Voluntary Carbon Standard 2007.1

VERIFICATION REPORT

6.25 MW Wind Power Generation project of Salora International Limited

VERIFICATION PERIOD:
31st July 2006 to 31st July 2009

Project No/ Rev. No.: V-3-I-01-S-0026-Ve /01

Verification Report

Name of Verification company:	**Date of issue:**
Perry Johnson Registrars CDM Inc.	2011-01-05
Report Title:	**Approved by:**
Verification report – *"6.25 MW Wind Power Generation project of Salora International Limited"*.	Mathsy Kutty
Client:	**Project Title:**
M/s Salora International Limited	Monitoring report of *"6.25 MW Wind Power Generation project of Salora International Limited*" Version : 02 Date : 2010-11-09

Summary:

M/s Salora International Limited has contracted with Perry Johnson Registrars Clean Development Mechanism Inc.(PJRCDM) for verification of the project – *"6.25 MW Wind Power Generation project of Salora International Limited*" under Voluntary Carbon Standard (VCS). The verification involves independent review of the implementation of project as per VCS project document (PD) and its monitoring plan.

The proposed VCS project is a bundled wind power project consisting of 5 wind turbine generators (WTG) belonging to M/s Salora International Limited. All the WTGs are located in Petle village of Dhule district in Maharashtra, India. Based on the assessment of the GHG emission reductions reported in the initial version of the monitoring report version 01 dated 1st October 2010, PJRCDM had requested responses from the project proponent through the means of Clarification Requests (CLs), Corrective Action Requests (CARs) and Forward Action Requests (FARs) issued in the draft verification report.

In our opinion, the GHG emission reductions reported in the monitoring report final version 02, dated 9th November 2010 are fairly stated. Based on the assessment, PJRCDM is able to certify that the implementation of the project has resulted in GHG emission reduction of **20,348** tCO_2 equivalent during the period 31st July 2006 to 31st July 2009.

PJRCDM's opinion regarding the reported emission reductions for the given monitoring period, is based on the information sought and also reviews of publicly available information where applicable. ISO-14064 guidelines have been applied in principle to assess the key issues like accuracy, completeness and conservativeness of the information. PJRCDM's verification/certification of GHG emissions is limited to this information evaluation.

Issuance and utilization of certified GHG-emission reductions is beyond the scope of PJRCDM.

Report Number/ Revision Number	**Number of pages**
V-3-I-01-S-0026-Ve/01	27
Work carried out by:	**Work Reviewed by:**
Ajay Verma	Mathsy Kutty

Abbreviations

CAR	Corrective Action Request
CDM	Clean Development Mechanism
CL	Clarification Request
GHG	Greenhouse gas
IPCC	Intergovernmental Panel on Climate Change
KWh	Kilo Watt hour
PD	Project Document
PJRCDM	Perry Johnson Registrars Clean Development Mechanism Inc.
PP	Project Proponent
MSEDCL	Maharashtra State Electricity Distribution Company Limited
NEWNE	North East West Northeast Grid
UNFCCC	United Nations Framework Convention on Climate Change
VCS	Voluntary Carbon Standard
SIL	Salora International Limited

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1 INTRODUCTION

M/s Salora International Limited.(SIL), hereinafter referred to as the "client" or "project proponent", contracted Perry Johnson Registrars Clean Development Mechanism Inc. (PJRCDM) to perform the validation and verification of the project activity "*6.25 MW Wind Power Generation project of Salora International Limited*" under the Voluntary Carbon Standard (VCS) 2007.1 for the period 31st July 2006 to 31st July 2009. The report describes the verification work undertaken. The validation of the project activity against the VCS 2007.1 requirements was completed on 15th November 2009.

1.1 Objective

Verification under VCS is the independent ex-post quantification and certification of the greenhouse gas (GHG) emission reductions achieved by a project activity which has completed validation under VCS 2007.1 or validated under a VCS approved GHG program.

The above work is carried out through an independent assessment and a written assurance is provided on the GHG emission reductions achieved for the period specified.

1.2 Scope and Criteria

The scope of the verification covers independent objective review and ex-post determination of the monitored GHG emission reductions by the project activity "6.*25 MW Wind Power Generation project of Salora International Limited*".

The specific scope of the verification work involves:

- To verify that the project activity is implemented as per the project details of the validated project design document (PDD) or the VCS PD
- To assess whether the emissions reductions determined are in conformance with the monitoring plan of the VCS PD and the approved methodology.
- To express a conclusion whether reported data are accurate, complete, consistent, and transparent with a reasonable level of assurance and free of omission or material error, based on the review of the reported data and emission reduction calculations.

The project is assessed against the verification requirements of VCS 2007.1 standard including the criteria that the emission reductions are real, measurable, transparent and conservative. The approach adopted by PJRCDM verification team is risk-based, drawing on an understanding of the risks associated with reporting of GHG emissions data and the controls in place to mitigate these.

The work carried out by PJRCDM is free from any conflict of interest.

Request for issuance of Voluntary Carbon Units (VCUs), verified and certified by PJRCDM, shall be made by the project proponent to the VCS registry in accordance with the most recent version of the "*VCS Guidance Document: VCS Project Registration and VCU Issuance process*". In view of the above, PJRCDM's responsibility is limited only to verification and certification of the GHG emission reductions achieved during the specified period.

1.3 VCS project Description

The project activity is generation of electricity by wind turbine generators and exporting the generated electricity to the North East West North east (NEWNE) grid of India. The project activity comprises of 5 WTGs owned by SIL (*details are in below table*) in Petle village of district Dhule of the state of Maharashtra, India.

The WTGs are of S66 make by M/s Suzlon Energy Ltd.

Project owner : M/s Salora International Limited.

Location : Petle Village, Dhule district of Maharashtra, India.

Title of the PDD : *6.25 MW Wind Power Generation project of Salora International Limited*

Methodology used : AMS I D, version 13

VCS Crediting period : 31st July 2006 to 30th July 2016

Monitoring period under VCS : 31st July 2006 to 31st July 2009

Table 1: Project Details

Sl.No.	*WTG*	*Village*	*Taluka*	*District*	*Commissioning Date*	*Latitude*	*Longitude*
1	J104	Petle	Isharde	Dhule	31/07/2006	N21 12 15.0	E74 19 22.9
2	J106	Petle	Isharde	Dhule	03/08/2006	N21 13 25.7	E74 19 06.5
3	J107	Petle	Isharde	Dhule	01/08/2006	N21 13 45.1	E74 19 06.8
4	J108	Petle	Isharde	Dhule	01/08/2006	N21 13 16.3	E74 18 59.8
5	J109	Petle	Isharde	Dhule	01/08/2006	N21 14 39.0	E74 18 55.7

1.4 Level of assurance

In line with VCS 2007.1 requirements and as per ISO 14064-3:2006 paragraph A.2.3.2, a ***"reasonable level of assurance"*** is defined for the verification of the project.

This implies that, based on the process and procedures conducted, PJRCDM confirms that the GHG assertion in the monitoring report

- is materially correct and is a fair representation of the GHG data and information, and
- is prepared in accordance with VCS requirements, the validated CDM PDD and the approved methodology for information pertaining to GHG quantification, monitoring and reporting.

The verification work is carried out as per this requirement and details are presented in the Verification statement in section 2 below.

2 METHODOLOGY

2.1 General Approach

The project activity applies approved baseline and monitoring methodology AMS-I.D (version 13) categorised under sectoral scope 01 'Energy industries (renewable - / non-renewable sources)'. For verification of emission reductions, PJRCDM's approach involves broadly three steps:

1) Completeness check and desktop review of the monitoring report
2) Onsite inspection and issuance of findings from the audit
3) Resolution of the findings and preparation of the verification report

The following team members from PJRCDM were involved in these steps :

Name	Role	Areas covered
Ajay Verma	GHG Auditor/Project Manager	Completeness check of monitoring report, desktop review, issuance and closure of findings, final verification report preparation
G Subramanyam	GHG Auditor	Site Visit
Mathsy Kutty	Technical Reviewer	Independent review of the verification assignment.

2.2 Means of Verification

2.2.1 Review of Project Documentation

On receipt of the monitoring report from the client, the completeness of information made available as per VCS2007.1 standard requirements was reviewed. A desktop review was further carried out to assess the following:

- the validated VCS PD with the monitoring plan
- the emission reduction calculation method used in the applied methodology and the VCS PD
- the monitoring report, including frequency of monitoring and the calculation of emission reductions for the period
- the documented operation and maintenance manual furnished by the project participant (where applicable)
- other external documents like grid emission factor, IPCC emission factor, etc. applied.

A complete list of all documents reviewed is attached in Appendix I of this report.

2.2.2 Onsite Inspections

An onsite visit was carried out by PJRCDM in the month of 23rd September 2009. The actual operation of the project as described in the PD, the JMR sheets were reviewed and discussed during the site visit and issues identified in the desktop review of submitted documents were discussed.

List of personnel interviewed and issues discussed during the site visit is as provided below:

Table 2: Personnel Interviewed

Name / Designation / Company	Interviewed on
Mr. B.S.Naik, Asst. Manager (CRM) Suzlon Energy Ltd	▪ Determination of net electricity generation ▪ Joint meter reading exercises ▪ Monitoring system ▪ Invoices for electricity export ▪ Calibration practice

During the site visit, PJRCDM verified the actual operation of the project as described in the PD. The system of controller energy meters and joint energy meters used for monitoring the sale of electricity sale to grid were examined. The monthly records for joint meter readings were reviewed.

2.2.3 Review of Monitoring Results and Correct Application of Monitoring Methodology

Based on the site inspection and review of records including the monitoring plan, a list of non conformities; Corrective Action Requests (CAR) were raised. The non con-

formities could be related to lack of adherence to the VCS 2007.1 requirement, non-conformance to the monitoring plan of as defined in the VCS validated PD or where evidence provided is found insufficient to prove conformity. They could also be mistakes in applying data/ assumptions and in calculation of emission reductions.

If information made available is insufficient to transparently arrive at the stated conclusion, a Clarification request (CL) is raised and communicated to the project proponent.

Observations may also be raised which are for the benefit of future verification period. These, however, have no impact upon the completion of the current verification activity.

On receipt of response from the project developer, the adequacy with compliance with VCS requirements is checked along with a revised monitoring report. Closure of comments raised occurs only if the response provided and correction made fully complies with the stated requirements of the methodology applied.

The list of CARs/ CLs raised and the response provided and reasons for closure are provided Appendix-1.

2.2.4 Determinations of the reductions in GHG Emissions

As per the applicable methodology the emission reductions achievable by the project activity are calculated as a difference of baseline emissions (BE_y) project emissions (PE_y) and emissions due to leakage (L_y) determined as follows.

Baseline emissions: The baseline emissions are determined as a multiple of net electricity generated and supplied to the grid by the renewable energy technology (EGy in MWh), and an electricity grid emission factor calculated as per CDM EB guidance.

As per the VCS validated PD, the emission factor has been fixed ex-ante. For the current verification period, PJRCDM was able to verify the VER calculations based on the grid emission factor of 0.9075 tCO_2/MWh.

Project emissions: As per methodology, there are no project emissions applicable and hence they have been considered as zero.

Leakage: No leakage has to be considered for the proposed project activity.

Emission reductions: $ER_y = BE_y - PE_y - L_y = BE_y$

During the current monitoring period, i.e. from 31st July 2006 to 31st July 2009, the project activity has delivered 22,422.31 MWh of net electricity to the grid. PJRCDM team was able to verify the generation data presented in the excel worksheets, which were further cross checked against the JMR sheets and invoices. The invoices serve as a credible source for cross verification, since the same is used for the payment by the MSEDCL to project proponent. Based on this, the net reduction in GHG emissions achieved by the project activity during the said monitoring period is equivalent to **20,348** tCO2e.

The above value of GHG emission reductions is based on completely monitored data, transparently presented, accurately measured and calculated, conservatively estimated and independently verified by PJRCDM.

2.2.5 Review of Additional Data from other Sources if appropriate

The validation report of the VCS validated project issued by PJRCDM, dated 15th November 2009, the VCS validated PD, version 02 dated 31st August 2009 were reviewed for any pending issues to be considered during verification.

The other source of information was the CEA Database Version 04, available from the website, from which the emission factor for the grid was determined.

2.3 Internal Quality Control

On completion of the assessment by the GHG assessment team, the complete verification package including the verification report, monitoring report and supporting documents is sent to the technical reviewer. In this stage, the Technical Reviewer independently assesses the project with the VCS requirements before accepting/ rejecting the recommendation from the GHG assessment team.

3 VERIFICATION FINDINGS

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

No pending issues were identified from the discussion, findings and conclusions drawn from the current VCS Validation Report (version 01) issued by validating agency dated 15th November 20009.

3.2 Project Implementation

The project activity involves the installation and operation of five (5) Wind Turbine Generators (WTGs) installed in Petle village of Dhule district of Maharashtra, India by the clients. These WTGs are all manufactured by M/s Suzlon Energy Ltd and are of 1.25 MW capacities.

The implementation of the project activity was as described in the VCS validated PD, checked against supportive documents presented. PJRCDM was able to verify that the there was no change in project design compared to the design presented in the VCS validated PD, version 02 dated 31st August 2009.

3.3 Completeness of Monitoring

The GHG emission reductions are calculated based on the net electricity exported by the project activity to the grid. This is measured by the 0.2% accuracy class tri-vector meters (energy meters) installed at located at the sub-station. The main meter readings are the primary source while the check meter is used to determine the accuracy of meter readings, and the check meter readings would be used in the eventuality of main meter failing, if and when identified during yearly checks.

The JMR sheets of all the monthly readings for all the WTGs were provided by PP. It has recorded in presence of MSEDCL representative and PP.

Complete data of electricity supply to the grid was available for the entire verification period (31st July 2006 to 31st July 2009) which was verified by PJRCDM.

3.4 Accuracy of Emission Reduction Calculations

PJRCDM assessed the different areas (as mentioned below) which can affect the accuracy of the final emission reduction calculations:

Net electricity supplied to the grid: The energy meter readings calculated based on the difference between measured values of "export" and "import" on the MSEDCL meter. However, monthly joint meter reading is taken jointly by the MSEDCL and PP. Since this meter is common to project activity and other wind turbines that are not under this project activity, the apportioning of net electricity would be done based on electricity generated from individual wind turbines by MSEDCL. A individual JMR for each WTG will be generated by MSEDCL containing export, import and net export to grid..

Metering accuracy: The calibration of the meters is carried out every once a year. The portable standard meter is owned by the MSEDCL at its own cost and tested and certified from an accepted laboratory standard meter in accordance with electricity board standards.

As per requirement for monitoring plan of validated VCS PD. PP has provided calibration certificates as can be seen from the table below:

S.No.	WEG Location No.	Feeder Name	Meter Number	Dates for which the test reports are available
1.	J-104	Jamde 12	04725806	28th March 2006, 8th October 2007, 27th May 2008, 8th July 2009
2.	J-106, J-108 & J-109	Jamde 6 & Jamde 3	4725778 4725795 4862465	28th March 2006, 8th October 2007, 27th May 2008, 8th July 2009
3.	J-107	Jamde 6 , Jamde 10 & Jamde 3	4725778 4725795 4862465 4862462	28th March 2006, 8th October 2007, 27th May 2008, 8th July 2009

The meters are deemed to be working satisfactorily if the errors are within specifications i.e. + 0.2. It was noticed that the annual calibration for the WTGs were not available as per validated monitoring plan. However, the project proponent has applied a correction factor in line with the guideline from the EB (EB 52, Annex 60) as higher of the errors between calibration report and maximum applicable to the accuracy class of the meter. The correction period has been reviewed by PJRCDM as per below table and was deemed to be correct and conservative in line with the guideline from EB.

As per requirement of from the EB (EB 52, Annex 60) PP has applied correction factor in periods mentioned in table below:

S.No.	WEG Location No.	Period for which correction applied as per EB 52, Annex 60
1	J-104	April 2007 to October 2007 and June 2009
2	J-106	April 2007 to April 2008, June 2009
3	J-107	April 2007 to April 2008, June 2009
4	J-108	April 2007 to April 2008, June 2009
5	J-109	April 2007 to April 2008, June 2009

Value of grid emission factor: PJRCDM was able to confirm that this parameter was fixed ex-ante during the validation of the project (Validation Report Version 01 dated 15th November 2009 and VCS validated PD Version 02 dated 31st August 2009) and the same was used for ER calculations for the current monitoring period. Even during validation, the parameter was derived from officially published latest database1(version 04) from Central Electricity Authority of India, a subsidiary of Ministry of Power, Government of India, which is the authentic source of such information.

The emission factor for the Southern grid to which the project activity exports power to is determined as 0.9075 tCO_2/MWh.

3.5 Quality of Evidence to Determine Emission Reductions

The source of net energy generation, as reported in the validated PD, is the JMR sheets, and the same were used by the client to calculate the EGy. PJRCDM was able to check and verify the values. The annual value of the energy exported was the summation of these monthly readings. The JMR sheets are deemed to be the most appropriate source of data for net energy exported, as the values denoted were jointly measured by the representatives of the PP and a Government representative (MSEDCL/EB official), duly signed and acknowledged by both parties.

The emission factor for the NEWNE grid to which the project activity exports power to is determined as 0.9075 tCO_2/MWh, a value fixed ex-ante during validation of the project activity and sourced from the official source for grid emission factors in India.

These practices meet the requirements of the applied methodology and approved monitoring plan as validated in the VCS PD.

PJRCDM was able to verify that the calculations are based on the authentic data from the joint meter reading sheets issued by the state electricity boards of respective states. The excel sheet used to calculate the monthly emission reduction figure were all tracked, checked and found to be consistent. Some errors were found in data transfer which were communicated to the project developer and the excel sheet was corrected accordingly.

[1] http://www.cea.nic.in/planning/c%20and%20e/Government%20of%20India%20website.htm

3.6 Management and Operational System

The clients have established and implemented procedures to monitor the project activity and it's operation as per the validated PD. These procedures cover management responsibilities, data monitoring and reviewing procedures and have provided with reports.

All monthly records are archived in electronic copy and paper format.

4 VERIFICATION CONCLUSION AND CERTIFICATION STATEMENT

Perry Johnson Registrars CDM Inc. (PJRCDM) has carried out verification of the emission reductions achieved by the project "6.25 MW Wind Power Generation project of Salora International Limited" against the guidelines of VCS 2007.1. The project activity is generation of electricity by five (5) Wind Turbine Generators (WTGs) and installed in Petle villages, of Dhule district of Maharashtra, India.

Verification was sought for the emission reductions achieved by the project within the period 31st July 2006 to 31st July 2009. The project has applied the version 13 of the small scale CDM methodology AMS-I.D "Grid connected renewable electricity generation" and the emission reductions are as reported in the version 02 of the monitoring report, dated 9th November 2010.

PJRCDM's approach is risk-based, drawing on an understanding of the risks associated with reporting GHG emissions data and the controls in place to mitigate them. The assessment was based on review of supporting evidences and information provided, including other explanations where necessary to enable PJRCDM to provide ***reasonable assurance*** *that the reported amount of GHG emission reductions for the specified period is materially correct and fairly stated.*

Certification statement:

PJRCDM confirms that the project activity has been implemented as per the VCS validated PD and that the emission reductions presented in the monitoring report version 02 dated 9th November 2010, are correctly determined as per the VCS2007.1 standard and AMS-I.D methodology, version 14. Based on the above information, PJRCDM confirms the following:

Name of the project	*"6.25 MW Wind Power Generation project of Salora International Limited"*
VCS PD	*Version 02 dated 31st August 2009*
Methodology	*AMS-I.D Version 13*
Monitoring Report	*Version 02 dated 9th November 2010*
Reporting period	*31st July 2006 to 31st July 2009*

Verified emission in the above reporting period:

Project emissions	:	*0*	*tCO_2 equivalents*
Baseline emissions	:	*20348*	*tCO_2 equivalents*
Emission reductions	:	*20348*	*tCO_2 equivalents*

Total Year-Wise emission reductions:

Period	***Emission Reductions(tCO2e)***
31st July 2006- 31st December 2006	2282
1st January 2007 – 31st December 2007	3807
1st January 2008 – 31st December 2008	8125
1st January 2009 – 31st July 2009	6134
31st July 2006– 31st July 2009	***20348***

Project Manager

PJRCDM

Site Program Manager

PJRCDM

APPENDIX I: DOCUMENTS REVIEWED

/1/	Monitoring Report: *"6.25 MW Wind Power Generation project of Salora International Limited"* version 02, dated 9th November 2010 and the previous versions.
/2/	Final validated Project Design: *"6.25 MW grid connected wind energy project at Sangli and Dhule districts, Maharashtra"* Version 02 dated 31st August 2009.
/3/	VCS Validation Report – *"6.25 MW grid connected wind energy project at Sangli and Dhule districts, Maharashtra"* Version 01 *dated 15th November 2009*
/4/	Approved Small-scale Methodology – Indicative baseline and monitoring methodology AMS ID, version 13: "*Grid connected renewable electricity generation*"
/5/	CDM Executive Board: Validation and Verification Manual, version 01.1
/6/	Emission reduction excel worksheet, *'Verification Excel Sheet.xls'*
/7/	Calibration Certificates for WTGs Number J-104, J-106, J-107 , J-108 & J-109 dated 28th March 2006, 8th October 2007,27th May 2008, 8th July 2009.
/8/	Joint meter Reading for each WTGs Number J-104, J-106, J-107 , J-108 & J-109 form 31st July 2006 to 31st July 2009.
/9/	Invoice for each for each WTGs Number J-104, J-106, J-107 , J-108 & J-109 form 31st July 2006 to 31st July 2009.

APPENDIX II : RESOLUTION OF CARs AND CLs

Draft report clarification requests and corrective action requests by verification team	**Ref. To the section of the monitoring report**	**Summary of project owner response**	**Verification team conclusion**
CAR#1: PJRCDM has reviewed the generation records of WTG J-104, the Net generation has been taken form 1st July 2006 is prior to commissioning date of WTGs dated 31st July 2006. Please clarify.		PP response: Net generation for J-104 is only for the day 31/7/2006 as recorded in the JMR for the month. It is not from 1st July 2006.	PJRCDM has reviewed the JMR of WTG J-104 and found that generation data has been taken form 31st July 2006 which is found to be Ok. This CAR#1 is closed.

CAR#2 PJRCDM reviewed spreadsheet of "PJRCDM-Controller data" of the emission reduction sheet and found that for WTG J104, months of July 2006, August 2006, February 2007, March 2007, April 2007, June 2007, April 2008 and April 2009 controller data are lower than export unit. Please clarify		PP response: The controller data for all the months mentioned are more than the export unit for WTG-104 as recorded in the JMR and reproduced in the spreadsheet. PP response 2: It is to be noted that the date on which readings are taken do not necessarily coincide with the last day of the month. Secondly, in the daily generation report, a day is 24 hours from 12 midnight to the next 12 midnight. Whereas for the billing purpose a month is from the date and time of last reading to the next time monthly reading is taken. Hence, the difference when comparing the figures from Daily generation report and the JMR. In the JMRs, the controller readings for corresponding WTGs at the time of billing meter readings are also noted. The same may be referred for comparison.	PJRCDM has reviewed the daily generation data and compare with export data provided by PP. The difference between the controller and JMR data is due to difference in recording time. PJRCDM has found it OK. CAR#2 is closed.

CL#1 PJRCDM has reviewed the monitoring report and found that for WTG J-106 commissioning date is mentioned as 3rd August 2006 which is not matching with validated PD commissioning dated 1st August 2006. Please clarify		PP response: Corrected in Ver 02 of the monitoring report.	PJRCDM has reviewed the revised monitoring report and found OK. This CL#1 is closed.

CAR#3 PJRCDM reviewed spreadsheet of "PJRCDM-Controller data" of the emission reduction sheet and found that for WTG J106, months August 2006, March 2007, April 2008 and April 2009 controller data are lower than export unit. Please clarify		PP response: The controller data for all the months mentioned are more than the export unit for WTG-106 as recorded in the JMR and reproduced in the spreadsheet. PP response 2: It is to be noted that the date on which readings are taken do not necessarily coincide with the last day of the month. Secondly, in the daily generation report, a day is 24 hours from 12 midnight to the next 12 midnight. Whereas for the billing purpose a month is from the date and time of last reading to the next time monthly reading is taken. Hence, the difference when comparing the figures from Daily generation report and the JMR. In the JMRs, the controller readings for corresponding WTGs at the time of billing meter readings are also noted. The same may be referred for comparison.	PJRCDM has reviewed the daily generation data and compare with export data provided by PP. The difference between the controller and JMR data is due to difference in recording time. PJRCDM has found it OK. CAR#3 is closed.

CAR#4 PJRCDM reviewed spreadsheet of "PJRCDM-Controller data" of the emission reduction sheet and found that for WTG J107, months August 2006, August 2007, April 2008 and April 2009 controller data are lower than export unit. Please clarify		PP response: The controller data for all the months mentioned are more than the export unit for WTG-107 as recorded in the JMR and reproduced in the spreadsheet. PP response 2: It is to be noted that the date on which readings are taken do not necessarily coincide with the last day of the month. Secondly, in the daily generation report, a day is 24 hours from 12 midnight to the next 12 midnight. Whereas for the billing purpose a month is from the date and time of last reading to the next time monthly reading is taken. Hence, the difference when comparing the figures from Daily generation report and the JMR. In the JMRs, the controller readings for corresponding WTGs at the time of billing meter readings are also noted. The same may be referred for comparison.	PJRCDM has reviewed the daily generation data and compare with export data provided by PP. The difference between the controller and JMR data is due to difference in recording time. PJRCDM has found it OK. CAR#4 is closed.

CL#2 PJRCDM has reviewed the monitoring report and found that for WTG J-109 commissioning date is mentioned as 3rd August 2006 which is not matching with validated PD commissioning dated 1st August 2006. Please clarify		PP response: Corrected in Ver 02 of the monitoring report.	PJRCDM has reviewed the revised monitoring report and found OK. This CL#2 is closed.
CL#3 Please correct the WTG 109, export reading for the month of January 2009.		PP response: Corrected in Ver 02 of the spreadsheet and the monitoring report.	PJRCDM has reviewed the revised emission reduction sheet and found OK. This CL#3 is closed.

CAR#5 PJRCDM reviewed spreadsheet of "PJRCDM-Controller data" of the emission reduction sheet and found that for WTG J109, months September 2006, January 2007, April 2007, April 2008 and April 2009 controller data are lower than export unit. Please clarify		PP response: The controller data for all the months mentioned are more than the export unit for WTG-109 as recorded in the JMR and reproduced in the spreadsheet. PP response 2: It is to be noted that the date on which readings are taken do not necessarily coincide with the last day of the month. Secondly, in the daily generation report, a day is 24 hours from 12 midnight to the next 12 midnight. Whereas for the billing purpose a month is from the date and time of last reading to the next time monthly reading is taken. Hence, the difference when comparing the figures from Daily generation report and the JMR. In the JMRs, the controller readings for corresponding WTGs at the time of billing meter readings are also noted. The same may be referred for comparison.	PJRCDM has reviewed the daily generation data and compare with export data provided by PP. The difference between the controller and JMR data is due to difference in recording time. PJRCDM has found it OK. CAR#5 is closed.

CL#4 Please send us the fresh copy of daily generation for WTG 108 , since it is not opening .		PP response: Fresh copy submitted to DOE. PP response 2: It is to be noted that the date on which readings are taken do not necessarily coincide with the last day of the month. Secondly, in the daily generation report, a day is 24 hours from 12 midnight to the next 12 midnight. Whereas for the billing purpose a month is from the date and time of last reading to the next time monthly reading is taken. Hence, the difference when comparing the figures from Daily generation report and the JMR. In the JMRs, the controller readings for corresponding WTGs at the time of billing meter readings are also noted. The same may be referred for comparison.	PJRCDM has reviewed the daily generation data and compare with export data provided by PP. The difference between the controller and JMR data is due to difference in recording time. PJRCDM has found it OK. CL#3 is closed.
CL#5 Please provide the controller data for All WTGs for the months of January 2009.		PP response: Already available in the JMR submitted earlier. PP response 2: Submitted to DOE	PJRDM has reviewed the provided controller data of the month July 09, for J-104, J-106, J-107, J-109 is OK. This CL#4 is closed.

CAR #6 Please provide the invoice copies of all WTGs for the monitoring period of 31st July 2006 to 31st July 2009.		PP response: Submitted to DOE. PP response 2: Submitted to DOE	PJRCDM has reviwed the provided in-voice copies of Jul-2007 of WTG 108 & 109 invoice copy is OK. This CAR#6 is Closed.

CAR#7 PJRCDM has reviewed the provided calibration certificates and found as below: 1. For WTG J104, PP has provided the calibration certificates dated 28th March 2006, 8th October 2007, 27th May 2008 and 8th July 2009. Please provide the calibration form 28th March 2007 to 8th October 2007, 27th May 2009 to 8th July 2009. 2. For WTG J106, J108 &J109 ,PP has provided the calibration certificates dated 28th March 2006, 8th October 2007, 27th May 2008 and 8th July 2009. Please provide the calibration form 28th March 2007 to 8th October 2007, 27th May 2009 to 8th July 2009. 3. For WTG J107, PP has provided the calibration certificates dated 28th March 2006, 8th October 2007, 27th May 2008 and 8th July 2009. Please provide the calibration form 28th March 2007 to 8th October 2007, 27th May 2009 to 8th July 2009.		PP response: 1. Calibration certificate for the period mentioned are not available. Therefore as per the guidance available in Paragraph 4.(a) of Annex 60, EB52 Meeting Report, since the results of the delayed calibration do not show any errors in the measuring equipment greater than the maximum permissible error, maximum permissible error of the instrument has been applied to the measured values for arriving at a conservative net generation figure for the said period. 2. Calibration certificate for the period mentioned are not available. Therefore as per the guidance available in Paragraph 4.(a) of Annex 60, EB52 Meeting Report, since the results of the delayed calibration do not show any errors in the measuring equipment greater than the maximum permissible error, maximum permissible error of the instrument has been applied to the measured values for arriving at a conservative net generation figure for the said period. 3. Calibration certificate for the period mentioned are not available. Therefore as per the guidance available in Paragraph 4.(a) of Annex 60, EB52 Meeting Report, since the results of the delayed calibration do not show any errors in the measuring equipment greater than the maximum permissible error, maximum permissible error of	PJRCDM has reviewed revised emission reduction sheet and found that for the period for which calibration certificates was not available as VCS PD monitoring plan. PP has applied correction factor as per EB 50 , Annex-60 para 4(a) for that period. PJRDM has reviewed the emission reduction sheet and found to be OK. This CAR#7 is closed.

CL#6 PP is requested to include a discussion in the monitoring report regarding the difference between the estimated yearly emission reduction figure (as stated in the validated VCS PD) and the actual emission reductions resulting from the project activity (as stated in the monitoring report). Reasons for the same needs to be clearly stated in the monitoring report.		PP response: Discussion included in the monitoring report regarding the difference between the estimated annual emission reduction figure as stated in the validated VCS PD and the actual emission reductions as stated in the monitoring report.	PJRCDM has reviewed the revised monitoring report version 02 and found that PP has justified the appropriate reason for decrease in emission reduction compare to emission reduction in VCS validated PD. It if found to be OK. This CL#5 is closed.

APPENDIX III: LIST OF PARAMETERS

List of parameters covered during the verification period under consideration (31st July 2006 to 31st July 2009) and details regarding the monitoring and reporting practices.

S.No.	Monitoring and reporting practice/Parameter	Parameter 1
1.	Monitoring and reporting frequency as verified during the site visit.	*The monthly meter reading is taken jointly by the Maharashtra State Electricity Distribution Company Limited and PP. At the conclusion of each meter reading an appointed representative of the Maharashtra State Electricity Distribution Company Limited (MSEDCL) and the PP sign a document indicating the number of Kilowatt-hours indicated by the meter.*
2.	Monitoring equipment verified during the site visit.	*Energy meter* *Accuracy of main and check meter: 0.2 class*
3	Calibration frequency and other details verified during the site visit.	*Once in a year.* *The calibration activity is in the control of the MSEDCL. The calibration was not carried out during this certain period. However, the test reports were submitted by the PP for the entire period and applying the principles of conservativeness, the PP has adjusted the total generation from the WTG against the maximum permissible error of the meter as per EB guidence.*
4.	The above parameters are in line with the MP agreed in the validated PDD.	*Yes. See discussion above.*
5	The above parameters are in line with the monitoring methodology applied for the proposed project.	*Yes. See discussion above.*
6	Calibration entity and if the same is in line with the monitoring plan as agreed in the validated PDD.	*Meter testing has been carried out by the state electricity Boards i.e. Maharashtra State Electricity Distribution Company Limited (MSEDCL).* *The calibration entity is in line with the monitoring plan as mentioned in the VCS PD.*