



**Verified Carbon
Standard**

WIND POWER PROJECT AT ANTHIYUR, TAMIL NADU



Document Prepared By: 4K Earth Science Private Limited

Project Title	Wind Power Project at Anthiyur, Tamil Nadu
Version	03
Report ID	2149-VCS

Report Title	Wind Power Project at Anthiyur, Tamil Nadu
Client	Emergent Ventures India Pvt. Ltd.
Pages	40
Date of Issue	08/03/2022
Prepared By	4K Earth Science Private Limited
Contact	No.20, 'SNS Arcade', Basement Floor, Old Airport Main Road, Konena Agrahara, Bangalore-560017, Karnataka, India Email: doe@4kearthscience.com , 4kearthscience@gmail.com Website: http://www.4kearthscience.com/

Approved By	Chandrakala R Director
Work Carried Out By	Mr. Chetan Swaroop Sharma (Team Leader & Technical Expert 1.2) Mr. Ma Paa Puratchikkanal (Technical Reviewer 1.2)

Summary:

4K Earth Science Private Limited (4KES) has been contracted by “Emergent Ventures India Pvt. Ltd.” to undertake verification and certification for the greenhouse gas (GHG) emission reductions reported from ‘Wind Power Project at Anthiyur, Tamil Nadu’ for the monitoring period 01/11/2020 to 31/08/2021 in the initial monitoring report version 1.0, date 18/10/2021.

The project activity is a 14.85 MW wind farm consisting of 9 WTGs of NM82/1650kW capacity each. The generated electricity is fed into the Tamil Nadu Electricity Board (TNEB).

The project activity involves implementation of WTGs as a voluntary measure to strengthen the regional grid of India through exploitation of wind power generation potential available to India. The generated electricity is fed into the Tamil Nadu Electricity Board (TNEB).

The project activity generated renewable electricity without any GHG emissions, which displaced part of the electricity otherwise supplied by grid connected fossil fuel fired power plants. Thus, GHG emission reductions are achieved.

Date of commissioning of each Turbine is mentioned under section 1.1 of the Monitoring report /1.2/ which is verified from the TNEB commissioning certificates /12/.

The 14.85 MW wind farm is located near Anthiyur Village of Udumalpet and Pollachi Talukas of Coimbatore District in Tamil Nadu. Verification team has verified the physical address through internet /08/ and found consistent.

The project activity is operational since commissioning and during current monitoring period i.e. from 01/11/2020 to 31/08/2021, the project activity has supplied 23,677.59 MWh net electricity to the grid, there by resulted in emission reduction of 23,149 tCO₂e. The monitoring period subject to this monitoring report is inclusive of first and last day of period.

A risk based approach has been followed to perform the 5th periodic verification (of 2nd Crediting period) of the project activity. In the course of the verification, 01 Corrective Action Requests (CARs) and 00 Clarification (CL) were raised.

The management of the ‘Windage Power Company (P) LTD’ responsible for the preparation of the GHG emissions data and the reported GHG emissions reductions on the basis set out within the project final monitoring report Version 1.2 dated 07/03/2022. The calculation and determination of GHG emission reductions from the project is the responsibility of the management of the Emergent Ventures India Pvt. Ltd. The development and maintenance of records and reporting procedures are in accordance with the Monitoring Report Version 1.2 dated 07/03/2022.

It is our responsibility to express an independent GHG verification opinion on the GHG emissions and on the calculation of GHG emission reductions from the project for the period 01/11/2020 to 31/08/2021 based on the reported emission reductions in the final monitoring report Version 1.2 dated 07/03/2022 for the same period.

Based on an understanding of the risks associated with reporting GHG emissions data and the controls in place to mitigate these, 4KES 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 this reported amount of GHG emission reductions for the period is fairly stated.

4KES confirms the following;

Reporting period: 01/11/2020 to 31/08/2021

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)
2020	663	0	0	663
2021	22,486	0	0	22,486
Total	23,149	0	0	23,149

1	Introduction	7
1.1	Objective	7
1.2	Scope and Criteria	7
1.3	Level of Assurance	8
1.4	Summary Description of the Project	8
2	Verification Process	9
2.1	Method and Criteria	9
2.2	Document Review	10
2.3	Interviews	10
2.4	Site Inspections	11
2.5	Resolution of Findings	11
2.5.1	Forward Action Requests	12
2.6	Eligibility for Validation Activities	12
3	Validation Findings	12
3.1	Participation under Other GHG Programs	12
3.2	Methodology Deviations	12
3.3	Project Description Deviations	13
3.4	Grouped Project	15
4	Verification Findings	15
4.1	Project Implementation Status	15
4.2	Safeguards	18
4.2.1	No Net Harm	18
4.2.2	Local Stakeholder Consultation	18
4.3	AFOLU-Specific Safeguards	18
4.4	Accuracy of GHG Emission Reduction and Removal Calculations	18
4.5	Quality of Evidence to Determine GHG Emission Reductions and Removals	33
4.6	Non-Permanence Risk Analysis	33
5	Verification conclusion	33
	APPENDIX I: List of documents	35
	APPENDIX II: Verification Findings	36

APPENDIX III: Team Competence	37
APPENDIX IV: Abbreviations	40

1 INTRODUCTION

1.1 Objective

4KES has been commissioned by 'Emergent Ventures India Pvt. Ltd.' to perform verification of its registered VCS project 'Wind Power Project at Anthiyur, Tamil Nadu', for the reported GHG emission reductions for the given monitoring period 01/11/2020 to 31/08/2021 (both dates included). The VCS projects must undergo an independent third-party verification and certification of emission reductions as the basis for issuance of Voluntary Emission Reductions (VERs).

The objectives of this verification exercise are, by review of objective evidence, to establish that:

- The project activity has been implemented and operated as per the project description (PD) and that all physical features (technology, project equipment, and monitoring and metering equipment) of the project are in place;
- Monitoring report and other supporting documents are complete;
- The data is recorded and stored as per the monitoring methodology and approved monitoring plan.
- To confirm that the monitoring system is implemented and fully functional to generate Voluntary Emission Reductions (VERs/VCUs) without any double counting, and
- To establish that the data reported are accurate, complete, consistent, transparent and free of material error or omission by checking the monitoring records and the emissions reduction calculation.

1.2 Scope and Criteria

The scope of verification is to assess the claims and assumptions made in the VCS monitoring report (MR) against the VCS criteria, including but not limited to, VCS standard, applied methodology and other relevant rules and requirements established for VCS project activities.

The Verification is not meant to provide any consulting towards the project participants. However, stated requests for clarification and/or correction actions request may have provided inputs for improvement of the project design.

1.3 Level of Assurance

The verification team verified the complete monitoring data /09/, /10/ and /11/ for all the monitoring parameters of the monitoring plan against the Monitoring report/1.2/ and ER Calculation sheet /2.2/ and confirms that the reported emission reductions are free from any type of material errors. Remote audit was also conducted to verify the implementation and monitoring plan of the project activity. The implementation of the project activity (i.e. major equipment and the metering arrangement) was verified during the telephonic interview, photos of meters and turbines, Video of project site and found in accordance with the monitoring report /1.2/ and registered VCS PD /05/. Verification team has also verified the technical details of the project equipments and metering arrangement with the supportive documents /12/, /15/ and /19/ and found correct. Therefore, 4KES confirms that the verification is conducted with reasonable level of assurance.

1.4 Summary Description of the Project

The project activity is a 14.85 MW wind farm consisting of 9 WTGs of NM82/1650kW capacity each. The generated electricity is fed into the Tamil Nadu Electricity Board (TNEB).

Verification team has verified the capacity of the project activity by Telephonic interview, technical specifications /19/, commissioning certificate /12/, photographs/video /15/ etc.

The project activity involves implementation of WTGs as a voluntary measure to strengthen the regional grid of India through exploitation of wind power generation potential available to India. The generated electricity is fed into the Tamil Nadu Electricity Board (TNEB).

The project activity generated renewable electricity without any GHG emissions, which displaced part of the electricity otherwise supplied by grid connected fossil fuel fired power plants. Thus, GHG emission reductions are achieved.

Date of commissioning of each Turbine is mentioned under section 1.1 of the Monitoring report /1.2/ which is verified from the TNEB commissioning certificates /12/.

The 14.85 MW wind farm is located near Anthiyur Village of Udumalpet and Pollachi Talukas of Coimbatore District in Tamil Nadu. Verification team has verified the physical address through internet /08/ and found consistent.

The project activity is operational since commissioning and during current monitoring period i.e. from 01/11/2020 to 31/08/2021, the project activity has supplied 23,677.59 MWh net electricity to the grid, there by resulted in emission reduction of 23,149 tCO₂e. The monitoring period subject to this monitoring report is inclusive of first and last day of period.

2 VERIFICATIONPROCESS

The registered VCS project is undergoing 5th verification under VCS (2nd Crediting period), the approach adopted to ensure the quality of emission reductions is described in the following sections.

2.1 Method and Criteria

4KES assessed and determined whether the proposed implementation and operation of the project activity, and the steps taken to report emission reductions comply with the criteria and relevant guidance provided by the VCS Board. The validation/verification process consist of the following three phases;

- A desk review of the VCS PD and VCS MR
- follow up interviews with project stakeholders
- The resolution of outstanding issues and issuance of final report and opinion.

The prepared verification report and other supporting documents then undergo an internal quality control before being submitted to the VCS executive board for issuance of credits as per VCS standard version 4.

Duration of Verification:

Verification Contract	27/10/2021
Remote audit	10/11/2021 and 16/11/2021
Findings raised	17/11/2021
Draft Verification Report	01/12/2021
Final Verification Report	08/03/2022

2.2 Document Review

The verification is performed primarily as a document review of the approved VCS PD and associated documents as stated in detail in appendix 1 of this document. The assessment is performed by a verification team using a protocol. The cross checks between information provided in the Monitoring report, VCS PD and information from sources other than those used, if available, the team's sectoral or local expertise and, if necessary, independent background investigations.

2.3 Interviews

Considering the current COVID19 situation, we don't expect the site visit to happen in near future. To meet the delivery deadline, VVB could not conduct site visit for this project activity.

However, the verification team performed the Telephonic interview with the PP/Consultant/Stakeholder and reviewed documents to achieve a reasonable level of assurance in the verification. This is in line with Section 4.1.2 of the VCS Standard, v4.1 /03/ which does not explicitly mandate site visits as part of the validation and verification process, only that VVBs must achieve a reasonable level of assurance on all validations and verifications. No sampling procedures were adopted in document verification and all the document were cross checked to ensure conservative estimation of emission reduction. Kindly find below names of the persons interviewed (Telephonic interview).

Location	The 14.85 MW wind farm is located near Anthiyur Village of Udumalpet and Pollachi Talukas of Coimbatore District in Tamil Nadu.		
Dates	10/11/2021 and 16/11/2021		
Key points discussed	Name of person, interviewed	Designation, Organization	Date of interview
Project Implementation, Operational data, Calibration, Data collection, QA/QC, procedures, Calculation of ERs, VCS requirements	N. Sivathanu Pillai	AGM - (Project and O&M), Windage Power Company Private Limited	10/11/2021
	K.Rameshkumar	Senior Engineer, Windage Power Company Private Limited	10/11/2021
	Deepak Bawari	Principal, Emergent Ventures India Pvt Ltd	10/11/2021
	N Umanath	Local	16/11/2021
	Madhavan K	Local	16/11/2021
	Natarajan	Local	16/11/2021

	Polanaidu		
--	-----------	--	--

2.4 Site Inspections

Considering the current COVID19 situation, we don't expect the site visit to happen in near future. To meet the delivery deadline, VVB could not conduct site visit for this project activity.

However, the verification team performed the Telephonic interview with the PP/Site person/stakeholder and reviewed documents to achieve a reasonable level of assurance in the verification. This is in line with Section 4.1.2 of the VCS Standard, v4.1 /03/ which does not explicitly mandate site visits as part of the validation and verification process, only that VVBs must achieve a reasonable level of assurance on all validations and verifications.

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 telephonic interview. The verification team prepares and/or updates a verification protocol (internal document) that records the conformities and non-conformities, which may be of following types;

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

- 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;
- Modifications to the implementation, operation and monitoring of the registered project activity has not been sufficiently documented by the project participants;
- Mistakes have been made in applying assumptions, data or calculations of emission reductions that will impact the quantity of emission reductions;
- 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 CDM requirements have been met. All CARs and CLs raised by the 4KES 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.

During the Verification process, total 01 CAR and 00 CL were raised and resolved satisfactorily. No FAR has been raised in the verification. The list of CARs/CLs/FARs raised and the response provided, the mean of validation, reasons for their closure and references to correction in the relevant documents are provided in Appendix II of this report.

2.5.1 Forward Action Requests

No FAR raised during the verification.

2.6 Eligibility for Validation Activities

4KES conducted the verification activity; the validation was performed by the other VVB. 4KES has a valid UNFCCC accreditation in the sectoral scope from UNFCCC. The accreditation scope can be checked from the below link: <http://cdm.unfccc.int/DOE/list/DOE.html?entityCode=E-0069>

3 VALIDATION FINDINGS

Use this section to provide details of all validation activities that took place during the verification, such as gap validation, validation of methodology deviations and project description deviations, and the inclusion of new project activity instances into grouped projects.

3.1 Participation under Other GHG Programs

The project is registered in VCS only, verification team confirms that it has checked that there is no double counting associated with project activity being participation of other GHG programs. Declaration has also given by the PP /14/ for the same.

3.2 Methodology Deviations

The verification team confirms that the registered PD complies with the requirements in the applied monitoring methodology AMS-I.D., Version 18.0 /07/. Therefore, no methodology deviations are applied during the monitoring period. The verification team confirms that no deviations were observed during the current monitoring period.

3.3 Project Description Deviations

Three deviations have been applied by the PP during this monitoring period. Description of the deviation and the assessment on conservativeness of the deviations is provided below.

Deviation 1: As per section 3.18.2 Para 2 of VCS standard v.4.1 “Where the deviation does not impact the applicability of the methodology, additionality or the appropriateness of the baseline scenario and the project remains in compliance with the applied methodology, the deviation shall be described and justified in the monitoring report.” Same has been explained and justified below.

In a previous Monitoring Period, a deviation had been taken on account of delay in meter calibration. As per VCS PD “The project adheres to all the mandatory regulatory and statutory requirements at the state as well as national level.” This applies to current monitoring period too.

It was proposed that meters will be calibrated annually; however as per prevailing practice in the project region there is no dedicated interval for meter calibration. Therefore, PP has referred to national practice as per CEA order dated 17 Mar 2016; which prescribes in the para 18(b) that “all the meters shall be tested once in five years”. Details of calibration of energy meters are provided in Section 3.3 of the MR. The validity of calibration from the previous date is still within the five years period. However, as a conservative approach PP has considered the delay in calibration of existing energy meters and appropriate error factor has been applied. Therefore, this delay has been considered as project deviation in line with the guidance provided under section 3.18.2 para 2 of VCS standard v.4.1.

However, it does not impact the existing applicability conditions of the methodology, additionality or the appropriateness of the baseline scenario.

Another deviation has been applicable for HTSC nos. As demonstrated under the footnote reference 1, the state authority TNEB has assigned different HTSC nos. as per their internal practice and revision. However, there is no other material change to the project activity except the nos. These updated HTSC nos. are reported under the ER sheet and also included under the Appendix 1.

Justification: The deviation has been transparently described in section 3.2.2 of the MR /1.2/.

Deviation 1: As per the registered VCS PD /05/, calibration frequency is once in a year however the same is not followed during this monitoring period. PP has referred to national practice as per CEA order dated 17 Mar 2016 /20/ which prescribes in the para 18(b) that “all the meters shall be tested once in five years” which is found OK. As discussed during telephonic interview, calibration is not under the control of PP and done by the state utility, hence the deviation is found accepted. As per the five year calibration frequency, the meters calibration is covering the monitoring period however PP has applied the error in the applied values (export and import) for the whole monitoring period as per the accuracy class of the energy meter on

conservative side which is accepted to the verification team. Further the meters are under the control of state utility company and they have their own QA/QC procedures. The electricity is measure by them on every month as verified from the monthly reports /10/.

Hence the deviation is accepted to the verification team. The deviation does not overestimate the emission reduction. The verification team is of the opinion that the approach followed by the PP is appropriately described and justified and the project remains in compliance with the VCS rules. Further the deviation does not impact the applicability of the methodology, additionality or the appropriateness of the baseline scenario.

Deviation 2: State authority TNEB has assigned different HTSC nos. as per their internal practice and revision. However, there is no other material change to the project activity except the HTSC Numbers. Verification team has verified the old and new HTSC numbers for all the wind turbines from the monthly JMR report for July 2018 /16/.

Hence the deviation is accepted to the verification team. The deviation does not overestimate the emission reduction. The verification team is of the opinion that the approach followed by the PP is appropriately described and justified and the project remains in compliance with the VCS rules. Further the deviation does not impact the applicability of the methodology, additionality or the appropriateness of the baseline scenario.

Deviation 3: The project activity was initially undertaken by Nuziveedu Seeds Limited but in 2011 the assets were sold to Windage Power Company (P) LTD and they became the rightful owner of the project.

Verification team has checked the asset purchase agreement dated 01/05/2011 between NSL Renewable Power Private Limited and Windage Power Company Private Limited /22/ and found the deviation correct. There is no other material change to the project activity due to this deviation.

Hence the deviation is accepted to the verification team. The verification team is of the opinion that the project remains in compliance with the VCS rules. Further the deviation does not impact the applicability of the methodology, additionality or the appropriateness of the baseline scenario.

3.4 Grouped Project

The project is not a grouped project. Therefore this section is not applicable.

4 VERIFICATION FINDINGS

4.1 Project Implementation Status

The project activity is a 14.85 MW wind farm consisting of 9 WTGs of NM82/1650kW capacity each. The project activity is implemented in the Anthiyur Village of Udumalpet and Pollachi Talukas of Coimbatore District in state of Tamil Nadu. The generated electricity is fed into the Tamil Nadu Electricity Board (TNEB).

The technical details of the project equipment have been verified from Telephonic interview, technical specifications /19/, commissioning certificate /12/, photographs/video /15/ etc.

Date of commissioning of each Turbine is mentioned under section 1.1 of the Monitoring report /1.2/ which is verified from the TNEB commissioning certificates /12/.

Location Name	HT. Service Number ¹	Date of Commissioning
NSL 1	507	31.03.2005
NSL 2	508	31.03.2005
NSL 3	510	31.03.2005
NSL 4	533	29.04.2005
NSL 5	509	31.03.2005
NSL 6	551	17.05.2005
NSL 7	497	30.03.2005
NSL 8	511	31.03.2005
NSL 9	482	26.03.2005

¹ These are current HTSC nos. different from the ones at the time of validation. HTSC nos. are assigned by TNEB as per their internal practice which is not under the control of PP. The change in HTSC nos. was already reported under previous verifications.

Operation and maintenance of the project activity is taken care by the Vestas and has O&M contract.

During the process of verification, 4KES confirmed the capacity, power generation, arrangement for evacuation of electricity generated, technical specifications, date of commissioning and arrangements for Operation & Maintenance (O&M). List of documents reviewed during the course of verification is presented under Appendix I of this report.

The selected monitoring period i.e. 01/11/2020 to 31/08/2021 (both days included) is within the 2nd crediting period i.e. 01/04/2016 to 31/03/2026 which is accepted to the verification team.

There was no major breakdown or shutdowns during the monitoring period which might affect the applicability of methodology or might cause material errors in emission reductions.

The project design as mentioned in the registered VCS PD & monitoring report submitted is implemented except a project deviation as mentioned under section 3.3 of this report and thus the same is acceptable to the assessment team. All required monitoring equipment and procedures as mentioned in the registered VCS PD & monitoring report are available and implemented in an appropriate manner.

The organisational role and responsibility as mentioned in the registered VCS PD /05/ & monitoring report /1.2/ is followed onsite. All the emergency preparedness as mentioned in the registered VCS PD & monitoring report is followed onsite and no discrepancies were found regarding the same.

The assessment team found that the project is in line with the registered VCS PD, monitoring report except a project deviation as mentioned under section 3.3 of this report.

Project activity provide local jobs and upgrade the existing roads, directly contributing to the improvement of infrastructure in region. Section 1.11 of the Monitoring report has been checked and found OK. The project activity contributes positively to sustainable development which has been verified from the remote interview of the Local people (Section 2.3 of this report).

Finding: No finding raised.

Opinion:

Assessment team concludes the following:

- a) There is no material discrepancies between project implementation and the project description provided in the registered PD/05/.
- b) The monitoring plan is implemented completely and monitoring system (i.e., process and schedule for obtaining, recording, compiling and analysing the monitored data and parameters) is appropriate.
- c) There is no material discrepancies between the actual monitoring system, and the monitoring plan set out in the project description and the applied methodology.
- d) The GHG emission reductions or removals generated by the project have not included in an emissions trading program or any other mechanism that includes GHG allowance trading.
- e) The project has not received or sought any other form of environmental credit, or has become eligible to do so since validation or previous verification.
- f) The project is registered under VCS only.

In view of the information as verified above the assessment team is able to conclude that the project has been implemented as described in the project description

4.2 Safeguards

4.2.1 No Net Harm

The project activity does not involve major construction activity. It primarily requires the installation of the wind turbines, transformer station and transmission line.

The project activity doesn't cause negative environmental and socio-economic impacts which is confirmed from the telephonic interviews of the local people (refer section 2.3 of this report). The project activity creates positive socioeconomic impacts by providing jobs to local people as confirmed from the remote interview of the local people (refer section 2.3 of this report).

4.2.2 Local Stakeholder Consultation

The Project is already registered with VCS and registered VCS Project Description; sections 5.3 & 5.4 provide the reference for the Local Stakeholder Consultation Process as in-line with VCS requirement.

The process was validated during the registration of project activity in VCS. VCS validation report verified to confirm the same. The PP had invited identified stakeholders well in advance with details of venue and time of meeting.

PP has a mechanism for on-going communication with local stakeholders which has been discussed during the remote interview. During the monitoring period (from 01/11/2020 to 31/08/2021), there are no comments received which is also confirmed during the telephonic interview of the stakeholders.

4.3 AFOLU-Specific Safeguards

Not Applicable.

4.4 Accuracy of GHG Emission Reduction and Removal Calculations

The verification team was able to confirm that the monitoring plan contained in registered VCS-PD/05/ and MR/1.2/ is in accordance with the applied methodology for the project activity i.e. "AMS-I.D. "Grid connected renewable electricity generation" Version 18.0" /07/ and its applicable tools.

All parameters stated in the monitoring plan /05/ and the applied methodology /07/ have been fulfilled in the current monitoring period.

The GHG emission reductions were correctly calculated on the basis of the applied methodology AMS-I.D. “Grid connected renewable electricity generation” Version 18.0 /07/, VCS-PD /05/ and the formulae given in the monitoring report /1.2/.

Parameters monitored:

Verification team confirms through remote audit verification and from the document review, the actual monitoring system complies with the monitoring plan mentioned in the registered validated VCS-PD/05/. According to the monitoring plan in the registered VCS-PD, there are 3 monitoring parameters required to be monitored.

1. EG_{Gross,y} (kWh)

		VVB Assessment
Data / Parameter	EG_{Gross,y}	The monitoring parameter, Unit, and descriptions are as per the registered VCS-PD /05/.
Data unit	kWh	
Description	Gross Electricity export to the grid by the project during the year y	
Source of data	From the certified joint meter readings	The monitoring parameter is measured by energy meter installed at 22 kV Transformer yard. Each wind turbine has individual energy meter installed at 22 kV Transformer yard. The installed electricity meters are digital bi-direction meters. The metering arrangement is verified during the remote audit, calibration certificates /09/ and photos/video /15/. The monthly electricity is jointly measured by PP and State electricity company in Joint meter reading reports /10/ as confirmed during the remote audit. The source of data is in accordance with the registered VCS-PD /05/.
Description of measurement methods and procedures to be	Gross electricity generated by each WTG is recorded with the aid of energy meter for that WTG. The procedures for metering and meter reading will be as per the provisions of the	The monitoring parameter is measured by energy meter installed at 22 kV Transformer yard. Each wind turbine has

applied	power purchase agreement.	individual energy meter installed at 22 kV Transformer yard. The installed electricity meters are digital bi-direction meters. The metering arrangement is verified during the remote audit, calibration certificates /09/ and photos/video /15/. The monthly electricity is jointly measured by PP and State electricity company in Joint meter reading reports /10/ as confirmed during the remote audit. The source of data is in accordance with the registered VCS-PD /05/.
Frequency of monitoring/recording	The parameter will be monitored continuously and recorded at least monthly.	The electricity export is continuously measured and monthly recorded in the form of the Joint meter reading reports /10/ as verified during the remote audit. The frequency of monitoring/recording is in accordance with the registered VCS-PD /05/.
Value monitored	24,012,890.97	Verification team has verified the reported electricity export data with the monthly Joint meter reading reports /10/ and found consistent.
Monitoring equipment	Energy Meter	Verification team has confirmed the meter details from the photos /15/, calibration certificates /09/ and during the telephonic interview and found consistent with the details mentioned in the monitoring report /1.2/. The energy meters are in accordance with the registered VCS-PD /05/. During the monitoring period,

		energy meters were changed which is verified from the supportive document /18/. The accuracy class of the energy meters is as per the registered VCS PD /05/ and hence found OK. Verification team has verified the energy meters calibration certificates /09/ by Tamil Nadu Generation and distribution corporation limited which is a government authority and hence accepted. The Energy meters were not calibrated as per the calibration frequency defined in the registered VCS PD /05/, hence PP has applied the project deviation as mentioned under section 3.3 of this report in detail and found accepted.
QA/QC procedures to be applied	QA/QC procedures are as implemented by TNEB–state government utility. It was proposed that the meters used are calibrated by utility once in a year to ensure accuracy of data. However, as per prevailing practice in the region such frequency is not addressed. But the consumption by equipment/electricity exported to the grid registered by main meters hold good for purpose of billing as long as errors in main meters are within the permissible limits. Therefore, as per the provision of CEA Order 2016, Hence, PP has considered testing of energy meters once in five years².	Verification team has verified the energy meters calibration certificates /09/ by Tamil Nadu Generation and distribution corporation limited which is a government authority and hence accepted. The Energy meters were not calibrated as per the calibration frequency defined in the registered VCS PD /05/, hence PP has applied the project deviation as mentioned under section 3.3 of this report in detail and found accepted.

² Refer Section 4.3 on Monitoring Plan for details where Data Monitoring has been described

Purpose of the data	Used to calculate baseline emissions	The purpose of the monitoring parameter is to calculate the electricity supplied to the grid ($EG_{Net,y}$) which is in accordance with the registered VCS-PD /05/.
Calculation method	Same as mentioned under the description of measurement methods	This is a measure parameter as explained above.
Comments	All records relating to the project are kept in a secure and retrievable manner for at least two years after the end of the project crediting period.	Validation team has found the record keeping as per the registered VCS PD /05/.

2. $EG_{import,y}$ (kWh)

		VVB Assessment
Data / Parameter	$EG_{import,y}$	The monitoring parameter, Unit, and descriptions are as per the registered VCS-PD /05/.
Data unit	kWh	
Description	Electricity imported from the grid by the project during the year y	
Source of data	From the certified joint meter readings	The monitoring parameter is measured by energy meter installed at 22 kV Transformer yard. Each wind turbine has individual energy meter installed at 22 kV Transformer yard. The installed electricity meters are digital bi-direction meters. The metering arrangement is verified during the remote audit, calibration certificates /09/ and photos/video /15/. The monthly electricity is jointly measured by PP and State electricity company in Joint meter reading reports /10/ as confirmed during the remote audit. The source of data is in accordance with the registered VCS-PD /05/.
Description of measurement methods and procedures to be applied	Calculated as measurement from the energy meters available at the generation points.	The monitoring parameter is measured by energy meter installed at 22 kV Transformer yard. Each wind turbine has individual energy meter installed at 22 kV Transformer yard.

		The installed electricity meters are digital bi-direction meters. The metering arrangement is verified during the remote audit, calibration certificates /09/ and photos/video /15/. The monthly electricity is jointly measured by PP and State electricity company in Joint meter reading reports /10/ as confirmed during the remote audit. The source of data is in accordance with the registered VCS-PD /05/.
Frequency of monitoring/recording	The parameter is monitored continuously and recorded at least monthly.	The electricity import is continuously measured and monthly recorded in the form of the Joint meter reading reports /10/ as verified during the remote audit. The frequency of monitoring/recording is in accordance with the registered VCS-PD /05/.
Value monitored	335,296.25	Verification team has verified the reported electricity export data with the monthly Joint meter reading reports /10/ and found consistent.
Monitoring equipment	Energy Meter	Verification team has confirmed the meter details from the photos /15/, calibration certificates /09/ and during the telephonic interview and found consistent with the details mentioned in the monitoring report /1.2/. The energy meters are in accordance with the registered VCS-PD /05/. During the monitoring period, energy meters were changed which is verified from the supportive document /18/. The accuracy class of the energy meters is as per the registered VCS PD /05/ and hence found OK. Verification team has verified the energy meters calibration certificates /09/ by Tamil Nadu Generation and distribution corporation limited which is a government authority and hence

		accepted. The Energy meters were not calibrated as per the calibration frequency defined in the registered VCS PD /05/, hence PP has applied the project deviation as mentioned under section 3.3 of this report in detail and found accepted.
QA/QC procedures to be applied	The electricity imported by the individual WTG is recorded. The electricity imported is adjusted against the gross export by the project activity to the grid. To be cross-checked with monthly invoices or receipts of payments.	Verification team has verified the energy meters calibration certificates /09/ by Tamil Nadu Generation and distribution corporation limited which is a government authority and hence accepted. The Energy meters were not calibrated as per the calibration frequency defined in the registered VCS PD /05/, hence PP has applied the project deviation as mentioned under section 3.3 of this report in detail and found accepted.
Purpose of the data	Used to calculate baseline emissions	The purpose of the monitoring parameter is to calculate the electricity supplied to the grid ($EG_{Net,y}$) which is in accordance with the registered VCS-PD /05/.
Calculation method	Same as mentioned under the description of measurement methods	This is a measure parameter as explained above.
Comments	All records relating to the project are kept in a secure and retrievable manner for at least two years after the end of the project crediting period.	Validation team has found the record keeping as per the registered VCS PD /05/.

3. $EG_{Net,y}$ (MWh)

		VVB Assessment
Data / Parameter	$EG_{Net,y}$	The monitoring parameter, Unit, and descriptions are as per the registered VCS-PD /05/.
Data unit	MWh	
Description	Net electricity supplied to the grid	
Source of data	Monthly joint Energy Meter Reading Reports of 9 energy meters covering 9 numbers of WTG	The monitoring parameter is calculated parameter from $EG_{Gross,y}$ and $EG_{import,y}$ (i.e. $EG_{Net,y} =$

		$EG_{Gross,y} - EG_{Import,y}$. Both the parameters $EG_{Gross,y}$ and $EG_{Import,y}$ are measured by energy meter installed at 22 kV Transformer yard. Each wind turbine has individual energy meter installed at 22 kV Transformer yard. The installed electricity meters are digital bi-direction meters. The metering arrangement is verified during the remote audit, calibration certificates /09/ and photos/video /15/. The monthly electricity is jointly measured by PP and State electricity company in Joint meter reading reports /10/ as confirmed during the remote audit. The source of data is in accordance with the registered VCS-PD /05/.
Description of measurement methods and procedures to be applied	Continuous measurement and monthly recording. The monitoring of 'Net Electricity supplied to the grid' would be as per the details provided in Power Purchase Agreement signed between the TNEB and project owner. The HTSC No. for the individual or group of turbines represents the unique identification of the joint meter. The net electricity supplied to the grid is calculated by the summation of the net electricity export figures of individual WTGs.	The monitoring parameter is calculated parameter from $EG_{Gross,y}$ and $EG_{Import,y}$ (i.e. $EG_{Net,y} = EG_{Gross,y} - EG_{Import,y}$). Both the parameters $EG_{Gross,y}$ and $EG_{Import,y}$ are measured by energy meter installed at 22 kV Transformer yard. Each wind turbine has individual energy meter installed at 22 kV Transformer yard. The installed electricity meters are digital bi-direction meters. The metering arrangement is verified during the remote audit, calibration certificates /09/ and photos/video /15/. The monthly electricity is jointly measured by PP and State electricity company in Joint meter reading reports /10/ as confirmed during the remote audit. The source of data is in accordance with the registered VCS-PD /05/.

		Verification team has checked the calculation under the MR /1.2/ and ER sheet /2.2/ and found correct.
Frequency of monitoring/recording	The parameter will be monitored continuously and recorded at least monthly.	The electricity export/import is continuously measured and monthly recorded in the form of the Joint meter reading reports /10/ as verified during the remote audit. The frequency of monitoring/recording is in accordance with the registered VCS-PD /05/.
Value monitored	23,677.59	Verification team has verified the reported electricity export/import data with monthly Joint meter reading reports /10/ and cross checked from monthly invoices /11/ and found consistent.
Monitoring equipment	Energy Meter	Verification team has confirmed the meter details from the photos /15/, calibration certificates /09/ and during the telephonic interview and found consistent with the details mentioned in the monitoring report /1.2/. The energy meters are in accordance with the registered VCS-PD /05/. During the monitoring period, energy meters were changed which is verified from the supportive document /18/. The accuracy class of the energy meters is as per the registered VCS PD /05/ and hence found OK. Verification team has verified the energy meters calibration certificates /09/ by Tamil Nadu Generation and distribution corporation limited which is a government

		authority and hence accepted. The Energy meters were not calibrated as per the calibration frequency defined in the registered VCS PD /05/, hence PP has applied the project deviation as mentioned under section 3.3 of this report in detail and found accepted.
QA/QC procedures to be applied	Every month these meter readings will be recorded by TNEB representative and plant personnel. The meters at the substation will be two-way meters and will be in the custody of TNEB. The quantity of net electricity supplied is cross-verified from the invoice raised on TNEB by the project proponent.	Verification team has verified the energy meters calibration certificates /09/ by Tamil Nadu Generation and distribution corporation limited which is a government authority and hence accepted. The Energy meters were not calibrated as per the calibration frequency defined in the registered VCS PD /05/, hence PP has applied the project deviation as mentioned under section 3.3 of this report in detail and found accepted.
Purpose of the data	Used to calculate baseline emissions	The purpose of the monitoring parameter is to calculate the baseline emission which is in accordance with the registered VCS-PD /05/.
Calculation method	Same as mentioned under the description of measurement methods	The calculation method is in compliance with the registered VCS-PD /05/.
Comments	All records relating to the project are kept in a secure and retrievable manner for at least two years after the end of the project crediting period.	Validation team has found the record keeping as per the registered VCS PD /05/.

Finding: CAR-01 is raised and successfully closed.

Opinion: The verification team confirms;

- The monitoring plan has been implemented as per the registered PD /05/;
- The monitoring complies with the requirement of the applied methodology /07/;
- The information inflow (from data generation, aggregation, to recording, calculation and reporting) is included above under each parameters and confirms to the requirement of the PDD;
- The values included in the monitoring report and corresponding emission reduction sheets are verified and included under each monitoring parameter, wherever appropriate;

Compliance with the calibration frequency requirements for measuring instruments:

Verification team has checked whether the calibration of the measuring equipment that has an impact on the claimed GHG emission reductions is conducted by the PP at a frequency specified in the monitoring plan/05/.

There are three monitoring parameters

1. $EG_{Gross,y}$
2. $EG_{import,y}$
3. $EG_{Net,y}$

$EG_{Gross,y}$ and $EG_{import,y}$ are measured by energy meter installed at 22 kV Transformer yard. Each wind turbine has individual energy meter installed at 22 kV Transformer yard.

The installed electricity meters are digital bi-direction meters. The metering arrangement is verified during the remote audit, calibration certificates /09/ and photos/video /15/.

The net electricity supplied by the power plant to the grid ($EG_{Net,y}$) is calculated from $EG_{Gross,y}$ and $EG_{import,y}$. All these meters are specific only to the project activity.

The calibration details of the monitoring equipments corresponding to electricity exported to the grid ($EG_{Gross,y}$) and imported from the grid ($EG_{import,y}$) is given in the below table.

Location Name	Current HTSC. No	Energy Meter - SI. No	Make	Accuracy Class	Type	Date of Calibration / Date of replacement	Validity of Calibration*
NSL-1	507	4321904	Genus	0.2s	03D-183 (DLMS)	08-05-2017	07-05-2022
NSL-2	508	4321911	Genus	0.2s	03D-183 (DLMS)	08-05-2017	07-05-2022
NSL-3	510	4321912	Genus	0.2s	03D-183 (DLMS)	08-05-2017	07-05-2022
NSL-4	533	4321910	Genus	0.2s	03D-183 (DLMS)	08-05-2017	07-05-2022
NSL-5	509	4321907	Genus	0.2s	03D-183 (DLMS)	08-05-2017	07-05-2022 Replaced on 11-11-2020
		5839987	Genus	0.2s	03D-183 (DLMS)	11-11-2020	10-11-2025
NSL-6	551	4321909	Genus	0.2s	03D-183 (DLMS)	08-05-2017	07-05-2022

Location Name	Current HTSC. No	Energy Meter - SI. No	Make	Accuracy Class	Type	Date of Calibration / Date of replacement	Validity of Calibration*
NSL-7	497	4321903	Genus	0.2s	03D-183 (DLMS)	08-05-2017	07-05-2022 replaced on 16-08-2018
		1380036	Secure	0.2s	E3M024	16-08-2018	15-08-2023 replaced on 06-12-2019
		HT2180075	EDMI	0.2s	ME6EDLMS	06-12-2019	05-12-2024
NSL-8	511	4321905	Genus	0.2s	03D-183 (DLMS)	08-05-2017	07-05-2022
NSL-9	482	4322619	Genus	0.2s	03D-183 (DLMS)	08-05-2017	07-05-2022

Calibration frequency: Verification team has verified the energy meters calibration certificates /09/ by Tamil Nadu Generation and distribution corporation limited which is a government authority and hence accepted.

The Energy meters were not calibrated as per the calibration frequency defined in the registered VCS PD /05/, hence PP has applied the project deviation as mentioned under section 3.3 of this report in detail and found accepted.

The accuracy class of the energy meters is as per the registered VCS-PD /05/.

The monitoring equipment have been installed in the project activity according to registered monitoring plan /05/.

Parameters not monitored/ex-ante:

4.4.4 EF_{OM,y} (tCO₂/MWh)

Simple operating margin emission factor of Indian Grid

	Discussion and verification assessment
Purpose of data	Baseline calculations: Calculating the combined margin emissions factor (EF _{Grid,y}) of national

	grid
Verified value	0.9941 tCO ₂ /MWh
Source of value	Registered VCS-PD /05/ Calculated from CEA database, Version 11, April 2016 (http://www.cea.nic.in/reports/others/thermal/tpece/cdm_co2/user_guide_ver11.pdf)
Justification	It is fixed for the entire crediting period as per the registered VCS-PD /05/. The value of the operating margin emission factor has been correctly taken as per the registered VCS-PD /05/ and Hence accepted by the verification team.

4.4.5 EF_{BM,y} (tCO₂/MWh)

Build margin emission factor of Indian Grid

	Discussion and verification assessment
Purpose of data	Baseline calculations: Calculating the combined margin emissions factor (EF _{Grid,y}) of national grid
Verified value	0.9285 tCO ₂ /MWh
Source of value	Registered VCS-PD /05/ Calculated from CEA database, Version 11, April 2016 (http://www.cea.nic.in/reports/others/thermal/tpece/cdm_co2/user_guide_ver11.pdf)
Justification	It is fixed for the entire crediting period as per the registered VCS-PD /05/. The value of the build margin emission factor has been correctly taken as per the registered VCS-PD /05/ and Hence accepted by the verification team.

4.4.6 EF_{Grid,y} (tCO₂/MWh)

Combined margin CO₂ Emission Factor of Indian Grid

	Discussion and verification assessment
Purpose of data	Calculation of baseline emissions
Verified value	0.9777 tCO ₂ /MWh

Source of value	Registered VCS-PD /05/ Calculated from operating and built margin, using 75%-25% weights
Justification	It is fixed for the entire crediting period as per the registered VCS-PD /05/. The value of the combined margin emission factor has been correctly taken as per the registered VCS-PD /05/ and Hence accepted by the verification team.

Opinion:

In the opinion of assessment team, emission factor values that were applied in the calculations is consistent with registered PDD /05/ and correctly applied in MR /1.2/, emission reduction spread sheet /2.2/ and justified.

Assessment of Data and Calculation of GHG emission reductions:

According to the applied methodology AMS-I.D., Version 18.0 /07/, Emission Reductions are calculated as follows:

Baseline Emissions

The baseline emissions are calculated as follows:

$$BE_y = EG_{BL,y} \times EF_{CO_2}$$

Where,

BE_y is Baseline Emissions in year y (tCO₂e/y)

$EG_{BL,y}$ is Energy Baseline in year y, kWh

EF_{CO_2} is CO₂ Emission Factor in year y; t CO₂ / kWh

The baseline emission (BE_y) for the monitoring period is:

$$\begin{aligned} \text{Baseline Emissions} &= 23,677.59 \text{ MWh} \times 0.9777 \text{ tCO}_2/\text{MWh} \\ &= 23,149 \text{ tonnes of CO}_2 \text{ (rounded down value considered)} \end{aligned}$$

Project Emissions

According to applied methodology AMS-I.D., Version 18.0 /07/ and registered VCS PD /05/, for wind power projects $PE_y = 0 \text{ tCO}_2$.

Leakage

According to applied methodology AMS-I.D., Version 18.0 /07/ and registered VCS PD /05/, no leakage is considered from the project activity.

Emission reductions

Reductions are calculated as follows:

$$\text{Thus } ER_y = BE_y - PE_y - LE_y$$

The results of the emission reduction are shown in the table below:

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)
2020	663	0	0	663
2021	22,486	0	0	22,486
Total	23,149	0	0	23,149

Opinion:

The verification team confirms that

- The complete data set for the identified and required parameters for the operational days in the current monitoring period was available;
- The reported data has been cross checked with available records, as indicated in the section 4.4 above under each monitored data, wherever appropriate;
- The baseline, project and leakage emissions have been determined in accordance with the requirement of the applied methodologies, as contained in the final monitoring report and corresponding emission reductions spreadsheet;
- The assumptions, emission factors and default values used are justified, as indicated in the section 4.4 above

4.5 Quality of Evidence to Determine GHG Emission Reductions and Removals

Evidences (Documents/Telephonic interviews/Photos/Video of project site) referred for verification of individual monitoring parameters and fixed parameters are defined under section 4.4. We further confirm that, sufficient evidence covering the entire monitoring period and at the required frequency were available. A list of referred documents for verification is also included in Appendix 1 of this report.

4.6 Non-Permanence Risk Analysis

Not applicable.

5 VERIFICATION CONCLUSION

4K Earth Science Pvt. Ltd (4KES), contracted by 'Emergent Ventures India Pvt. Ltd.', has performed the independent verification of the emission reductions for the VCS project activity (VCS ID- 682) "Wind Power Project at Anthiyur, Tamil Nadu" in India for the monitoring period 01-November-2020 to 31-August-2021 as reported in the Monitoring Report Version 1.2 dated 07/03/2022. Emergent Ventures India Pvt. Ltd. are 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.

4KES commenced the verification on the basis of the baseline and monitoring methodology AMS-I.D., Version 18.0 /07/, the monitoring plan contained in the registered VCS PD /05/, VCS guidelines version 4 and Monitoring Report (Version 1.2 dated 07/03/2022) as per the process described under Section 2 of this report.

4KES 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. 4KES planned and performed the verification by obtaining evidence and other information and explanations that 4KES 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 01-November-2020 to 31-August-2021 are fairly stated in the Monitoring Report Version 1.2 dated 07/03/2022. The GHG emission reductions were calculated correctly on the basis of the approved baseline and monitoring methodology AMS-I.D., Version 18.0 and the VCS standard.

Verification period: From 01-November-2020 to 31-August-2021

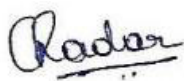
Verified GHG emission reductions and removals in the above verification period:

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)
2020	663	0	0	663
2021	22,486	0	0	22,486
Total	23,149	0	0	23,149

Approved by

Chandrakala R.

Director



4K Earth Science Private Limited

Date: 08-March-2022

Place: Bangalore, India

APPENDIX I: LIST OF DOCUMENTS

/1/	/1.1/ Monitoring Report, Version 1.0, dated 18/10/2021 (Initial Version) /1.2/ Monitoring Report, Version 1.2 dated 07/03/2022 (Final Version)
/2/	/2.1/ Draft Emission Reduction calculation sheet (corresponding to initial Version of VCS MR) /2.2/ Final Emission Reduction calculation Sheet (corresponding to final Version of VCS MR)
/3/	VCS Standard Version v4.1 https://verra.org/project/vcs-program/rules-and-requirements/
/4/	VCS Program Guide, v4.0 https://verra.org/project/vcs-program/rules-and-requirements/
/5/	2 nd Crediting period: 1. Revised approved VCS PD version 01 dated 20/03/2017 2. Validation report version 01 dated 29/08/2018
/6/	Web-Link for the Registered project activity: https://registry.verra.org/app/projectDetail/VCS/682
/7/	Approved monitoring methodology: AMS-I.D., Version 18.0
/8/	Websites referred: http://www.itouchmap.com/latlong.html (Latitude-Longitude location finder)
/9/	Certificates of Calibration for all the meters belongs to project activity
/10/	Monthly joint meter reading report issued by Tamil Nadu Generation and distribution corporation limited for the monitoring period
/11/	Monthly invoice issued by PP
/12/	Commissioning certificate for all the WTGs of the project activity issued by state electricity authority
/13/	Power Purchase Agreements
/14/	Letter of declaration from PP regarding not having created or sought any other form of environmental credit for the same period 28/10/2021
/15/	Photos of the energy meters/wind turbines and video of the project site.
/16/	Supportive for HTSC change: Monthly joint meter reading report issued by Tamil Nadu

	Generation and distribution corporation limited for the month of July 2018 showing both old and new HTSC No.
/17/	Major breakdown during this Monitoring period
/18/	Supportive for the meter change from Tamil Nadu Generation and distribution corporation limited
/19/	Manufacturer specification of wind turbines
/20/	Central Electricity Authority (Installation and Operation of Meters) Regulations Notified on 17/03/2006 No. 502/70/CEA/DP&D Amendments Notified on 26/06/2010 No. 502/6/2009/DP&D/D-I http://www.cbip.org/cearegulations/CEA%20DATA/MeteringRegulations/Metering_First%20Amendment%20.pdf
/21/	Extracts of ERPA signed between PP and Emergent Ventures
/22/	Asset purchase agreement dated 01/05/2011 between NSL Renewable Power Private Limited and Windage Power Company Private Limited.

APPENDIX II: VERIFICATION FINDINGS

Table 1. Remaining FAR from validation and/or previous verifications

No FAR raised during this periodic verification of the project activity.

FAR ID	xx	Section no.	Date: DD/MM/YYYY
Description of FAR			
Project participant response			Date: DD/MM/YYYY
Documentation provided by project participant			
DOE assessment			Date: DD/MM/YYYY

Table 2. CL from this verification

No CL raised during this verification.

CL ID	XX	Section no.	-	Date: DD/MM/YYYY
Description of CL				

Project participant response	Date: DD/MM/YYYY
Documentation provided by project participant	
DOE assessment	Date: DD/MM/YYYY

Table 3. CAR from this verification

CAR ID	01	Section no.	4.4	Date: 17/11/2021
Description of CAR				
From the energy meters photo and remote audit, Verification team has found that energy meters were changed during this monitoring period however no information has been provided for the same under section 4.3 of the monitoring report /1.1/. Also PP need to submit the supportive document for the same.				
Project participant response				Date: 18/11/2021
Energy meters were changed during the Monitoring period, the corrected monitoring report now includes the meter change information under section 4.3. The supporting documents are also shared.				
Documentation provided by project participant				
Revised Monitoring report				
DOE assessment				Date: 01/12/2021
Corrections have been done in the section 4.3 of the revised MR /1.2/ and found OK. Verification team has checked the revised information from the meter photos /15/, Meter change supportive /18/ and found consistent. Hence this CAR is closed.				

Table 4. FAR from this verification

No FAR raised during this verification.

FAR ID	xx	Section no.		Date: DD/MM/YYYY
Description of CAR				
NA				
Project participant response				Date: DD/MM/YYYY
Documentation provided by project participant				
DOE assessment				Date: DD/MM/YYYY

APPENDIX III: TEAM COMPETENCE

<u>Certificate of Competence</u>						
Name	☒ Mr. ☐ Ms.	Chetan Swaroop Sharma				
Qualification Procedure	Fulfil the requirement as per the appointment of personnel procedure of 4KES for Validation and Verification of CDM/VCS/GS/GHG Projects.					
Appointed to work as:						
	CDM Validator/Verifier	Team Leader	Team Member	Technical Expert	Technical Reviewer	Financial Expert
Appointed	Yes	Yes	Yes	Yes	Yes	No
Appointed Date	27-04-2021					
Authorized to work as Technical Expert for:						
Authorized Technical Area	Sectoral Scope		TA Code	Technical Area within the scope		
	Energy industries (renewable - / non-renewable sources)		1.1	Thermal energy generation		
	Energy industries (renewable - / non-renewable sources)		1.2	Renewables		
	Energy distribution		2.1	Energy distribution		
	Energy demand		3.1	Energy demand		
	Waste handling and disposal		13.1	Solid waste and wastewater		
	Waste handling and disposal		13.2	Manure		
Authorized to work as Local Expert for:						
Country/Countries	India					
Compliance check by: Anand S. R.						

<u>Certificate of Competence</u>		
Name	☒ Mr.	Ma Paa Puratchikkana

	☐ Ms.					
Qualification Procedure	Fulfils the requirement as per the appointment of personnel procedure of 4KES for Validation and Verification of CDM/VCS/GS/GHG Projects.					
Appointed to work as:						
	CDM Validator/Verifier	Team Leader	Team Member	Technical Expert	Technical Reviewer	Financial Expert
Appointed	Yes	Yes	Yes	Yes	Yes	No
Appointed Date	27-04-2021					
Authorized to work as Technical Expert for:						
Authorized Technical Area	Sectoral Scope	TA Code		Technical Area within the scope		
	Energy industries (renewable - / non-renewable sources)	1.1		Thermal energy generation		
	Energy industries (renewable - / non-renewable sources)	1.2		Renewables		
	Energy demand	3.1		Energy demand		
	Construction	6.1		Construction		
	Waste handling and disposal	13.1		Solid waste and wastewater		
	Waste handling and disposal	13.2		Manure		
	Agriculture	15.1		Agriculture		
Authorized to work as Local Expert for:						
Country/Countries	India and Sri Lanka					
Compliance check by: Anand S. R.						

APPENDIX IV: ABBREVIATIONS

BM	Build Margin
CAR	Corrective Action Request
CDM	Clean Development Mechanism
CL	Clarification Request
EB	Executive Board
ER	Emission Reductions
FAR	Forward Action Request
GHG	Greenhouse Gases
IPCC	Intergovernmental Panel for Climate Change
JMR	Joint Meter Readings
MP	Monitoring Period
MR	Monitoring Report
MW	Mega Watt
MWh	Mega Watt hour
OM	Operating Margin
O&M	Operation & Maintenance
PD	Project Description
PP	Project proponent
PPA	Power Purchase Agreement
QA/QC	Quality Assurance/Quality Control
tCO ₂	Tonnes of Carbon Dioxide
UNFCCC	United Nations Framework Convention on Climate Change
VCS	Verified Carbon Standard
VCSA	Verified Carbon Standard Association
VCU	Verified Carbon Unit