

VERIFICATION REPORT



Document Prepared By Earthood Services Private Limited

Project Title	Bundled Wind Power Project in Tamil Nadu managed by Enercon India Limited - II
Version	1.1
Report ID	VCS.VER.15.27

Report Title	Verification report for 'Bundled Wind Power Project in Tamil Nadu managed by Enercon India Limited – II'
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Prepared By	Earthood Services Pvt. Ltd.
Contact	Regd. Office: 224, Tower A, Spaze I-Tech Park, Sector 49, Sohna Road, Gurgaon-122018, INDIA Tel: +91 124 4204599 Fax: +91 124 4204599 Website: www.earthood.in Email: info@earthood.in
Approved By	Technical Reviewer: Abhishek Mahawar Technical Expert (TA 01.2): Abhishek Mahawar
Work Carried Out By	Team Leader: Shreya Garg Technical Expert (TA 01.2): Shreya Garg

Summary:

Earthood has performed the verification of the VCS project “Bundled Wind Power Project in Tamil Nadu managed by Enercon India Limited – II” VCS Ref. Number 404.

The scope of verification includes confirming the implementation of the monitoring plan of the registered PD (version 02) and the application of the monitoring methodology Consolidate baseline methodology for grid-connected electricity generation from renewable sources, ACM0002, Version 10. The verification is consisted of three phases: i) desk review of the project; ii) follow-up onsite visit and interviews with project stakeholders; iii) resolution of outstanding issues and the issuance of the final verification report and opinion. The overall verification, from Contract Review to Verification Report & Opinion, was conducted following Earthood internal quality procedures.

During the verification process 03 CARs, 00 CL and 00 FARs were raised.

Earthood confirms that the monitoring system is in place and the emission reductions are calculated without material misstatements. The emission reductions from the VCS project activity 404 “Bundled Wind Power Project in Tamil Nadu managed by Enercon India Limited – II” in India during the period 16/08/2014 – 15/05/2015 (including both days) amount to 10,195 tonnes of CO₂e.

Vintage wise representation of the emission reductions is as follows:

Period	Baseline Emissions (tCO ₂ e)	Project Emissions (tCO ₂ e)	Leakages (tCO ₂ e)	Emission Reductions (tCO ₂ e)
16/08/2014 to 15/12/2014	7,543	00	00	7,543
16/12/2014 to 15/05/2015	2,652	00	00	2,652
Total	10,195	00	00	10,195

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1. INTRODUCTION

1.1 Objective

Wind World (India) Limited has contracted Earthood Services Private Limited (Earthood) to conduct the verification and certification of emission reductions reported for the VCS project activity VCS Ref number 404 “Bundled Wind Power Project in Tamil Nadu managed by Enercon India Limited – II” in India for the period 16/08/2014 – 15/05/2015. This report contains the findings of the verification process and a certification statement for the certified emission reductions.

The verification is the periodic independent review and *ex post* determination by Earthood of the monitored reductions in GHG emissions that have occurred as a result of the registered VCS project activity during a defined monitoring period. Certification is the written assurance by Earthood that, during a specific period in time, a project activity achieved the emission reductions as verified.

The objective of this verification was to verify and certify emission reductions reported for “Bundled Wind Power Project in Tamil Nadu managed by Enercon India Limited – II” for the monitoring period 16/08/2014 – 15/05/2015.

1.2 Scope and Criteria

The scope of the verification is to establish and verify that;

- a) The project activity has been implemented and operated as per the registered PD or any approved revised PD, and that all physical features (technology, project equipment, and monitoring and metering equipment) of the project are in place;
- b) The monitoring report and other supporting documents provided are complete in accordance with the latest applicable version of the completeness checklist for requests for issuance of VERs, verifiable, and in accordance with applicable VCS requirements;
- c) The actual monitoring systems and procedures comply with the monitoring systems and procedures described in the monitoring plan, any revised approved monitoring plan, the approved methodology including applicable tool(s) and/or, where applicable, the approved standardized baseline;
- d) The data recorded and stored as per the monitoring methodology including applicable tool(s) and, where applicable, the standardized baseline.

1.3 Level of Assurance

A draft verification report that is prepared by assessment team will be reviewed by an independent technical review team (one or more members) to confirm if the internal procedures established and implemented by Earthood were duly complied with and such opinion/conclusion is reached in an objective manner that complies with the applicable VCS and CDM (Clean Development Mechanism) requirements as appropriate. The technical review team is collectively required to possess the technical expertise of all the technical area/sectoral scope the project activity relates to. All team members of technical review team are independent of the validation team. The report approved by Quality Manager is endorsed by Managing Director, who is overall responsible to ensure quality, before final release. The further details of applicable procedures and responsibilities about Earthood Quality Management System (QMS) are available on its website (www.earthood.in).

1.4 Summary Description of the Project

The project activity is a large scale bundled wind power project of the capacity 24.8 MW consisting 31 WTG of 0.8 MW each and Enercon E-48 make installed in the state of Tamil Nadu, India. At the time of VCS registration of the projects, the total capacity of the project was 36 MW. However one of the bundles belonging to the investor Bannari Amman Spinning Mills got registered under CDM on 17/06/2011, thereafter the monitoring of that subproject was not conducted under this project.

The project aims to displace electricity produced by fossil fuel power plants harnessing wind energy. Therefore the project reduces greenhouse gas emissions and thereby contributes to sustainable development. The verification team confirms that the total emission reductions achieved under this (seventh) monitoring period (16/08/2014 – 15/05/2015) are 10,195 tCO₂e.

2. VERIFICATION PROCESS

2.1 Method and Criteria

The overall verification, from Contract Review to Verification Report & Opinion, was conducted using Earthood internal procedures.

The Project was verified against the latest requirements and guidance set out in VCS and CDM standards.

2.2 Document Review

The verification is performed primarily as a document review of the documents submitted at various stages of assessments. The review is performed by assessment team using dedicated protocols. The assessment team cross checks the information provided in the documents (PDD, MR, validation report) and information from sources other than those used, if available, and also conducts independent background investigations. Earthood conducted a desk review as under;

- a) A review of the data and information presented to verify their completeness.
- b) A review of the monitoring plan, the monitoring methodology including applicable tool(s) and, where applicable, the applied standardized baseline, paying particular attention to the frequency of measurements, the quality of metering equipment including calibration requirements, and the quality assurance and quality control procedures.
- c) An evaluation of data management and the quality assurance and quality control system in the context of their influence on the generation and reporting of emission reductions.

2.3 Interviews

On 04/06/2015, Earthood performed an on-site visit and interviews with project stakeholders to confirm selected information and to resolve issues identified in the document review. During the on-site visit, representatives of Wind World India Limited were interviewed.

2.4 Site Inspections

A site visit was undertaken by Earthood on 04/06/2015 to carry out following;

- a. An assessment of the implementation and operation of the registered project activity as per the registered PD or any approved revised PD.

- b. A review of information flows for generating, aggregating and reporting the monitoring parameters.
- c. Interviews with relevant personnel to determine whether the operational and data collection procedures are implemented in accordance with the monitoring plan in the PD.
- d. A cross check between information provided in the monitoring report and data from other sources such as plant logbooks, inventories, purchase records or similar data sources.
- e. A check of the monitoring equipment including calibration performance and observations of monitoring practices against the requirements of the PD, the applied methodology including applicable tool(s), and, where applicable, the applied standardized baseline.
- f. A review of calculations and assumptions made in determining the GHG data and emission reductions.
- g. An identification of quality control and quality assurance procedures in place to prevent or identify and correct any errors or omissions in the reported monitoring parameters.

2.5 Resolution of Findings

The objective of this step is to identify, discuss and conclude on the issues related to the monitoring, implementation and operations of the registered project activity that could impair the capacity of the registered project activity to achieve emission reductions or influence the monitoring and reporting of emission reductions. This is done based on the desk review and onsite assessment. The verification team prepares and/or updates a verification protocol (internal document) that records the conformities and nonconformities, which may be of following types;

CAR (Corrective Action Request) is raised if one of the following occurs:

- a) Non-compliance with the monitoring plan, the methodology or the standardized baseline are found in monitoring and reporting and has not been sufficiently documented by the project participants, or if the evidence provided to prove conformity is insufficient
- b) Modifications to the implementation, operation and monitoring of the registered project activity has not been sufficiently documented by the project participants
- c) Mistakes have been made in applying assumptions, data or calculations of emission reductions that will impact the quantity of emission reductions
- d) Change to the key sustainable development indicators
- e) Issues identified in a FAR during validation to be verified during verification or previous verification(s) have not been resolved by the project participants.

Clarification request (CL) is raised if information is insufficient or not clear enough to determine whether the applicable GS requirements have been met. All CARs and CLs raised by the Earthhood during verification shall be resolved prior to submitting a request for issuance.

FAR (Forward Action Request) is raised during verification if the monitoring and reporting require attention and/or adjustment for the next verification period.

All the findings that are raised and communicated to project participant during the verification are included under Appendix 2. The section also includes the response, if provided, by the project participants and an assessment by the verification team if it was closed out or otherwise.

2.5.1 Forward Action Requests

Not applicable

2.6 Eligibility for Validation Activities

Not applicable

3. VALIDATION FINDINGS

Not applicable

3.1 Participation under Other GHG Programs

Not applicable

3.2 Methodology Deviations

Not applicable

3.3 Project Description Deviations

Not applicable

3.4 Grouped Project

Not applicable

4. VERIFICATION FINDINGS

4.1 Project Implementation Status

The project activity consist of 31 WTGs located in Pushpathur site in Dindigull district and Chinnakkampalayam site in Erode district in the state of Tamil Nadu; all Enercon make E-48 of capacity 0.8 MW each. The machines were commissioned between a period of 26/02/2007 and 11/05/2007; which was verified from the commissioning certificates/9/. The machines belong to four investors, details of which have been provided below:

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		D49	21-03-2007		
3		D52	26-03-2007		
4		D54	26-03-2007		
5		D79	25-04-2007		
6		D80	25-04-2007		

Sr. No.	Name of Customers	HTSC No.	Commissioning Date	No. of M/C	Capacity (MW)
7		D81	25-04-2007		
8		D82	09-04-2007		
9		D83	09-05-2007		
10		D84	11-05-2007		
11	Premier Fine Yarns Pvt Ltd	D26	26-02-2007	10	8
12		D27	26-02-2007		
13		D28	26-02-2007		
14		D29	26-02-2007		
15		D30	27-02-2007		
16		D30	27-02-2007		
17		D32	07-03-2007		
18		D32	07-03-2007		
19		D33	07-03-2007		
20		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		D43	21-03-2007		
24		D43	21-03-2007		
25		D44	21-03-2007		
26		D45	21-03-2007		
27		D68	29-03-2007		
28		D73	30-03-2007		
29		D74	30-03-2007		
30		D75	30-03-2007		
31		D78	16-04-2007		
	Total			31	24.8

The machines are operated and maintained by WWIL which is ISO 9001:2008 certified; and the monthly readings are recorded by state utility officers in the presence of the a PPs representative/16/.

The electricity produced by the project activity is supplied through grid and this information was verified from the wheeling agreement signed between government owned grid company and PP /8/. The electricity exported and imported is monitored by energy meters installed at HTSC yard which in some cases connects a single WTG or connected to a group.

The start date of the current monitoring period is 16/08/2014 and indicates no gap in the monitoring as the previous monitoring (Sixth) period ended on 15/08/2014 /6/. The project information provided in the monitoring report was found consistent with the previous documents (Registered PD/1/, Validation Report/2/, monitoring report/6/ and verification reports/7/) and with the supportive provided. The information about one of the investors (Bannari Amman Spinning Mills) machines (14 WTGs) not being included in the monitoring of the concerned project could be verified from the previous monitoring and verification reports as referred above. Hence it was acceptable by the verification team to not include the emission reduction from the same investor as those WTGs are registered under CDM (UNFCCC Ref. No. 4877).

Therefore the assessment team concluded that the project implementation is in accordance with the description provided in the registered PD.

4.2 Accuracy of GHG Emission Reduction and Removal Calculations

The project monitoring has been carried in accordance with the registered PD considering the deviations included during the second and third monitoring period. The monitoring plan lay out after deviation is being followed at the site. The assessment team has verified the information flow (from data generation, aggregation, to recording, calculation and reporting for these parameters including the values) in the MR/4/.

The emission reductions are purely based on the net electricity generated and exported from the machines.

4.2.1 Parameters to be monitored:

The below tables describe how each parameter, which is to be measured according to the monitoring plan, has been verified to confirm that the actual monitoring complies with the monitoring plan, monitoring data has thoroughly assessed and that the calibration requirements are met.

a) EG, Export; MWh

Criteria/Requirements	Assessment/Observation
Description	Electricity exported to the grid
Measured /Calculated /Default	Measured
Monitoring equipment	Tri-vector energy meters which are state utility owned, installed at every HTSC (High Tension Service Connection) yard. Details are included in the forthcoming section of this report.
Measuring /Reading /Recording frequency	Continuous monitoring and monthly recording
Value(s) of monitored parameter	11156.166 MWh
Source of data	Reading are recorded every month by personnel from state utility in the presence of a

	representative of the PP and reproduced in the form of JMR (Joint Meter Reading). JMR form the basis and is used for the purpose of all money transactions for power exported to grid.
Calculation method (if applicable)	It is a monitored parameter and no further calculations are conducted.
Purpose of data	Baseline emissions
QA/QC Procedures	The meters are calibrated by designated entity. Details have been provided below.

b) EG, Import; MWh

Criteria/Requirements	Assessment/Observation
Description	Electricity imported to the grid
Measured /Calculated /Default	Measured
Monitoring equipment	Tri-vector energy meters which are state utility owned, installed at every HTSC yard. Details are included in the forthcoming section.
Measuring /Reading /Recording frequency	Continuous monitoring and monthly recording
Value(s) of monitored parameter	154.352 MWh
Source of data	Reading are recorded every month by personnel from state utility in the presence of a representative of the PP and reproduced in the form of JMR. JMR form the basis for all monetary transaction purposes.
Calculation method (if applicable)	It is a monitored parameter.
Purpose of data	Baseline emissions
QA/QC Procedures	The meters are calibrated by authorised body. Details have been provided below in section 4.2.3.

c) EG_y, net; MWh

Criteria/Requirements	Assessment/Observation
Description	Net electricity supplied to the grid by the Project
Measured /Calculated /Default	Calculated

Monitoring equipment	It is a calculated parameter (it is the difference of the electricity exported and electricity imported)
Measuring /Reading /Recording frequency	Monthly calculation
Value(s) of monitored parameter	11001.814 MWh
Source of data	Reading for electricity exported and imported are monitored and recorded. These values are used to calculate the net electricity exported and results are reproduced in JMR. JMR is an official document and is used for the purpose of all monetary transactions.
Calculation method (if applicable)	$EG_y, net = EG_{export} - EG_{import}$
Purpose of data	Baseline emissions
QA/QC Procedures	The meters are calibrated by authorised entities. Details have been provided below in section 4.2.3.

4.2.2 Parameters fixed ex ante:

- EF_{OM,y}**; tCO₂e/MWh: it is the Operating Margin Emission Factor of Southern Regional Electricity Grid fixed at the time of project registration. The mentioned value of 0.998157 tCO₂e/MWh is consistent with the VCS PD/1/.
- EF_{BM,y}**; tCO₂e/MWh: it is the Build Margin Emission Factor of Southern Regional Electricity Grid fixed at the time of project registration. The mentioned value of 0.7133 tCO₂e/MWh is consistent with the VCS PD/1/.
- EF_{CM,y}**; tCO₂e/MWh: it is the Combined Margin Emission Factor of Southern Regional Electricity Grid fixed at the time of project registration. The mentioned value of 0.92694 tCO₂e/MWh is consistent with the VCS PD/1/.

4.2.3 Calibration

During the site visit, the verification team visited HTSC yards where the energy meters have been installed. one meter detail at HTSC yard D44 was found inconsistent which was accounted to meter change; details of the both the meters have been provided. There is no change in the accuracy class of the meters. The details of the monitoring equipment have been provided below:

S. No.	Name of Customers	HTSC No.	Type	Meter No.	Past Calibration date	Recent Calibration date	Accuracy Class
1	Premier Spg & Wvg Mills Pvt Ltd	D47	SECURE	TN905549	28-01-2012	13-11-2013	0.2s
2	Premier Spg & Wvg Mills Pvt Ltd	D49	ELSTER	04890022	28-01-2012	12-11-2013	0.5s
3	Premier Spg & Wvg Mills Pvt Ltd	D52	SECURE	TN902732	09-12-2011	13-11-2013	0.2s
4	Premier Spg & Wvg Mills Pvt Ltd	D54	ELSTER	04865534	28-01-2012	13-11-2013	0.5s
5	Premier Spg & Wvg Mills Pvt Ltd	D79	ELSTER	04865507	28-01-2012	13-11-2013	0.5s
6	Premier Spg & Wvg Mills Pvt Ltd	D80	SECURE	TNB02400	28-01-2012	13-11-2013	0.5s
7	Premier Spg & Wvg Mills Pvt Ltd	D81	ELSTER	04865535	28-01-2012	13-11-2013	0.5s
8	Premier Spg & Wvg Mills Pvt Ltd	D82	SECURE	TN905507	27-01-2012	12-11-2013	0.2s
9	Premier Spg & Wvg Mills Pvt Ltd	D83	ELSTER	04865503	27-01-2012	12-11-2013	0.5s
10	Premier Spg & Wvg Mills Pvt Ltd	D84	SECURE	TN903448	27-01-2012	12-11-2013	0.2s
11	Premier Fine Yarns Pvt Ltd	D26	SECURE	TN902742	22-11-2011	12-11-2013	0.2s
12	Premier Fine Yarns Pvt Ltd	D27	SECURE	TN905284	27-01-2012	12-11-2013	0.2s
13	Premier Fine Yarns Pvt Ltd	D28	L&T	10287910	27-01-2012	12-11-2013	0.5s
14	Premier Fine Yarns Pvt Ltd	D29	WALLAB Y	HT5100083	27-01-2012	12-11-2013	0.5s
15	Premier Fine Yarns Pvt Ltd	D30	WALLAB Y	HT5110137	27-01-2012	12-11-2013	0.5s
16		D30	WALLAB Y	HT5110137	27-01-2012	12-11-2013	0.5s
17	Premier Fine Yarns Pvt Ltd	D32	SECURE	TN903995	27-01-2012	12-11-2013	0.2s
18		D32	SECURE	TN903995	27-01-2012	12-11-2013	0.2s

S. No.	Name of Customers	HTSC No.	Type	Meter No.	Past Calibration date	Recent Calibration date	Accuracy Class
19	Premier Fine Yarns Pvt Ltd	D33	ELSTER	04863762	27-01-2012	12-11-2013	0.5s
20	Premier Fine Yarns Pvt Ltd	D34	SECURE	TN904584	27-01-2012	12-11-2013	0.2s
21	Coimbatore Twisted (Premier Mills)	D37	SECURE	TN904565	27-01-2012	12-11-2013	0.2s
22	Coimbatore Polytex (Premier Mills)	D38	ELSTER	04865383	27-01-2012	13-11-2013	0.5s
23	Coimbatore Polytex (Premier Mills)	D43	ELSTER	04865533	27-01-2012	12-11-2013	0.5s
24		D43	ELSTER	04865533	27-01-2012	12-11-2013	0.5s
25	Coimbatore Polytex (Premier Mills)	D44	SECURE	TN903449	27-01-2012	13-11-2013	0.2s
			SECURE	14197108	Meter replaced on 07-03-2015		0.2s
26	Coimbatore Polytex (Premier Mills)	D45	SECURE	TN903117	27-01-2012	13-11-2013	0.2s
27	Coimbatore Polytex (Premier Mills)	D68	SECURE	TN905537	28-01-2012	13-11-2013	0.2s
28	Coimbatore Polytex (Premier Mills)	D73	ELSTER	04959599	28-01-2012	13-11-2013	0.5s
29	Coimbatore Polytex (Premier Mills)	D74	ELSTER	04865530	27-01-2012	13-11-2013	0.5s
30	Coimbatore Polytex (Premier Mills)	D75	SECURE	TN901783	18-10-2011	13-11-2013	0.2s
31	Coimbatore Polytex (Premier Mills)	D78	WALLAB Y	208320441	28-01-2012	13-11-2013	0.5s

The calibration of all meter have been conducted in November 2013, valid for one year, doesn't cover the current monitoring period, a CAR was raised in this context as the PPA too mentions the calibration frequency as annual. However, PP responded that calibration is under the purview of State Electricity Board and the calibration frequency as per the national regulations on installation and operation of meters by Central Electricity Authority (CEA) of India is once in five years. PP chooses to follow the national guideline since there is no calibration frequency defined by the applied methodology. In view of the technical expert also the CEA metering regulations are applicable for the project activity. Also it is a reasonable approach since maintaining energy meters is in the interest of the power seller and buyer and the payments (or offsets) have been based on the installed energy meters readings; a calibration frequency of once in five years is acceptable to the assessment team as the calibration is not in the hands of the PP.

4.2.4 GHG Calculations

The emission reduction as per the applied methodology equals the baseline emissions (project emissions and leakage emissions for such project activities is considered zero). The formula provided for the calculation of baseline emissions is:

$$BE_y = EG_y * EF_y$$

Where,

BE_y is baseline emissions in year y, tCO₂e

EG_y is the net electricity supplied

EF_y is the emission factor of the grid

Therefore the Baseline Emissions = 11001.814 (MWh) * 0.92694 (tCO₂e/MWh)
= **10,195 tCO₂e** (rounded down)

4.3 Quality of Evidence to Determine GHG Emission Reductions and Removals

As per the monitoring plan the complete data set for the current monitoring period were verified. The emission reduction calculation for the project activity is estimated based on the electricity supplied by the WTGs. Monthly generation sheets were reviewed; the generation sheets for every HTSC yard issued by the state utilities readings from which have been used for the calculations were reviewed by the assessment team. Since 100% data was verified, the team can ascertain that the values taken for emission reduction calculation are free from material errors.

4.4 Non-Permanence Risk Analysis

The data variable used for the calculation of emission reductions was overall net electricity supplied by the project activity. The parameter has been monitored through electronic meters therefore the likelihood of error is purely systematic in nature. The energy meters are state utility owned and undergo a calibration check. The monthly sheets for the energy generated issued by the state utility have been submitted to the assessment team and 100% of the data has been verified.

Therefore assessment team is of the opinion that the emission reductions are free from any omissions, misstatement and material errors.

5. VERIFICATION CONCLUSION

Earthood Services Private Limited (Earthood), contracted by Wind World (India) Limited, has performed the independent verification of the emission reductions for the VCS project activity ref number 404 “Bundled Wind Power Project in Tamil Nadu managed by Enercon India Limited – II” in India for the monitoring period 16/08/2014 – 15/05/2015 as reported in the Monitoring Report Version 02 dated 11/06/2015. The Wind World (India) Limited is responsible for the collection of data in accordance with the monitoring plan and the reporting of GHG emissions reductions from the project activity.

It is our responsibility to express an independent verification statement on the reported GHG emission reductions from the project activity. Earthood commenced the verification on the basis of the baseline and monitoring methodology ACM0002, V 10, the monitoring plan contained in the PD Version 2 and VCS guidelines version 3.5, Monitoring Report Version 02 dated 11/06/2015 as per the process described under Section 2 of this report.

Earthood's verification approach is based on the understanding of the risks associated with reporting of GHG emission data and the controls in place to mitigate these. Earthood planned and performed the verification by obtaining evidence and other information and explanations that Earthood considered necessary to give reasonable assurance that reported GHG emission reductions are fairly stated.

In our opinion the GHG emissions reductions reported for the project activity for the period 16/08/2014 – 15/05/2015 are fairly stated in the Monitoring Report Version 02 dated 11/06/2015. The GHG emission reductions were calculated correctly on the basis of the approved baseline and monitoring methodology ACM0002, V 10, and the VCS standard.

Verification period: 16/08/2014 – 15/05/2015. Verified GHG emission reductions and removals in the above verification period:

Year	Baseline emissions or removals (tCO ₂ e)	Project emissions or removals (tCO ₂ e)	Leakage emissions (tCO ₂ e)	Net GHG emission reductions or removals (tCO ₂ e)
2014 (16/08/2014 to 15/12/2014)	7543	0	0	7543
2015 (16/12/2014 to 15/05/2015)	2652	0	0	2652
Total	10,195	0	0	10,195

Approved by



Dr. Kaviraj Singh
Managing Director
Earthood Services Private Limited

Date: 26/06/2015
Place: Gurgaon, Haryana

APPENDIX 1: REFERENCES

S. No.	Title of Document
1.	Registered VCS-PD, version 2 dated 08/09/2009
2.	VCS Validation report , Report No. 53153808/02-08/480 dated 10/11/2009
3.	Monitoring Report version 01 dated 16/05/2015
4.	Monitoring Report version 02 dated 11/06/2015
5.	ER spreadsheet (corresponding to the final monitoring report)
6.	Monitoring reports of 1 st , 2 nd , 3 rd , 4 th , 5 th and 6 th monitoring period
7.	Verification reports of 1 st , 2 nd , 3 rd , 4 th , 5 th and 6 th monitoring period
8.	Energy Wheeling agreement by the investors with the Tamil Nadu Generation and Distribution Corporation Ltd
9.	Commissioning certificates for all the WTGs of the project activity
10.	HT bills of the manufacturing plants of the customers during the current monitoring period.
11.	Monthly statements of electricity generated, issued by TNEB, for the current monitoring period.
12.	Calibration certificates for the concerned monitoring period
13.	Approved Baseline & Monitoring Methodology: ACM0002, version 10
14.	VCS Standard Version 3.4
15.	UNFCCC website and VCS website
16.	On site observations and interviews with plant personnel and stakeholders
17.	Guideline for Calibration and periodical testing of meters by Central Electricity Authority (CEA) of India

APPENDIX 2: FINDINGS

Type	Date	11/06/2015
CAR	Reference	Verification protocol
Description of the Non Conformance		
- The cover page of the MR does not contain the project id for the concerned project. - Kindly provide the invoices to cross check the values mentioned. - PP is requested to mention the dates consistently in all the project documents (emission reduction calculation sheet, section 1.6 of the MR)		
1st Response from PP	Date	11/06/2015
- The cover page of the MR has the project id of the project activity. - Since the project is a captive project, there is no invoice available. - PP has revised the date of monitoring period in the ER sheet & MR.		
1st Assessment by Audit Team	Status	Closed
	Date	16/06/2015
- The cover page of the MR is now complete. - It was confirmed from the wheeling agreements provided earlier that the project is a captive consumption. - The dates in the revised documentation are now consistent		

Type	Date	11/06/2015
CAR	Reference	Verification protocol
Description of the Non Conformance		
PP is required to provide clear information if the electricity produced by the project activity is sold to the grid or wheeled for captive consumption.		
1st Response from PP	Date	11/06/2015
PP hereby confirms that the electricity generated from the project activity is used for captive consumption. The same has been already explained in the VCS second verification.		
1st Assessment by Audit Team	Status	Closed
	Date	16/06/2015
It can be drawn from the previous documents and confirmation from the PP that power is being evacuated through grid for captive consumption. The finding was therefore closed.		

Type	Date	11/06/2015
CAR	Reference	Verification protocol
Description of the Non Conformance		
The following discrepancies were found in project documentation: - Meter serial number for HTSC no D44 installed at the site did not conform to the number mentioned in the monitoring report. - The calibration frequency in the monitoring report has been mentioned as once in five years however in the previous monitoring reports the monitoring frequency has been mentioned annually at all the places.		
1st Response from PP	Date	11/06/2015
- The meter change details has been changed in the revised MR. - As per the registered PD, the accuracy of the monitoring parameter is ensured by adhering to the calibration frequency and testing of metering equipment once each year and the calibration is done by the officials of the state utility. Hence calibration and testing of meters cannot be conducted solely by the PP, therefore meter calibration is not solely in control of PP. The PP can request the state utilities to conduct calibration of meters at the scheduled time but cannot by any		

means force the state utilities to conduct calibration. As per national regulations of installation and operation of meters in accordance with section 18 subsection 1 (b), calibration and periodical testing of meters by Central Electricity authority of India; the energy meters shall be calibrated and tested once in five years. Therefore PP wish to change the frequency of calibration from once in year to once in five year.				
1st Assessment by Audit Team	Status	Closed	Date	16/06/2015
1) The meter details in the revised MR are consistent to the onsite observations. 2) PP chooses to follow the national guideline since there is no calibration frequency defined by the applied methodology. In view of the technical expert also the CEA metering regulations are applicable for the project activity. Also it is a reasonable approach since maintaining energy meters is in the interest of the power seller and buyer and the payments (or offsets) have been based on the installed energy meters readings; a calibration frequency of once in five years is acceptable to the assessment team as the calibration is not in the hands of the PP.				

APPENDIX 3: CV OF VERIFICATION TEAM

Competence Statement			
Name	Shreya Garg		
Country	India		
Education	M. Sc. (Climate Science and Policy)		
Experience	3+ Years Completed more than 15 CDM projects and 2 GS projects		
Field	Climate Change & Environment		
Approved Roles			
Team Leader	YES		
Validator	YES		
Verifier	YES		
Financial Expert	NO		
Technical Reviewer	YES		
TA Expert (1.2)	YES		
Reviewed by	Ashok Gautam	Date	14/11/2014
Approved by	Kaviraj Singh	Date	14/11/2014