date: 28/03/2012
PP had submitted commissioning certificates for all WTGs involved in the project activity. Commissioning certificates submitted are checked and found to be consistent with details provided in section 2.1 of MR version 02. This is found to be appropriate and it is accepted. Details of commissioning certificates submitted are as follows;	
1. Commissioning Certificate from TNEB dated 15/03/2007 (DOC 07/03/2007) for 2 WTGs connected to HTSC D32 2. Commissioning Certificate from TNEB dated 15/03/2007 (DOC 07/03/2007) for 1 WTG connected to HTSC D33 3. Commissioning Certificate from TNEB dated 15/03/2007 (DOC 07/03/2007) for 1 WTG connected to HTSC D34 4. Commissioning Certificate from TNEB dated 25/03/2007 (DOC 21/03/2007) for 2 WTGs connected to HTSC D43 5. Commissioning Certificate from TNEB dated 25/03/2007 (DOC 21/03/2007) for 1 WTG connected to HTSC D44 6. Commissioning Certificate from TNEB dated 25/03/2007 (DOC 21/03/2007) for 1 WTG connected to HTSC D45 7. Commissioning Certificate from TNEB dated 05/02/2006 (DOC 17/01/2006) for 1 WTG connected to HTSC 1067 8. Commissioning Certificate from TNEB dated 05/02/2006 (DOC 17/01/2006) for 1 WTG connected to HTSC 1068 9. Commissioning Certificate from TNEB dated 05/02/2006 (DOC 17/01/2006) for 1 WTG connected to HTSC 1069 10. Commissioning Certificate from TNEB dated 05/02/2006 (DOC 17/01/2006) for 2 WTG connected to HTSC 1070 11. Commissioning Certificate from TNEB dated 05/02/2006 (DOC 17/01/2006) for 1 WTG connected to HTSC 1071 12. Commissioning Certificate from TNEB dated 23/03/2006 (DOC 08/02/2006) for 1 WTG connected to HTSC 1086 13. Commissioning Certificate from TNEB dated /04/2006 (DOC 08/03/2006) for 2 WTGs connected to HTSC 1106 14. Commissioning Certificate from TNEB dated 13/03/2007 (DOC 26/02/2007) for 1 WTG connected to HTSC D26 15. Commissioning Certificate from TNEB dated 15/03/2007 (DOC 26/02/2007) for 1 WTG connected to HTSC D27 16. Commissioning Certificate from TNEB dated 15/03/2007 (DOC 26/02/2007) for 1 WTG connected to HTSC D28 17. Commissioning Certificate from TNEB dated 15/03/2007 (DOC 26/02/2007) for 1 WTG connected to HTSC D29 18. Commissioning Certificate from TNEB dated 15/03/2007 (DOC 27/02/2007) for 2 WTGs connected to	

- HTSC D30
19. Commissioning Certificate from TNEB dated 05/02/2006 (DOC 17/01/2006) for 2 WTGs connected to HTSC 1072
 20. Commissioning Certificate from TNEB dated 05/02/2006 (DOC 17/01/2006) for 1 WTG connected to HTSC 1073
 21. Commissioning Certificate from TNEB dated 03/03/2006 (DOC 01/02/2006) for 2 WTG connected to HTSC 1077
 22. Commissioning Certificate from TNEB dated 31/03/2007 (DOC 29/03/2007) for 1 WTG connected to HTSC D68
 23. Commissioning Certificate from TNEB dated 09/04/2007 (DOC 30/03/2007) for 1 WTG connected to HTSC D73
 24. Commissioning Certificate from TNEB dated 09/04/2007 (DOC 30/03/2007) for 1 WTG connected to HTSC D74
 25. Commissioning Certificate from TNEB dated 09/04/2007 (DOC 30/03/2007) for 1 WTG connected to HTSC D75
 26. Commissioning Certificate from TNEB dated 23/04/2007 (DOC 16/04/2007) for 1 WTG connected to HTSC D78
 27. Commissioning Certificate from TNEB dated 20/03/2007 (DOC 14/03/2007) for 1 WTG connected to HTSC D37
 28. Commissioning Certificate from TNEB dated 26/03/2007 (DOC 21/03/2007) for 1 WTG connected to HTSC D47
 29. Commissioning Certificate from TNEB dated 26/03/2007 (DOC 21/03/2007) for 1 WTG connected to HTSC D49
 30. Commissioning Certificate from TNEB dated 27/03/2007 (DOC 26/03/2007) for 1 WTG connected to HTSC D52
 31. Commissioning Certificate from TNEB dated 27/03/2007 (DOC 26/03/2007) for 1 WTG connected to HTSC D54
 32. Commissioning Certificate from TNEB dated 04/05/2007 (DOC 25/04/2007) for 1 WTG connected to HTSC D79
 33. Commissioning Certificate from TNEB dated 04/05/2007 (DOC 25/04/2007) for 1 WTG connected to HTSC D80
 34. Commissioning Certificate from TNEB dated 04/05/2007 (DOC 25/04/2007) for 1 WTG connected to HTSC D81
 35. Commissioning Certificate from TNEB dated 21/05/2007 (DOC 09/05/2007) for 1 WTG connected to HTSC D82
 36. Commissioning Certificate from TNEB dated 21/05/2007 (DOC 09/05/2007) for 1 WTG connected to HTSC D83
 37. Commissioning Certificate from TNEB dated 21/05/2007 (DOC 11/05/2007) for 1 WTG connected to HTSC D84
 38. Commissioning Certificate from TNEB dated 20/03/2007 (DOC 14/03/2007) for 1 WTG connected to HTSC D38

Commissioning certificate for the WTGs connected to HTSC D84, D34 and D78 are not found to be submitted. Please clarify.

Section 2.1 of VCS MR version 01 mentions that as a part of regular maintenance the machines are stopped for mechanical and electrical maintenance for 16 to 18 hours annually and for visual inspection for 6 to 7 hours quarterly. This is found to be appropriate and accepted.

Section 2.1 of the MR version 02 mentions occurrence of no such events that may impact the GHG emission reductions and monitoring in current monitoring period considered for the project activity. This is checked and confirmed during site visit carried out for the project activity and this is accepted.

Thus CL #2 is open.

Project Participant Response:	Date: 04/04/2012
Please find the commission certificates of the WTGs at HTSC D84, D34 and D78	
Documentation Provided as Evidence by Project Participant:	
commission certificates	

Information Verified by Lead Assessor:	
Commissioning certificates for HTSC D84, D34 and D78 are checked for appropriateness of commissioning dates.	
Reasoning for not Acceptance or Acceptance and Close Out:	Date: 10/04/2012 Reopen: 05/05/2012
PP submitted below calibration certifications for HTSC D84, D34 and D78; 1. Commissioning Certificate from TNEB dated 15/03/2007 (DOC 07/03/2007) for 1 WTG connected to HTSC D34 2. Commissioning Certificate from TNEB dated 21/05/2007 (DOC 11/05/2007) for 1 WTG connected to HTSC D84 3. Commissioning Certificate from TNEB dated 23/04/2007 (DOC 16/04/2007) for 1 WTG connected to HTSC D78 Same are checked and it is found to be appropriate; hence this is accepted. VCS PD has mentioned start date as 08/03/2006 and MR as 17/01/2006, please clarify the inconsistency observed. The same date of 08/03/2006 was validated as start date or first WEC commissioning date. VCS PD has mentioned only 11/05/2007 date as commissioning date for all WTGs owned by Premier Spg & Wvg Mills Pvt Ltd. However, MR mentions different dates for the same. Please clarify the inconsistency observed. Thus CL #2 is Open.	
Project Participant Response:	Date: 05/05/2012
First machine was commissioned on 17/01/2006 as per the commissioning certificates. There was error in mentioning the start date as 08/03/2006 in PD, hence PD considers the crediting period start date as 01/04/2006. Crediting period has been followed as per PD. This doesn't have any impact on emission reduction and additionality of project. VCS PD mentions the commission date for respective investor as the date on which last machine was commissioned for that investor. Monitoring report specifies the commission dates for all the machines instead a date on which last machine was commissioned.	
Documentation Provided as Evidence by Project Participant:	
Explanation provided	
Information Verified by Lead Assessor:	
Explanation provided by the project participant is checked for appropriateness of start date and commissioning date of the project activity.	
Reasoning for not Acceptance or Acceptance and Close Out:	Date: 09/05/2012
It is understood that start date of the project activity was erroneously mentioned as 08/03/2006 whereas first WTG involved in the project activity was commissioned on 17/01/2006. This is checked and confirmed commissioning certificates submitted for the project activity. This is found to be appropriate and it is accepted. Also it is understood that VCS PD mentions commissioning date for each investor as date of commissioning of last WTG. However, commissioning dates mentioned for all the WTGs involved in the project activity are checked and confirmed from commissioning certificates for the project activity. This is found to be appropriate and it is accepted. Thus CL #2 is closed out.	
Acceptance and Close out by Lead Assessor:	Date: 09/05/2012

Date:	21/02/2012	Raised by:	Vikas Bankar		
Type:	CL	Number:	03	Reference:	Section 2.3
Lead Assessor Comment:				Date: 21/02/2012	

During site visit, it is understood that the subproject of Bannari Amman Spinning Mills (for 14 machines) was registered as CDM project (UN Ref. No. 4877) on 17 th June 2011. Hence, VCU has been considered up to 16 th June 2011 only. Please clarify the implication of this information mentioned in section 2.3 of VCS MR version 01 to category of grouped project in VCS standard.	
Project Participant Response:	Date: 07/03/2012
The information as mentioned above has been removed from section 2.3 of MR and has been added to section 5 of revised MR (Version 2).	
Documentation Provided as Evidence by Project Participant:	
Revised MR (Version 2)	
Information Verified by Lead Assessor:	
Revised MR version 02 is checked for appropriateness of information provided in section 2.3 of the MR.	
Reasoning for not Acceptance or Acceptance and Close Out:	Date: 28/03/2012
Section 05 of the VCS MR now mentions that since subproject of Bannari Amman Spinning Mills (for 14 machines) was registered as CDM project (UN Ref. No. 4877) on 17 th June 2011. Hence, VCU has been considered up to 16 th June 2011 only. This is found to be appropriate and it is accepted. Thus CL #3 is closed out.	
Acceptance and Close out by Lead Assessor:	Date: 28/03/2012

Date:	21/02/2012		Raised by:	Vikas Bankar					
Type:	CAR	Number:	04		Reference:	Section 3.3			
Lead Assessor Comment:					Date: 21/02/2012				
Also PP is requested to include latest calibration details covering whole monitoring period and meter change details in section 3.3 of the VCS MR along with documentary evidences indicating the same.									
Project Participant Response:					Date: 07/03/2012				
The calibration details covering whole monitoring period and meter change details have been presented in section 3.3 of the Revised MR (version 2). The documentary evidence being presented to DOE.									
Documentation Provided as Evidence by Project Participant:									
Revised MR (Version 2)									
Calibration Certificates covering monitoring period									
Information Verified by Lead Assessor:									
Calibration certificates submitted by the project activity are checked for appropriateness of calibration carried for the metering equipments involved in the project activity.									
Reasoning for not Acceptance or Acceptance and Close Out:					Date: 30/03/2012				
Calibration Certificates for the meters involved in the project activity are submitted by PP and below are details of the same;									
Sr. No.	Name of Investors	HTSC No.	Type	Meter No.	Past Calibration	Dates of Calibration Certificates	Recent Calibration	Dates of Calibration Certificates	Accuracy Class
1	Premier Spg & Wvg Mills Pvt Ltd	D47	ELSTER	04863754	12/10/2010	22/10/2010	28/01/2012	01/02/2012	0.5s
2	Premier Spg & Wvg Mills Pvt Ltd	D49	ELSTER	04890022	12/10/2010	22/10/2010	28/01/2012	01/02/2012	0.5s

3	Premier Spg & Wvg Mills Pvt Ltd	D52	SECUR E	TN902732	12/10/2010	22/10/2010	09/12/2011	01/02/2012	0.2s	
4	Premier Spg & Wvg Mills Pvt Ltd	D54	ELSTER	04865534	12/10/2010	22/10/2010	28/01/2012	01/02/2012	0.5s	
5	Premier Spg & Wvg Mills Pvt Ltd	D79	ELSTER	04865507	12/10/2010	22/10/2010	28/01/2012	01/02/2012	0.5s	
6	Premier Spg & Wvg Mills Pvt Ltd	D80	SECUR E	TNB02400	12/10/2010	22/10/2010	28/01/2012	01/02/2012	0.5s	
7	Premier Spg & Wvg Mills Pvt Ltd	D81	ELSTER	04865535	12/10/2010	22/10/2010	28/01/2012	01/02/2012	0.5s	
8	Premier Spg & Wvg Mills Pvt Ltd	D82	ELSTER	04865504	12/10/2010	22/10/2010	27/01/2012	01/02/2012	0.5s	
9	Premier Spg & Wvg Mills Pvt Ltd	D83	ELSTER	04865503	12/10/2010	22/10/2010	27/01/2012	01/02/2012	0.5s	
10	Premier Spg & Wvg Mills Pvt Ltd	D84	ELSTER	04865505	12/10/2010	22/10/2010	27/01/2012	01/02/2012	0.5s	
11	Premier Fine Yarns Pvt Ltd	D26	SECUR E	TN902742	12/10/2010	22/10/2010	22/11/2011	01/02/2012	0.2s	
12	Premier Fine Yarns Pvt Ltd	D27	ELSTER	04865401	12/10/2010	22/10/2010	27/01/2012	30/01/2012	0.5s	
13	Premier Fine Yarns Pvt Ltd	D28	ELSTER	10287910	12/10/2010	22/10/2010	27/01/2012	30/01/2012	0.5s	
14	Premier Fine Yarns Pvt Ltd	D29	WALLA BY	HT5100083	12/10/2010	22/10/2010	27/01/2012	30/01/2012	0.5s	
15	Premier Fine Yarns Pvt Ltd	D30	ELSTER	HT5110137	12/10/2010	22/10/2010	27/01/2012	30/01/2012	0.5s	
16	Premier Fine Yarns Pvt Ltd	D30	ELSTER	HT5110137	12/10/2010	22/10/2010	27/01/2012	30/01/2012	0.5s	

17	Premier Fine Yarns Pvt Ltd	D32	ELSTER	04863757	12/10/2010	22/10/2010	27/01/2012	30/01/2012	0.5s	
18	Premier Fine Yarns Pvt Ltd	D32	ELSTER	04863757	12/10/2010	22/10/2010	27/01/2012	30/01/2012	0.5s	
19	Premier Fine Yarns Pvt Ltd	D33	ELSTER	04863762	12/10/2010	22/10/2010	27/01/2012	30/01/2012	0.5s	
20	Premier Fine Yarns Pvt Ltd	D34	ELSTER	04865400	12/10/2010	22/10/2010	27/01/2012	30/01/2012	0.5s	
21	Coimbatore Twisted (Premier Mills)	D37	ELSTER	04863761	18/10/2010	22/10/2010	27/01/2012	01/02/2012	0.5s	
22	Coimbatore Polytex (Premier Mills)	D38	ELSTER	04865383	18/10/2010	22/10/2010	27/01/2012	01/02/2012	0.5s	
23	Coimbatore Polytex (Premier Mills)	D43	ELSTER	04865533	18/10/2010	22/10/2010	27/01/2012	01/02/2012	0.5s	
24	Coimbatore Polytex (Premier Mills)	D43	ELSTER	04865533	18/10/2010	22/10/2010	27/01/2012	01/02/2012	0.5s	
25	Coimbatore Polytex (Premier Mills)	D44	ELSTER	04865526	18/10/2010	22/10/2010	27/01/2012	01/02/2012	0.5s	
26	Coimbatore Polytex (Premier Mills)	D45	ELSTER	04865528	18/10/2010	22/10/2010	27/01/2012	01/02/2012	0.5s	
27	Coimbatore Polytex (Premier Mills)	D68	ELSTER	04865501	18/10/2010	22/10/2010	28/01/2012	01/02/2012	0.5s	
28	Coimbatore Polytex (Premier Mills)	D73	ELSTER	04959599	18/10/2010	22/10/2010	28/01/2012	01/02/2012	0.5s	
29	Coimbatore Polytex (Premier Mills)	D74	ELSTER	04865530	18/10/2010	22/10/2010	27/01/2012	01/02/2012	0.5s	
30	Coimbatore Polytex (Premier Mills)	D75	SECURE	TN901783	18/10/2010	22/10/2010	27/01/2012	01/02/2012	0.2s	

31	Coimbatore Polytex (Premier Mills)	D78	WALLA BY	208320441	18/10/2010	22/10/2010	28/01/2012	01/02/2012	0.5s	
32	Bannari Amman Spinning Mills	1,067	ELSTER	04721986	09/10/2010	18/10/2010	25/01/2012	31/01/2012	0.5s	
33	Bannari Amman Spinning Mills	1,068	SECUR E	TN900964	06/10/2010	12/10/2010	25/01/2012	31/01/2012	0.5s	
34	Bannari Amman Spinning Mills	1,069	ELSTER	04725673	06/10/2010	12/10/2010	25/01/2012	31/01/2012	0.5s	
35	Bannari Amman Spinning Mills	1,070	ELSTER	04725674	09/10/2010	12/10/2010	25/01/2012	31/01/2012	0.5s	
36	Bannari Amman Spinning Mills	1,070	ELSTER	04725674	09/10/2010	12/10/2010	25/01/2012	31/01/2012	0.5s	
37	Bannari Amman Spinning Mills	1,071	ELSTER	02373937	09/10/2010	12/10/2010	25/01/2012	31/01/2012	0.5s	
38	Bannari Amman Spinning Mills	1,072	ELSTER	04721860	09/10/2010	12/10/2010	25/01/2012	31/01/2012	0.5s	
39	Bannari Amman Spinning Mills	1,072	ELSTER	04721860	09/10/2010	12/10/2010	25/01/2012	31/01/2012	0.5s	
40	Bannari Amman Spinning Mills	1,073	SECUR E	TN902837	09/10/2010	12/10/2010	25/11/2011	02/12/11	0.2s	
41	Bannari Amman Spinning Mills	1,077	ELSTER	04721982	06/10/2010	12/10/2010	25/01/2012	31/01/2012	0.5s	
42	Bannari Amman Spinning Mills	1,077	ELSTER	04721982	06/10/2010	12/10/2010	25/01/2012	31/01/2012	0.5s	
43	Bannari Amman Spinning Mills	1,086	ELSTER	04725696	06/10/2010	12/10/2010	25/01/2012	31/01/2012	0.5s	

44	Bannari Amman Spinning Mills	1,106	ELSTER	04726631	09/10/2010	12/10/2010	25/01/2012	31/01/2012	0.5s
45	Bannari Amman Spinning Mills	1,106	ELSTER	04726631	09/10/2010	12/10/2010	25/01/2012	31/01/2012	0.5s
PP is requested to clarify why details of both the meters i.e. old as well as new meters are not provided for HTSC D52, D26, D28, D30, D75, 1068 and 1073. Also please mention date of meter replacement in the MR. PP is requested to check appropriateness of date of recent calibration of meter installed at HTSC D75. PP applied maximum permissible error of 0.5% for the month of Oct 2010, Nov 2010, Oct 2011 and Nov 2011 for all the meters involved in the project activity for delayed calibration period. This is found to be appropriate and it is accepted. Thus CAR #4 is open.									
Project Participant Response:					Date: 04/04/2012				
Details of both the meters i.e. old as well as new meters are provided for HTSC D52, D26, D28, D30, D75, 1068 and 1073. Also meter replacement record is provided in the MR.									
Documentation Provided as Evidence by Project Participant:									
Revised MR version 03									
Information Verified by Lead Assessor:									
Revised MR version 03 is checked for appropriateness of meter change details in section 3.3 and calibration date for HTSC D75									
Reasoning for not Acceptance or Acceptance and Close Out:					Date: 10/04/2012				
					Reopen: 05/05/2012				
Section 3.3 of the revised MR version 03 now mentions meter change details and correct calibration date for WTG connected to HTSC D75. This is found to be appropriate and it is accepted. It is observed that there is change in meter for D52 as compared with previous verification; however the same is not discussed. Please check this for all meters and clarify about change in meters Please confirm the accuracy class for 0.2s meters as previous verification report mentioned that all meters are of 0.5 accuracy class. Thus CAR #4 is open.									
Project Participant Response:					Date: 05/05/2012				
Meter change details with supporting references have been provided in MR.									
There have been the cases of meter change. New meters have different accuracy class than old meters. To assess the conservative numbers of emission reduction units, larger accuracy class of 0.5 has been used wherever error factors have been applied.									
Documentation Provided as Evidence by Project Participant:									
Revised MR version 04									
Information Verified by Lead Assessor:									
Revised MR and ER sheet is checked for appropriateness of response to above queries raised.									
Reasoning for not Acceptance or Acceptance and Close Out:					Date: 10/05/2012				

Section 3.3 of revised MR transparently mentions details of old meter, new meter, meter replacement date and reference document etc. This is found to be appropriate and it is accepted. It is understood that the meters employed are of different accuracy class of 0.2s or 0.5s as some of the meters are found to be replaced by new meter with better accuracy class of 0.2s. Also The Gadget of India (Registered NO. DL (N) – 04/0007/2003 – 15) dated 26/07/2010 which is a gadget for metering regulations in India clearly mentions that for voltage of 650 V up to 33 kV, 0.5s and better is recommended. Hence it is accepted. Thus CAR #4 is closed out.	
Acceptance and Close out by Lead Assessor:	Date: 10/05/2012

Date:	21/02/2012	Raised by:	Vikas Bankar		
Type:	CAR	Number:	05	Reference:	Section 4, 5
Lead Assessor Comment:				Date: 21/02/2012	
PP is requested to clarify the appropriateness of actual PLF achieved mentioned in section 5 of the VCS MR version 01 considering number of days involved in current monitoring period for the project activity.					
Project Participant Response:				Date: 07/03/2012	
The actual PLF achieved mentioned in section 5 of the VCS MR version 02 considers the number of days involved in current monitoring period for the project activity.					
Documentation Provided as Evidence by Project Participant:					
Revised MR (Version 2)					
Information Verified by Lead Assessor:					
Revised MR version 02 is checked for appropriateness of actual PLF mentioned in section 5 of the MR					
Reasoning for not Acceptance or Acceptance and Close Out:				Date: 30/03/2012	
Revised MR version 02 now mentions correct value of actual PLF achieved during current monitoring period for the project activity. This is found to be appropriate and it is accepted. Thus CAR #5 is closed out.					
Acceptance and Close out by Lead Assessor:				Date: 30/03/2012	

Date:	21/02/2012	Raised by:	Vikas Bankar		
Type:	CL	Number:	06	Reference:	Section 3.3, 4.1
Lead Assessor Comment:			Date: 21/02/2012		
Section 3.3 of VCS MR version 1.1 doesn't describe procedures for handling internal auditing and non-conformities. Also line diagram indicating GHG collection and management system is not found to be included in section 3.3 of VCS MR version 01. Please clarify the same in line with indicative guidelines available in VCS MR template available on VCS website http://v-c-s.org/program-documents . PP is requested to submit ISO certificate of EPC contractor for the project activity. Also please submit internal audit and training procedure being followed for data recording and management in the project activity					
Project Participant Response:			Date: 07/03/2012		
Section 3.3 of Revised MR (Version 2) has been updated accordingly to incorporate management structure to handle internal auditing and non-conformities. Also, the line diagram indicating data collection leading to GHG collection has been presented in section 3.3. ISO certificate of EPC contractor and internal audit and training procedure being submitted to DOE.					
Documentation Provided as Evidence by Project Participant:					
Revised MR (Version 2) ISO certificate of EPC contractor and internal audit and training manual					
Information Verified by Lead Assessor:					

Revised MR is checked for appropriateness of QA/QC procedure to be followed for the project activity	
Reasoning for not Acceptance or Acceptance and Close Out:	Date: 30/03/2012
Section 3.3 of VCS MR version 2 now mentions procedures towards internal auditing and non-conformities along with inclusion of line diagram indicating GHG collection and management system. This is found to be appropriate and it is accepted. PP had submitted training manual and ISO certificate of Enercon India Limited who is acting as EPC contractor for the project activity. This is found to be appropriate and it is accepted. Thus CL #6 is closed out.	
Acceptance and Close out by Lead Assessor:	Date: 30/03/2012

Date:	21/02/2012	Raised by:	Vikas Bankar		
Type:	CAR	Number:	07	Reference:	ER Sheet
Lead Assessor Comment:				Date: 21/02/2012	
PP is requested to clarify the appropriateness of net export values considered for the project activity in line start and end date of current monitoring period.					
PP is requested to check appropriateness of value of net electricity exported for the month of September 2011 for HTSC D-32 (Premier Fine Yarns Pvt Ltd).					
PP is requested to mention appropriate units for monitored data reported in ER sheet submitted for the project activity.					
Project Participant Response:				Date: 07/03/2012	
The star date of crediting period is 16 September 2011 and end date of crediting period is 15 November 2011 except for Bannari Amman Spinning Mills for which end of crediting period is 09 June 2011. This information has been presented in section 5 of revised MR (version 2).					
The net electricity exported for the month of September 2011 for HTSC D-32 (Premier Fine Yarns Pvt Ltd) has been rectified to match electricity generation statement.					
The appropriate units for monitored data in ER sheet have been added.					
Documentation Provided as Evidence by Project Participant:					
Revised MR and ER sheet					
Information Verified by Lead Assessor:					
Revised MR version 02 and ER sheet is checked for appropriateness of above queries raised.					
Reasoning for not Acceptance or Acceptance and Close Out:				Date: 30/03/2012	
It is observed that PP hasn't considered electricity exported in the month of Sep 2010 in emission reduction calculations for the project activity. This is found to be appropriate and it is accepted.					
The value net electricity exported for the month of September 2011 for HTSC D-32 (Premier Fine Yarns Pvt Ltd) is found to be corrected in line with statement of electricity generation for the month of Sep 2011. This is found to be appropriate and it is accepted.					
Revised ER sheet now mentions appropriate units and it is accepted.					
Thus CAR #7 is closed out.					
Acceptance and Close out by Lead Assessor:				Date: 30/03/2012	

Annex 3: Team Members Statements of Competency

Name: Vikas Bankar

Status

- Lead Assessor	x	- Expert	x
- Assessor	x	- Financial Expert	
- Local Assessor	India	- Technical Reviewer	

Scopes of Expertise

1. Energy Industries (renewable / non-renewable)

x

Technical Area(s): TA 1.2 Energy generation from renewable energy sources

2. Energy Distribution

x

Technical Area(s): TA 2.1 Electricity distribution
TA 2.2 Heat distribution

3. Energy Demand

x

Technical Area(s): TA 3.1 Energy Demand

4. Manufacturing

Technical Area(s):

5. Chemical Industry

Technical Area(s):

6. Construction

Technical Area(s):

7. Transport

Technical Area(s):

8. Mining/Mineral Production

Technical Area(s):

9. Metal Production

Technical Area(s):

10. Fugitive Emissions from Fuels (solid, oil and gas)

Technical Area(s):

11. Fugitive Emissions from Production and Consumption of Halocarbons and Sulphur Hexafluoride

Technical Area(s):

12. Solvent Use

Technical Area(s):

13. Waste Handling and Disposal

Technical Area(s):

14. Afforestation and Reforestation

Technical Area(s):

15. Agriculture

Technical Area(s):

Approved Member of Staff by: Siddharth Yadav Date: 06/02/2012

Statement of Competence

Name: Ramkrishna Patil

Status

- Lead Assessor	X	- Expert	x
- Assessor	X	- Financial Expert	
- Local Assessor	India	- Technical Reviewer	x

Scopes of Expertise

1. Energy Industries (renewable / non-renewable)	x
Technical Area(s): TA 1.2 Energy generation from renewable energy sources	
2. Energy Distribution	x
Technical Area(s): TA 2.1 Electricity distribution TA 2.2 Heat distribution	
3. Energy Demand	x
Technical Area(s): TA 3.1 Energy Demand	
4. Manufacturing	
Technical Area(s):	
5. Chemical Industry	
Technical Area(s):	
6. Construction	
Technical Area(s):	
7. Transport	
Technical Area(s):	
8. Mining/Mineral Production	
Technical Area(s):	
9. Metal Production	
Technical Area(s):	
10. Fugitive Emissions from Fuels (solid, oil and gas)	
Technical Area(s):	
11. Fugitive Emissions from Production and Consumption of Halocarbons and Sulphur Hexafluoride	
Technical Area(s):	
12. Solvent Use	
Technical Area(s):	
13. Waste Handling and Disposal	
Technical Area(s):	
14. Afforestation and Reforestation	
Technical Area(s):	
15. Agriculture	
Technical Area(s):	
Approved Member of Staff by: Siddharth Yadav	Date: 22/02/2012