WIND BUNDLE PROJECT IN MAHARASHTRA BY SISPARA

Document Prepared By

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VCS Standard Version	4.6
Client	M/s Sispara Renewable Power Private Limited.
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Summary:

VKU Certification Pvt. Ltd. (hereafter referred as VKU) has been commissioned by Sispara Renewable Power Private Limited (hereafter referred as PP) to verify the greenhouse gas emission reductions reported for the project activity "**Wind Bundle Project in Maharashtra by Sispara" (VCS ID 1660)** in India. This is the ninth verification of monitoring period from **01-January-2023 to 31-December-2023 (Inclusive of both start and end dates)** under fixed crediting period from **13-February-2015 to 12-February-2025 (Inclusive of both dates).**

The purpose of the verification: The objective of the verification process is to obtain an impartial evaluation of the ex-post determination of the monitored reductions in greenhouse gas (GHG) emission. This verification ensures that the monitoring methodology aligns with the plan outlined in the registered VCS Joint PD & MR /3/, and that the monitoring data used to confirm reductions in anthropogenic emissions from sources is comprehensive, definitive, and transparently presented.

The verification scope of the project is:

- To verify that the project is implemented as described in the registered VCS Joint PD & MR/3/.
- To evaluate the project's adherence to relevant regulations, including the legislation of the host country (India)
- To verify the implementation and functionality of the monitoring system, ensuring the generation of Verified Carbon Units without any instances of double counting.
- To verify the accuracy, completeness, consistency, transparency, and absence of significant errors or omissions in the reported data by examining monitoring records and emissions reduction calculations.
- To ensure that the actual monitoring systems and procedures align with those described in the monitoring plan.
- To assess the GHG emission reduction data and provide a conclusion with a reasonable level of assurance regarding the absence of material misstatements.
- To verify that reported GHG emission data is sufficiently supported by evidence.

Verification was conducted using VKU's procedures in line with the requirements specified in the VCS Program Guide version 4.4/8/, VCS Standard Version 4.6/9/, VCS Validation and Verification Manual version 3.2/10/, CDM M&P, the latest version of the CDM Validation and Verification Standard 3.0/11/, and relevant decisions of the COP/MOP and the CDM EB viz., the requirements of Article 12 of the Kyoto Protocol, the CDM Modalities and Procedures as agreed in the Marrakech Accords under decision 3/CMP.1, the annexes to this decision, subsequent decisions and guidance made by COP/MOP & CDM Executive Board and other relevant rules, including the Host Country (India) legislation. Furthermore, standard auditing techniques were applied throughout the verification process.

The verification process included inter alia a desk review, on-site assessment and the resolution of outstanding issues and the issuance of the final verification report. This comprehensive verification is aimed to ensure that the reported emission reductions are thorough and precise, aligning with the relevant VCS requirements, thus enabling the project to obtain certification.

VKU diligently followed the rule-based approach during the verification process, ensuring strict adherence to the applicable VCS requirements. The verification encompassed a comprehensive assessment of the project activity's operations, monitoring procedures, and GHG emission reduction calculations.

During this ninth verification, it is to note that as a result of assessment, a total of **(07)** findings were identified, comprising of **(05) Corrective Action Request (CARs); (02) Clarification Requests (CLs) and (00) Forward Action Requests (FAR).** All the raised findings were successfully resolved/closed after necessary corrections/clarifications by the client. The same has been discussed in Appendix 3 of this verification report.

The assessment team ensured that the reported emission reductions are complete and accurate by verifying 100% of the data with the supporting documents and evidences made available to the assessment team, This was performed during desk review and also during site visit by conducting personnel interviews and focussed group discussions along with verification of data present on-site in accordance with applicable VCS requirements to be certified therefore the assessment team has detected no further uncertainties.

The GHG emission reductions were calculated based on the approved methodology ACM0002, Version 17.0: Grid-connected electricity generation from renewable sources /12/, Tool for the demonstration and assessment of additionality; Version 07.0/20/ and Tool to calculate the emission factor for an electricity system; Version 05.0 /19/ and the monitoring plan included in the registered VCS Joint PD & MR version 02 dated 06-February-2017/3/

Verification Conclusion:

Based on VKU's thorough assessment, it is their professional judgment that the project activity **"Wind Bundle Project in Maharashtra by Sispara"** (VCS ID 1660) fully complies with the applicable requirements of VCS Standard version 4.6 /9/ and associated guidelines. The project has successfully implemented the designated baseline and monitoring methodology outlined in ACM0002: Grid-connected electricity generation from renewable sources- Version 17.0 /12/.

The monitoring system in place is found to be effective and reliable, ensuring reasonable level of assurance allowed by the VCS standards without any significant discrepancies. As a result, VKU is able to objectively state that the project has achieved an emission reduction of **69,695 tCO_2e** during the ninth verification for monitoring period, which spans from **01-January-2023 to 31-December-2023 (Inclusive of both start and end dates)** of fixed crediting period of 10 years (from 13-February-2015 to 12-February-2025; Including both dates). This certification affirms the project's substantial contributions towards mitigating greenhouse gas emissions.

CONTENTS

1 INTRODUCTION

1.1 Objective

Sispara Renewable Power Pvt. Ltd. (hereafter referred as PP) commissioned VKU Certification (here after referred as VKU) to carry out ninth verification of the project "**Wind Bundle Project in Maharashtra by Sispara"** (VCS ID 1660) project in India for the period from **01-January-2023 to 31-December-2023** (Inclusive of both start and end dates) under fixed crediting period from 13-February-2015 to 12-February-2025 (Inclusive of both dates).

The objective of the verification is to have an independent evaluation of a project activity by an accredited validation and verification body against the requirements of the VCS Program Guide Version 4.4 /8/, VCS standard version 4.6 /9/ and GHG program applied, on the basis of the registered VCS Joint PD & MR version 02 dated 06-February-2017/3/.

This is the ninth verification under **fixed crediting period of 10 years from 13-February-2015 to 12-February-2025**, (Inclusive of both dates) for a period of twelve months i.e., from **01-January-2023 to 31-December-2023** (Inclusive of both start and end dates). The project activity adopts fixed crediting period of 10 years period as mentioned in section 1.6 of VCS Joint PD & MR version 02 dated 06-February-2017/3/.

Table No 01: Number and time period of Verification under fixed crediting period of 10 years

1st Crediting Period Audit Trail			
Audit Type	**GHG Programme**	**Monitoring Period (Inclusive of both dates)**	**Number of years**
Joint Validation and 1st Verification	VCS	13-February-2015 to 31-December-2016	1 Year 10 months 19 days
2nd Verification	VCS	01-January-2017 to 30-September-2017	00 Years 9 months 00 days
3th Verification	VCS	01-October-2017 to 31-August-2018	00 Years 11 months 00 days
4th Verification	VCS	01-September-2018 to 31-October-2019	1 year 2 months 00 days
5th Verification	VCS	01-November-2019 to 31-October-2020	1 year 00 months and 00 days
6th Verification	VCS	01-November-2020 to 31-August-2021	00 Years 10 months 00 days
7th Verification	VCS	01-September-2021 to 30-April-2022	00 Years 8 months 00 days

8th Verification	VCS	01-May-2022 to 31-December-2022	00 Years 8 months 00 days
9h Verification (Current Monitoring Period)	VCS	**01-January-2023 to 31-December-2023**	01 Years 00 months 00 days
Total	**VCS**	**13-February-2015 to 31-December-2023**	**8 years, 10 months, 19 days**

The verification will be performed by review of evidences & documents submitted to the VKU Assessment Team by PP, for the registered project activity to establish that:

- The project activity has been implemented and operated in strict adherence to the registered VCS Joint PD & MR version 02 dated 06-February-2017 /3/ & MR /1/ and that all physical features (technology employed, technical specifications/30/ of the WTGs, project equipment's, metering and monitoring protocols) of the project are in place.
- The monitoring report/1/ and accompanying documentation have been carefully compiled and are comprehensive in nature.
- The data has been properly recorded and stored in accordance with the prescribed monitoring methodology outlined in "ACM0002: Grid-connected electricity generation from renewable sources" - version 17.0 /12/ and approved monitoring plan.

The verification process aimed to confirm the seamless implementation and full functionality of the monitoring system, ensuring the accurate generation of Verified Carbon Units (VCUs) without any instances of double counting/28/. Additionally, a thorough examination of the monitoring records and emissions reduction calculations has been carried out to ensure the reported data is complete, consistent, transparent, and free from significant errors or omissions. This aims to establish the reliability and integrity of the data.

1.2 Scope and Criteria

The scope of this verification is independent, objective review and ex-post determination of the monitored reductions in GHG emissions from the **"Wind Bundle Project in Maharashtra by Sispara"**. The verification of this project is based on the validated & registered VCS Joint PD & MR version 02 dated 06-February-2017/3/ & monitoring report/1/ along with supporting documents submitted by the project proponent to the VKU assessment team. The documents thus submitted to the VKU Assessment Team were reviewed against the following guidance & protocols:

i) VCS Programme Guide (Version 4.4) /8/
ii) VCS Standard (Version 4.6) /9/
iii) VCS Program Definitions (Version 4.5) /6/
iv) VCS Registration & Issuance Process (Version 4.5) /7/

v) VCS validation and verification manual (Version 3.2)/10/
vi) CDM Approved methodology ACM0002 (Version 17.0) /12/
vii) Tool to calculate the emission factor for an electricity system (Version 05.0) /19/
viii) Tool for the demonstration and assessment of additionality, (Version 07.0) /20/
ix) CDM Validation and Verification Standard (Version 3.0)/11/

The steps involved are as follows:

- To assess the project's compliance with other relevant rules including the host country (India) legislation.
- To confirm that the monitoring system is implemented and fully functional to generate verified carbon units without any double counting
- To verify that actual monitoring systems and procedures are in compliance with the monitoring systems and procedures described in the monitoring plan.
- To evaluate the GHG emission reduction data and express a conclusion with a reasonable level of assurance about whether the reported GHG emission reduction data is free from material misstatement is sufficiently supported by evidence.
- The verification process ensures that the reported emission reductions are comprehensive and accurate in order to obtain certification.

The verification method and criteria encompassed several phases, including

(i) Desk review of registered VCS Joint PD & MR Version 02 dated 06-Februaury-2017/3/ and other supporting documents listed in **Table-06;**
(ii) Interviews & Focussed Group Discussions with Stakeholders & PP representatives involved in project's implementation during onsite visit of project/37/.
(iii) Independent Internal Technical Review
(iv) VKU's Completeness/Quality Check, and
(v) Final issuance of the verification report.

Outstanding issues found during assessment process have been resolved, leading to the issuance of the final verification report and the relevant VCS Verification Deed of Representation.

1.3 Level of Assurance

All the revisions of the verification report before being submitted to the client were subjected to an independent internal technical review to confirm that all verification activities had been completed according to the pertinent VKU's procedure, with a "Reasonable level of assurance", as per section 04 clause 4.1.2, 4.1.10 and clause 4.1.24 of the VCS standard version 4.6/9/.

The verification report is based on the Monitoring report/1/, ER Sheet/2/ registered VCS Joint PD & MR version 02 dated 06-Februaury-2017 /3/ & supporting documents that were made available to the VKU's assessment team references provided in table-06 and information collected through performing interviews/37/ with PP Representatives/Local Stakeholders during on-site visit.

The technical review was performed by a technical reviewer(s) qualified in accordance with VKU's qualification procedure. The assessment team and the technical reviewers consist of the following personnel.

Table No 02: The Assessment Team comprises of

Role/Qualification of Assessment Team	Last Name	First Name
VCS Team Leader, Technical Expert T.A 1.2, (Local Expert – Country: India)	Chauhan	Shivani
Validator/Verifier	Dhankar	Anil
Project Trainee	Singh	Shreea

Table No 03: The Technical Reviewer Team comprises of:

Role/Qualification of Technical Team	Last Name	First Name
Technical Reviewer & Technical Expert T.A 1.2	Kathuria	Sunil

1.4 Summary Description of the Project

Project Overview:

The project activity involves electricity generation by renewable source (Wind energy) and supplying the generated electricity to the state grid system i.e., Maharashtra State Electricity Distribution Company Limited (MSEDCL), which falls under the Northern, Eastern, Western and North-Eastern regional grids (NEWNE) grid of India, now Unified Indian Grid. The spatial extent of the project boundary is the NEWNE (Now Unified Indian Grid) located in different villages of Satara and Sangli district of Maharashtra State, India.

Energy Source & Project Nature:

This is a greenfield project activity i.e., there had been no renewable energy-based electricity generation facility at site of this project and equivalent amount of electricity would have been supplied by fossil-fuel dominated grid – which is pre-project scenario as well as baseline scenario for this project activity. The project activity ensures the reduction of greenhouse gas (GHG) emissions that are real, measurable and verifiable and also plays beneficial role in the mitigation of climate change.

The bundled project activity involves installation of 35.5 MW capacity wind power generation project out of which 12 MW by M/s Sispara Renewable Power Private Limited, 6 MW by M/s Kalsubai Power Private Limited, 10 MW by M/s Nilgiri Power Private Limited and 7.5 MW capacity wind power generation project by M/s NSL Wind Power Company (Sayamalai) Pvt. Ltd. in various villages of Satara and Sangli district of Maharashtra State, India. M/s Sispara Renewable Power Private Limited is the Project Proponent of the project activity.

The total capacity of the project activity when it got commissioned was 35.5 MW. The 1st machine (WTG) was commissioned on 13-February-2015 and is functioning successfully since then and dates are verified against registered VCS Joint Project Description and Monitoring Report version 02 dated 06-February-2017/3/ and commissioning certificates/29/.

The project proponent also proposed to develop the projects under CDM but have not taken further in CDM, and only pursued under VCS.

This bundled project activity involves installation and operations of 22 numbers of two type Wind turbine generators (WTGs). The 17 WTGs are of Vensys V87 type with rated capacity of 1500kW each, supplied by ReGen Power Tech Pvt. Ltd. and the 5 WTGs are of WT 2000 DF type with rated capacity of 2000kW each, supplied by INOX WIND Ltd. The entire project is in continuous operation since its date of commissioning of the respective machines, as witnessed by the assessment team during onsite visit & which was verified against the registered VCS Joint PD & MR/3/ previous Verification report /5/ and commissioning certificates/29/ which were submitted by PP to the assessment team as a response to the feedback raised by the assessment team during verification assessment as per section 3.26 and clause 3.26.3 of the VCS Standard version 4.6/9/. it is an obligation for the project proponent to make available to the validation and verification body the required supporting documents.

Start date of this project activity is earliest date of commissioning of the 1st machine (WTG) of project activity i.e., on 13-February-2015 and the project was fully commissioned on date of commissioning of last machine (22th WTG) i.e., 31-October-2015.

Hence VKU in adherence to the section 3.1, clause 3.1.8 of the VCS Standard version 4.6/9/ conforms that the capacity of the project has been verified from the commissioning certificates/29/ and also verified during site visit while interviewing the site personnel.

Table 04: By implementing the project activity, the following GHG sources of emissions are reduced/avoided:

Baseline/Source	Generation of electricity by fossil fuel- dominated grid connected power plants
Project Equipment/Sink	The avoidance of GHG emission into the atmosphere is due to generation of electricity by renewable means i.e., Wind Turbine Generators of this project and exporting to Unified Indian Grid which is in line with 3.1.1 of ISO:14064-2/43/ Renewable Energy Projects do not create sinks, they avoid emissions through their technology i.e., Through installed Wind Power Project.
Baseline GHG emission source reduced/avoided	CO_2 emissions from fossil fuels and other fuel fired grid connected plants/projects.

As per MR/1/, the electricity generated from the project is supplied to the state grid system which is under the purview of the NEWNE Grid which is confirmed from registered VCS Joint Project Description and Monitoring Report version 02 dated 06-February-2017/3/, Group credit notes issued by MSEDCL (Maharashtra State Electricity Distribution Co. Ltd.) and Invoices raised by PP to MSEDCL (Maharashtra State Electricity Distribution Co. Ltd.) /27/ and last verification report/05/ and interview with PP/37/.

Table 05: Plant Capacity

Project Developer	Number of WTG	Supplier of WTG	Rated Capacity	Total Installed Capacity	Location
M/s Sispara Renewable Power Private Limited	8	Regen Powertech Private Limited	1.5 MW	12 MW	Villages: Puklewadi & Chilarewadi, Taluka: Maan District: Satara State: Maharashtra Country: India
M/s Kalsubai Power Private Limited	4	Regen Powertech Private Limited	1.5 MW	6 MW	Villages: Virali & Puklewadi, Taluka: Maan District: Satara State: Maharashtra Country: India
M/s Nilgiri Power Private Limited	5	INOX	2.0 MW	10 MW	Villages: Valsang , Untwadi & Rawalgundwadi, Taluka: Jath District: Sangli State: Maharashtra Country: India
M/s NSL Wind Power Company (Sayamalai) Pvt. Ltd.	5	Regen Powertech Private Limited	1.5 MW	7.5 MW	Villages: Sahyadrinagar & Waki, Taluka: Jawali District: Satara State: Maharashtra Country: India
Total Project Capacity				**35.5 MW**	

This information has been verified during on site assessment /36/and found to be in line with the details provided in the registered VCS Joint PD & MR version 02 dated 06-February-2017/3/. The net electricity generated by the project activity that was evacuated to the grid during the current monitoring period (9th monitoring period) from **01-January-2023 to 31-December-2023** (inclusive of both the dates) is **71,358.10 MWh.** The total emission reductions achieved in this monitoring period i.e., from **01-January-2023 to 31-December-2023** (inclusive of both the dates) is **69,695 tCO_2e.**

2 VERIFICATION PROCESS

The registered VCS project **"Wind Bundle Project in Maharashtra by Sispara"** (VCS ID 1660) is undergoing ninth periodic verification of fixed crediting period under VCS with VKU Certification Pvt Ltd from **01-January-2023 to 31-December-2023**, inclusive of both dates.

The approach adopted to ensure the quality of emission reductions is described in the following sections.

2.1 Method and Criteria

Verification was conducted using VKU's procedures in line with the requirements specified in the VCS Requirements, i.e., VCS Program Guide Version 4.4 /8/, VCS standard document version 4.6 /9/. The project activity does not fall under category "grouped projects", hence no sampling methods was employed by the assessment team and during onsite visit /36/. Assessment team reviewed 100% data for all the Wind Turbine Generators involved in this project at site for the verification of GHG emission reductions generated by the project.

- The GHG emission reductions are based on the approved Baseline and monitoring methodology ACM0002 "Grid-connected electricity generation from renewable sources" Version 17.0 /12/
- Scope: 01 - Energy Industries (renewable /non-renewable sources)
- Project type: Type I - Renewable energy projects
- The project activity is a bundled project activity
- This is not a grouped and also a non-AFOLU project.

Tools used for GHG Calculations are as follows as per registered VCS Joint PD & MR /3/:

- Tool to calculate the emission factor for an electricity system, Version 05.0 /19/

Keeping in line with ISO (14064-3; 2019/40/ clause 06 & 14065-2020/41/, clause 09) Standard guidelines assessment team has framed down the process for completing the verification and has followed the same throughout the execution of audit of the said project VCS 1660.

The verification consisted of the following phases.

1. **Planning and Intimation to VERRA about site visit:** The assessment team plans the GHG-programme site visit and starts with a desk review. Assessment team also shared a NOVS Notice of Validation/Verification Services (NOVS) Form and submit it to auditing@verra.org, 15 business days before the initial meeting with the project proponent.

2. Decision to take site visit was based on independent risk assessment, as defined in section 4.1.13 of VCS standard version 4.6/9/

3. **Strategic Analysis:** Assessment team performed strategic analysis to understand the activities and complexity of the project and to determine the nature and extent of the verification activities. The results of the strategic analysis shall be used in the risk assessment.

4. **Risk Assessment;** Assessment team performed risk assessment of the GHG statement to identify the risk of a material misstatement or nonconformity with the criteria

5. **Evidence Gathering Activities;** Using a risk-based approach assessment team prepared evidence gathering activities, to collect sufficient and appropriate evidence upon which the conclusion shall be based. It will also determine whether the GHG statement conforms to the criteria, taking into account the principles of the standards or GHG programme that apply to the GHG statement.

6. **Evidence Gathering Plan;** The evidence-gathering plan is prepared based on the results of the VKU's Assessment Team's risk assessment. It was designed to lower the verification risk to an acceptable level. The evidence-gathering plan thus specify the type and extent of evidence-gathering activities
7. Need for site visit is identified and site visit is planned.
8. **Audit and Sampling Plan:** An audit plan is prepared, including all sub-elements required for an integrated verification process aligned with the contract, scope, objectives, level of assurance and materiality.
9. **Client Confirmation and Approval:** The site visit audit plan is sent to the client for review and confirmation via email.
10. **Document Review:** Relevant documents, such as the previous verification report, monitoring plan, methodology, VCS Joint PD & MR and QA/QC procedures are thoroughly reviewed.
11. **On-Site Assessment:** This includes interviews and evaluation of the actual project scenario.
12. **Resolution of Discrepancies:** Any non-conformities identified during the assessment are addressed and resolved.
13. **Independent Review:** A technical reviewer provides an independent assessment.
14. **Final Verification:** After completeness/quality checks, the verification report and certification are issued.

The following sections outline each step in more detail.

2.2 Document Review

During document review, VKU has applied standard auditing techniques to assess the quality of information provided. The verification was performed primarily based on the review of VCS monitoring report for **"Wind Bundle Project in Maharashtra by Sispara"** version 1.0 dated 15-March-2024, Version 1.1 dated 23-June-2024 and version 1.2 dated 14-July-2024/1/ and the emission reduction calculations spreadsheet for **"Wind Bundle Project in Maharashtra by Sispara"** version 1.0 dated 23-June-2024 and version 1.1 dated 14-July-2024/2/ were assessed

as part of the verification. In addition, the registered VCS Joint PD & MR version 02 dated 06-February-2017/3/ has been specifically referred for baseline estimations and the monitoring plan for the project was reviewed. The following **table-06** lists the documentation that was reviewed during the verification.

As per section 3.26 and clause 3.26.3 of the VCS standard version 4.6/9/ it is an obligation for the project proponent to make available to the assessment team the required supporting documents and data needed to support statements and data as documented in the monitoring report. Thus, the assessment team reviewed the following documents during verification:

Table No: 06; Lists of the documentation that were reviewed during the current verification:

Current Verification Reference Documents	
/1/	M/s. NSL Renewable Power Private Limited: VCS Monitoring Report for "Wind Bundle Project in Maharashtra by Sispara" in India, • Version 1.0 dated 15-March-2024 • Version 1.1 dated 23-June-2024 • Version 1.2 dated 14-July-2024
/2/	M/s. NSL Renewable Power Private Limited: Emission Reduction Calculation Spreadsheet, • Version 1.0 dated 23-June-2024 • Version 1.1 dated 14-July-2024
Background Documents/Weblinks	
/3/	Registered VCS Joint PD & MR- for the project "Wind Bundle Project in Maharashtra by Sispara" version 02 dated 06-February-2017
/4/	LGAI Technological Center, S.A (Applus+ Certification): VCS Joint Validation and verification- Report:"Wind Bundle Project in Maharashtra by Sispara", Version 01, dated 21-March-2016
/5/	VKU Certification Pvt. Ltd.: Verification Report: "Wind Bundle Project in Maharashtra by Sispara", Version 1.1, dated 21-December-2023
/6/	VCS Program Definitions (Version 4.5) dated 16-April-2024
/7/	VCS Registration & Issuance Process (Version 4.5) dated 16-April-2024
/8/	VCS: VCS Program Guide, version 4.4 dated 29-August-2023
/9/	VCS Standard, version 4.6 dated 21-March-2024
/10/	Validation and verification manual version 3.2 dated 19-October-2016
/11/	CDM Validation and Verification Standard version 3.0 dated 09-September-2021

/12/	CDM Executive Board: Baseline and Monitoring Methodology "ACM0002: Grid-connected electricity generation from renewable sources- Version 17.0
/13/	VERRA: Project search
/14/	UNFCCC: Project search
/15/	Renewable Energy Certificate Registry of INDIA - Registered RE Generator List (recregistryindia.nic.in)
/16/	I-REC Standard - The International REC Standard Foundation (irecstandard.org)
/17/	Gold Standard Foundation
/18/	EIA NOTIFICATION dated 14-September-2006
/19/	Tool to calculate the emission factor for an electricity system, Version 05.0
/20/	Tool for the demonstration and assessment of additionality, Version 07.0.0
/21/	CO_2 Baseline Database for the Indian Power Sector
/22/	Ministry of Environment, Forest and Climate Change (MoEF&CC) Notification dated 14-September-2006 (S.O. 1533(E)
Reference/Supporting documents submitted by PP to VVB	
/23/	Wind Energy Purchase Agreements between • Between M/s Sispara Renewable Power Private Limited and Maharashtra State Electricity Distribution Co. Ltd. (MSEDCL) for 12 MW, • Between M/s Kalsubai Power Private Limited and Maharashtra State Electricity Distribution Co. Ltd. (MSEDCL) for 6 MW, • Between M/s Nilgiri Power Private Limited for 10 MW and Maharashtra State Electricity Distribution Co. Ltd. (MSEDCL) and • Between M/s NSL Wind Power Company (Sayamalai) Pvt. Ltd. and Maharashtra State Electricity Distribution Co. Ltd. (MSEDCL) for 7.5 MW
/24/	Certificates of Calibration for all the energy meters for the project activity active during current monitoring period (01-January-2023 to 31-December-2023, inclusive of both start and end dates) issued by Maharashtra State Electricity Distribution Co. Ltd. (MSEDCL).
/25/	NSL Policies • NSL Policy Document: Commitment to Gender sensitivity, non-discrimination, anti- harassment, employee & stakeholders' welfare and work life balance version 01 dated 15-Novemeber-2023 • NSL Policy Review Statements for the month of December 2023, February 2024 & May 2024

/26/	JMRs & Credit Notes Issued by Maharashtra State Electricity Distribution Co. Ltd. (MSEDCL) to PPs
/27/	Invoices issued by PP to DISCOM i.e., Maharashtra State Electricity Distribution Co. Ltd. (MSEDCL) and LCS Meter Readings
/28/	Letter of declaration dated 23-May-2024 from PP regarding not having created or sought any other form of environmental credit for the current verification period (01-January-2023 to 31-December-2023, inclusive of both start and end dates)
/29/	Commissioning Certificates of all 22 Machines (Wind Turbine Generators) of the project activity issued by Maharashtra State Electricity Distribution Co. Ltd. (MSEDCL).
/30/	Technical Specifications of Wind Turbine Generators (WTGs) of "Wind Bundle Project in Maharashtra by Sispara." project as specified by manufacturer ReGen Power Tech Private Limited and INOX Wind Private Limited.
/31/	Grievance Register/Grievance-Resolution Letters present on project implemented site; more information related to the same has been included in Section 4.2 of this report
/32/	Tripping/Breakdown Details
/33/	Monthly Generation Reports/PLF Details from SCADA
VVB Documents used during Current Verification	
/34/	GPS Google earth software used for Location; Google Earth Pro
/35/	GPS Map Camera: Geotag Photos & Add GPS Location
/36/	Onsite visit on 10-April-2024 to Project implemented site i.e. Satara and Sangli district of Maharashtra State, India. On-site Visit Photographs/Evidences
/37/	Personnel Interviews and Focussed Group Discussions during onsite visit dated 10-April-2024 detailed in section 2.3 of this report.
/38/	VKU-Attendance Sheet of Onsite Audit_ VKU.VER.176.23_VCS_1660
/39/	VKU-Audit and Sampling Plan_ VKU.VER.176.23_VCS_1660
/40/	ISO 14064-3:2019: Greenhouse gases — Part 3: Specification with guidance for the verification and validation of greenhouse gas statements
/41/	ISO 14065:2020: General principles and requirements for bodies validating and verifying environmental information
/42/	ISO/IEC 17029:2019: Conformity assessment — General principles and requirements for validation and verification bodies

/43/	ISO 14064-2:2019: Greenhouse gases; Part 2: Specification with guidance at the project level for quantification, monitoring and reporting of greenhouse gas emission reductions or removal enhancements

2.3 Interviews

An on-site inspection /36/ has been performed by the VKU assessment team (VKU). The representatives of the PP were interviewed personally on 10-April-2024; i.e., Tables 07 & 08 provide a comprehensive overview of the onsite interview process/37/ conducted during the verification. The interviews specifically targeted individuals responsible for monitoring the project activity, data collection and management, as well as those involved in the quality assurance and quality control (QA/QC) procedures. The tables serve to identify the individuals interviewed and provide relevant information regarding their roles within the project. key personnel interviewed during the opening meeting and closing meeting session of the onsite audit, and the main topics of the interviews are summarized in the table below:

Table No: 07: Details of Personnel Interview/Focussed Group Discussion

S.No	Name	Gender	Designation	Topic of Discussion
1	Abhay Yadav	Male	AGM O&M NSL Power	• Implementation of the project, Baseline emission, • Emission reduction calculation, • Technical description of the project and monitoring along with QA/QC • SCADA, Breakdown details and maintenance of generation records • Data recording, management and archiving procedure
2	Kiran Shinde	Male	Senior Engineer NSL Power	
3	Mithun	Male	Engineer NSL Power	
4	Roshan Badge	Male	Renom Energy Services Pvt. Ltd.	
5	Tanaji Pawar	Male	Renom Energy Services Pvt. Ltd.	

The topics covered during interview ranges from general features and implementation of project to technical details of the project like calibration details, monitoring and measuring system and data collection, recording, emergency procedures and data archiving procedures. The

assessment was based on the feedback received during onsite interview/37/ coupled with the documentation.

During Onsite Visit/36/, Assessment team also interviewed the local stakeholders/37/ involved in the projects to verify the implementation of grievance mechanism and process of grievance resolution mentioned in the Monitoring report/1/ (refer section 2.1 of MR/1/) by the PP. The assessment team confirmed the sustainable development claims and assessed the socio-economic impact of the project on the local community. Assessment team also checked the records and observed that the PP provided opportunities for the locals to express their opinions and grievances, with efforts to resolve any issues through consultation with stakeholders. Assessment team thus verified all the above statements via focussed group discussions and personal interview/37/ with stakeholders as tabulated below:

Table No: 08: Details of Personnel Interview/Focussed Group Discussion with Stakeholders

S.no	Name	Gender	Category	Topic of Discussion
1	Sachin Parni	Male	Local Stakeholder	• Execution of Project activity and its impact on the economic, social and environmental parameters on the local people of the area & around the situated project activity • The ongoing communication procedure and the address of their grievance mechanism followed by the project proponent • Scope and generation of employment in the locality due to the implementation of said project activity in the area. • The ongoing trainings provided to the locals for self-employment.
2	Ramdas Chalke	Male		

The VKU Assessment Team meticulously documented the information obtained during the interviews with site personnel /37/. This data was recorded using VKU's dedicated form, specifically VKU.F46W, known as the Attendance Sheet of Onsite Audit/38/ Through a comprehensive process involving documentation, desk review, document verification, and interviews with site personnel and local stakeholders, VKU Assessment Team affirms that no negative comments have been received during the current monitoring period. For further details, please refer to section 4.2.4 below.

2.4 Site Visits

Site Location visited:

Location: near Village – Satara and Sangli district of Maharashtra State, India. Further the location along with longitude and latitude is mentioned in section 4.1 of this report.

Decision to take site visit was based on independent risk assessment, as defined in section 4.1.13 of VCS standard version 4.6/9/

An On-site visit has been undertaken by the assessment team to the project location identified in the MR/1/ at Satara and Sangli Districts of State- Maharashtra, India on 10-April-2024/36/, to carry out the following;

- An assessment of the implementation and operation of the registered project activity as per the registered VCS Joint PD & MR version 02 dated 06-February-2017/3/ and VCS MR/1/.
- A review of information flows that have been used to generate, aggregating and reporting of the monitoring parameters.
- Interviews/37/ with relevant personnel to determine whether the operational and data collection procedures are implemented in accordance with the monitoring plan in the registered VCS Joint Project Description & Monitoring Report version 02 dated 06-February-2017/3/.
- A cross check between information provided in the monitoring report and data from other sources such as plant generation log books, inventories, purchase records or similar data sources.
- A check of the monitoring equipment including LCS meter, Energy meter & calibration meter performance and observations of monitoring practices against the requirements of the VCS Joint PD & MR version 02 dated 06-February-2017/3/ applied methodology including applicable tool(s), and wherever applicable the applied standardized baseline.
- A review of calculations and assumptions made in determining the GHG data and emission reductions.
- 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 phase of the verification is to resolve any outstanding issues which need to be clarified for VKU's positive conclusion on project description. To guarantee transparency a verification protocol has been customized for the project. The protocol shows in a transparent manner the requirements, means of verification and the results from verifying the identified criteria. The verification protocol consists of three situations in tables; the different columns in these tables are described below.

A corrective action request (CAR) is raised if one of the following occurs:

- Non-conformities with the monitoring plan or methodology are found in monitoring and reporting, or if the evidence provided to prove conformity is insufficient.

- Mistakes have been made in applying assumptions, data or calculations of emission reductions that will impair the estimate of emission reductions.
- Issues identified in a FAR during previous assessment i.e., in validation or verification report to be cross verified during verification have not been resolved by the project participants.

A clarification request (CL) is raised if information is insufficient or not clear enough to determine whether the applicable VCS requirements have been met.

A forward action request is also raised in cases where any required deviation/information is not fulfilled in current verification and thus needs to be taken up in consequent verification for better transparency thus holding the applicability of the methodology eligible to the project activity and there is no impact of the same on additionality, baseline scenario & emission reduction calculation of project.

Keeping in line with the VCS standard version 4.6, Clause 4.1.21 Assessment team has documented a summary of total **07 Findings** (***00 FARs, 02 CLs and 05 CARs)*** were raised during this verification which were closed successfully and details are provided under Appendix 3 of this report.

2.5.1 Forward Action Requests

Based on the review of the VCS Joint Validation & Verification Report/4/ and previous VCS Verification Report /5/, no FAR was raised during Joint Validation & Verification and previous Verification which needs to be closed during this verification and **no FAR has been raised during current verification, (01-January-2023 to 31-December-2023; Inclusive of both start and end dates).**

2.6 Eligibility for Validation Activities

VKU has not undertaken any validation activities as part of the verification hence this section is not applicable.

3 VALIDATION FINDINGS

The registered VCS project **"Wind Bundle Project in Maharashtra by Sispara"** (VCS ID 1660) is undergoing ninth periodic verification of fixed crediting period under VCS with VKU Certification Pvt Ltd from **01-January-2023 to 31-December-2023** (both dates included). The fixed crediting period start from **13-February-2015 to 12-February-2025** (both dates included).

This project activity is a bundled project activity. Throughout the current monitoring period, no instances of methodology deviation or project description deviations have been identified. However, there are some deviations from previous verifications (7th monitoring period) which have already been approved and carried forward into the current verification. The project does not undergo baseline reassessment during the current monitoring period.

3.1 Methodology Deviations

No instances of methodology deviation have been identified throughout the current monitoring period from **01-January-2023 to 31-December-2023** (Inclusive of both start and end dates), signifying the adherence and compliance of the project to the prescribed methodologies. Furthermore, it is noteworthy that no methodology deviations were observed during the Joint Validation & Verification and previous VCS Verification processes which were confirmed from the VCS Joint Validation & Verification report /4/ and previous VCS Verification report/5/.

3.2 Project Description Deviations

There is no Project description deviation requested by PP during current monitoring period i.e., **01-January-2023 to 31-December-2023** (Inclusive of both the days).

The following deviation were reported and approved during the previous monitoring periods (7th MP) and will be considered in subsequent verifications. Description of the deviation and the assessment on conservativeness of the deviations is provided below:

Deviation: In seventh Monitoring Period from 01-September-2021 to 30-April-2022 (Inclusive of both start and end dates), there has been a change in the Feeder number and Billing Meter for M/s Nilgiri Power Private Limited, M/s Sispara Renewable Power Private Limited & M/s Kalsubai Power Private Limited.

1. The billing meters for both M/s Sispara Renewable Power Private Limited & M/s Kalsubai Power Private Limited are installed at Feeder No. 01 & Feeder no 05 at 220/33 kV Hiwarwadi S/Stn

2. The billing meters for M/s Nilgiri Power Private Limited are installed at Feeder no 04, Feeder no 05 & Feeder no 08 at 220/33KV Shedyal S/Stn

It is to note that from seventh Monitoring Period the above stated Feeder change will be followed by PP and the energy meter installed at these meters will be used for billing purposes and calculation of net electricity exported to the grid. It is to be also noted that the feeder change/meter change is not in control PP, MSEDCL (Maharashtra State Electricity Distribution Co. Ltd.) is solo entity for this change.

During seventh Monitoring Period there has been no delay in calibration since the calibration frequency for calibration is once in three years. The respective date of calibration is mentioned in section 4.4 of this report.

Hence, it can be confirmed from the above explanation that the deviation does not have an impact on the applicability of the methodology, additionality or the appropriateness of the baseline scenario. The project has duly reported the changed feeder numbers in the Emission Reduction (ER) sheet, and they have been included in Appendix 03 of the monitoring report of 7th Monitoring period 01-September-2021 to 30-April-2022 (inclusive of both days).

During an onsite visit, the VKU assessment team verified the feeder numbers, billing meters and also conducted interviews with the site personnel to confirm the number of the WTGs connected to specific feeders. The assessment team also cross-checked the last verification reports and Joint Monitoring Reports (JMRs) issued by MSEDCL, which specify the updated feeder numbers.

The assessment team has acknowledged and accepted the deviation, affirming that the project remains fully compliant with the VCS rules. Furthermore, it is important to note that this deviation has no impact on the applicability of the methodology, the concept of additionality, or the appropriateness of the baseline scenario. The project continues to meet all relevant requirements and remains in adherence with VCS guidelines. Since there is no delay in calibration and calibration is as per registered frequency i.e., Once in three years.

The change of feeder number & billing meter has been identified as a project deviation in accordance with the guidance outlined in Section 3.6.1 of VCS standard v.3.7 & section 3.21.2 Para 2 of VCS standard v.4.5 & VCS standard v.4.6.

The VKU Assessment Team conducted the assessment of feeders & billing meters, confirming that they possess mentioned no. of meters in specific feeders. During an onsite visit for current monitoring period, they further verified the details with site personnel. These findings were corroborated by the previous monitoring report, as well as the JMRs. The VKU assessment team deems this information to be accurate and acceptable.

3.3 New Project Activity Instances in Grouped Projects

This is not a grouped project. Therefore, this section is Not Applicable.

3.4 Baseline Reassessment

Did the project undergo baseline reassessment during the monitoring period?

☐ Yes ☒ No

4 VERIFICATION FINDINGS

4.1 Project Details

Based on the onsite audit conducted by assessment team with the project proponent (PP) representative, it was determined that the project is implemented as per the requirement outlined in the registered VCS Joint PD & MR /3/ and approved monitoring plan. The project activity is a wind energy project with total installed 22 WTGs with total capacity of 35.5 MW, comprising of 17 Wind Turbine Generators (WTGs) of rated capacity 1.5 MW each of Regen Powertech and 5 Wind Turbine Generators (WTGs) of rated capacity 2 MW each INOX WIND, commissioned/29/ from 13-February-2015 to 31-October-2015. The project start date is 13-February-2015 which is confirmed with the registered VCS Joint PD & MR/3/ and MR/1/ and the commissioning certificates of the WTGs/29/

Wind is the main source of power generation. The power generated from the wind turbine generators (WTGs) was exported to regional grid which falls now under Unified under Indian Grid system[1]. The Project WTGs are currently operational and during the current monitoring period (01-January-2023 to 31-December-2023; Inclusive of both the days), no unforeseen incidents or events occur that could significantly impact the operation of the project activity were identified, with the exception of scheduled maintenance and lull hours.

The total duration of these breakdowns (Machine breakdown Hours + Grid Breakdown hours + Force Majeure + Load Shedding) were calculated to be **22,068.68 hours**/32/. It is important to note that these breakdowns have minimal impact on the project activity's reduction of greenhouse gas (GHG) emissions or the monitoring methodology employed. There was some unexpected downtime of some WTGs & due to routine maintenance & breakdown of some WTGs due to generator failure and other reasons. etc.

[1] Before April 2016, the Indian electricity system was divided into two grids, the NEWNE and Southern Grid. These are now integrated as a single “Indian Grid” covering all the states.

Table no: 09: Breakdown Hours for the current Monitoring Period
(01-Januray-2023 to 31-December-2023)

Monitoring Period 01-January-2023 to 31-December-2023	Total available production hours for project activity=A (No. of days in the month* 24 hours *No. of WTGs) (Hours)	Machine Breakdown Hours =B	Grid Breakdown Hours = C	Lull Hours= D	% of Lull Hours (D/A*100)	Force majeure =E	Load shedding (under voltage) = F	Actual Production Hours (A-B-C-D-E-F) = G	% of Actual Production Hours (G/A*100)	% of Breakdown Hours (B+C+E+F)/A*100
January 2023	16,368	152.53	241.19	2,478.03	15.14%	744.00	331.49	12,420.76	75.88%	8.98%
February 2023	14,784	105.01	271.18	1,252.26	8.47%	670.17	266.07	12,219.31	82.65%	8.88%
March 2023	16,368	362.04	684.13	1,313.50	8.02%	607.70	191.30	13,209.32	80.70%	11.27%
April 2023	15,840	964.28	1,896.16	1,185.57	7.48%	1,224.10	340.45	10,229.45	64.58%	27.94%
May 2023	16,368	1,263.77	757.54	1,088.85	6.65%	429.61	432.93	12,395.31	75.73%	17.62%

June 2023	15,840	1,550.80	979.08	93.42	0.59%	118.22	119.55	12,978.93	81.94%	17.47%
July 2023	16,368	1,300.62	246.29	2.32	0.01%	118.22	119.55	14,581.00	89.08%	10.90%
August 2023	16,368	906.56	403.63	80.05	0.49%	7.50	91.99	14,878.27	90.90%	8.61%
September 2023	15,840	186.02	345.07	848.30	5.36%	14.15	251.51	14,194.95	89.61%	5.03%
October 2023	16,368	170.51	163.39	1,866.43	11.40%	45.01	705.29	13,417.37	81.97%	6.62%
November 2023	15,840	397.63	299.55	1,077.12	6.80%	0.00	573.84	13,491.86	85.18%	8.02%
December 2023	16,368	305.19	140.03	1,143.02	6.98%	0.00	573.84	14,205.91	86.79%	6.23%
	192,720	**7,664.96**	**6,427.23**	**12,428.87**	**6.45%**	**3,978.68**	**3,997.81**	**158,222.45**	**82.09%**	**11.45%**

The project activity was operational for a total of **192,720 hours**, representing 365 days. During the monitoring period. There were some scheduled with unscheduled breakdowns lasting **22,068.68 hours**, caused by either internal or external grid failures breakdowns, plant maintenance and service. Additionally, there were Lull Hours lasting **12,428.87 hours**, as detailed in Appendix 4 of the monitoring report (MR)

Total Operational Hours of WTGs.....= **192,720**

Actual Operating Hours .....= **158,222**

Breakdown Hours .....= **22,068.68**

Lull Hours .....= **12,428.87**

Percentage of Actual Operating Hour.....= **82.10%**

Percentage of Breakdown Hours.....= **11.45%**

Percentage of Lull Hours.....= **6.45%**

It's crucial to highlight that these breakdowns did not have any major substantial impact on the calculation of project activity's greenhouse gas (GHG) emissions reduction.

The breakdowns were due to scheduled maintenance activity as per the manufacture specification/30/. Moreover, it is important to note that the all WTGs were not entirely shut down during these breakdown hours; only the affected WTGs were temporarily out of operation.

The breakdowns were attributed to various minor reasons, which may include:

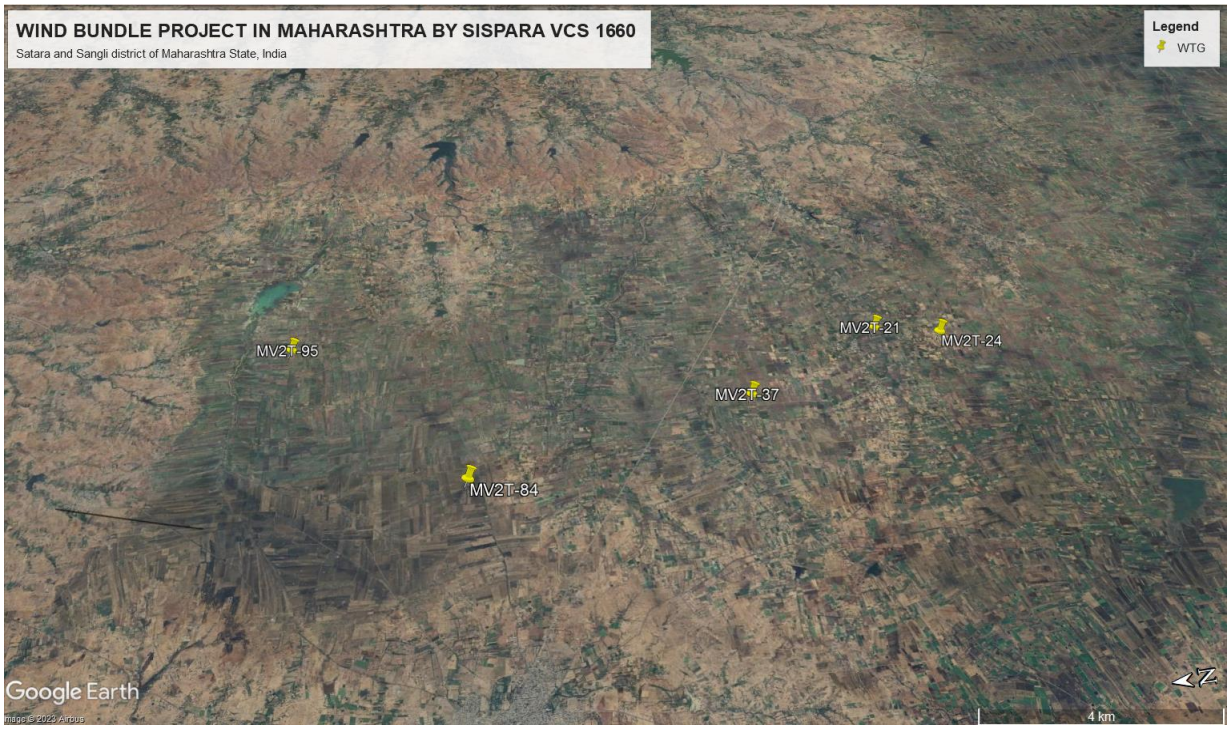
- Generator failure
- Gear Box Failure
- Transformer Failure
- Front Bearing failure
- External/Internal grid failure
- Machine servicing and repairing
- External/Internal grid maintenance

All the twenty-two WTGs project activity were operational for a total of **192,720 hours**, representing **365 days** under the current monitoring period. The breakdown due to scheduled maintenance is as per the manufacture's specification. Moreover, it is important to note that all the 22 WTGs were not entirely shut down during these breakdown hours; only the affected WTGs were temporarily out of operation.

The verification process involved reviewing the monthly generation records/33/ and breakdown excel sheet /32/ provided by the project proponent (PP). Additionally, an onsite visit to the project site/36/ was conducted, where it was confirmed that only the affected WTGs were shut down while the rest of the WTGs remained operational. This information is consistent with the details mentioned in Section 3.1 and Appendix 2 of the MR/01/.

The assessment team also conducted interviews with key personnel from the PP, including senior engineers, junior engineers and an assistant manager/37/. These interviews took place on 10-April-2024 during the onsite visit /36/. The assessment team thus concluded that the breakdowns and the resulting partial shutdown of the few WTGs of project activity do not have a significant impact on the calculation of emission reductions (ER). The project underwent continuous operation with only the affected parts being temporarily shut down. This approach is deemed acceptable by the assessment team and is verified to align with the methodology. Furthermore, no unforeseen incidents were identified that would affect the applicability of the methodology.

Based on the documents review (monthly generation records, breakdown log sheet records present on project site and tripping details for each month) submitted to VKU assessment team by PP that the plant supplied **71,358.10 MWh** of electricity, and thus contributing to **69,695 tCO_2e** GHG reductions. The emission reduction for this monitoring period comparing with registered VCS Joint PD & MR is **60,746 tCO_2e**, whereas actual emission reductions achieved are **69,695 tCO_2e**, which is **14.7% higher** than the estimated emission reductions for the current verification period. Further explanation is provided section 4.5 of this report. The ERs achieved in this monitoring period is basically due to high wind, high PLF and minor breakdowns occurred during this monitoring period.



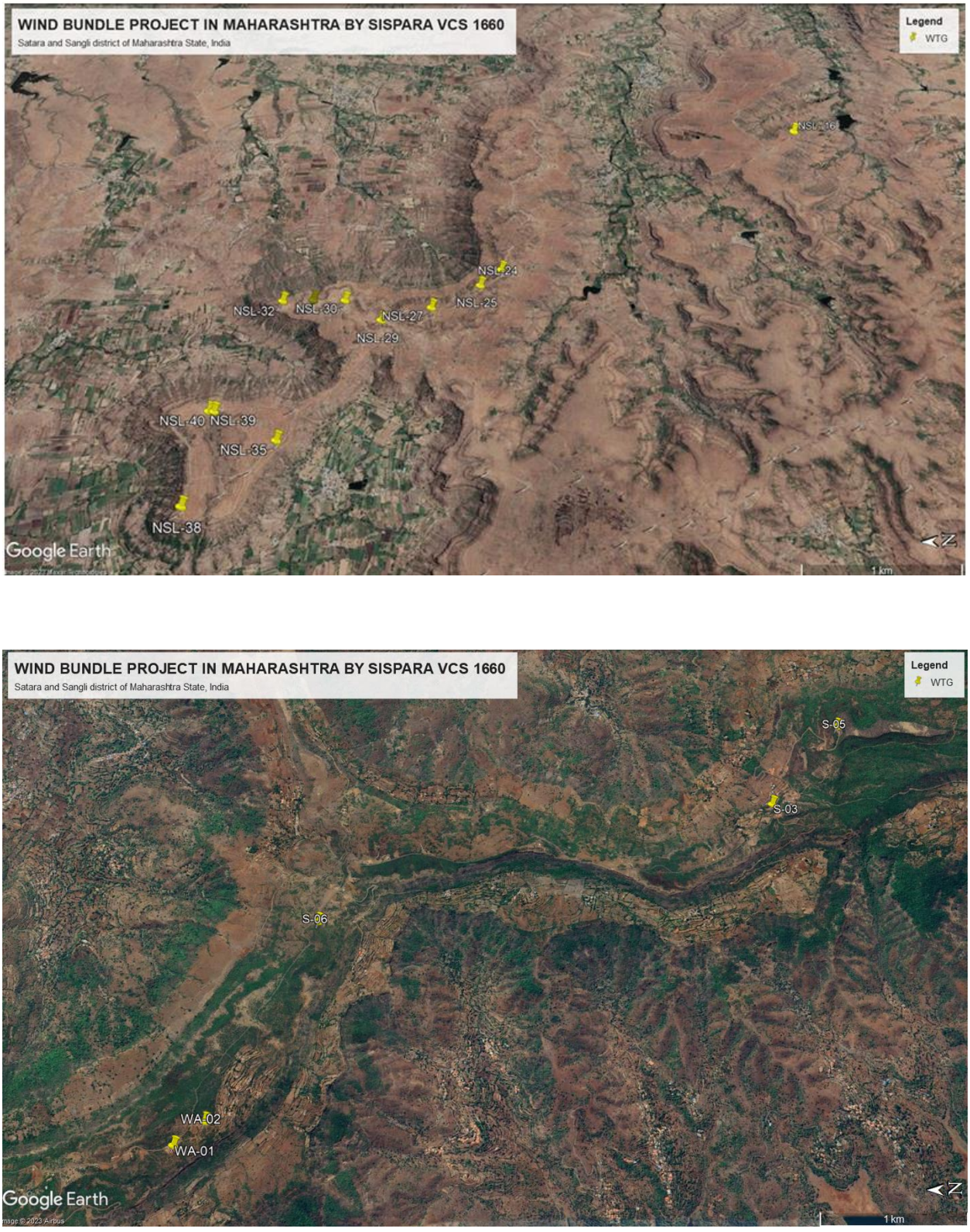


Figure 1.: Project implemented Location verified and mapped down WTG-wise

The project location was verified by the assessment team through Google earth pro /34/ during desk review and GPS map camera software/35/ during onsite visit /36/. Moreover, assessment team confirm that the latitude and longitude as mentioned in the registered VCS Joint PD & MR dated 06-February-2017/3/, VCS Joint Validation and Verification Report/4/, VCS MR/1/are consistent.

Table No. 10: The WTG wise commissioning dates, latitudes and longitudes are confirmed below:

S. No.	WTG No.	UTM (Universal Transverse Mercator) format		DD-MM-SS (Degree/minutes/Seconds) format		Location
		Easting (m)	Northing (m)	Latitude N	Longitude E	
08 WTGs from ReGen Powertech (By M/s Sispara Renewable Power Private Limited)						
1	NSL-24	466130	1937338	17° 31'19.7"	74° 40'50.9"	Village: Chilarwadi Taluka: Maan District: Satara
2	NSL-25	465969	1937519	17° 31' 25.30"	74° 40' 45.79"	Village: Chilarwadi Taluka: Maan District: Satara
3	NSL-35	464609	1938944	17° 32' 11.59"	74° 39' 59.58"	Village: Puklewadi Taluka: Maan District: Satara
4	NSL-27	465753	1937901	17° 31' 37.72"	74° 40' 38.44"	Village: Chilarwadi Taluka: Maan District: Satara
5	NSL-29	465638	1938283	17° 31' 50.14"	74° 40' 34.52"	Village: Puklewadi Taluka: Maan District: Satara
6	NSL-38	464134	1939494	17° 32' 29.47"	74° 39' 43.44"	Village: Puklewadi Taluka: Maan District: Satara
7	NSL-39	464853	1939448	17° 32' 28.01"	74° 40' 07.83"	Village: Puklewadi Taluka: Maan District: Satara

8	NSL-40	464850	1939719	17° 32' 36.83"	74° 40' 07.71"	Village: Puklewadi Taluka: Maan District: Satara
04 WTGs from ReGen Powertech (By M/s Kalsubai Power Private Limited)						
1	NSL-16	467956	1934816	17° 29' 57.52"	74° 41' 53.33"	Village: Virali Taluka: Maan District: Satara
2	NSL-30	465839	1938575	17° 31' 59.65"	74° 40' 41.32"	Village: Puklewadi Taluka: Maan District: Satara
3	NSL-31	465850	1938823	17° 32' 07.73"	74° 40' 41.68"	Village: Puklewadi Taluka: Maan District: Satara
4	NSL-32	465844	1939060	17° 32' 15.43"	74° 40' 41.46"	Village: Puklewadi Taluka: Maan District: Satara
05 WTGs from M/s INOX (By M/s Nilgiri Power Private Limited)						
1	MV2T-21	530786	1876559	16° 58' 21.76"	75° 17' 21.05"	Village: Rawalgundwadi Taluka: Jath District: Sangli
2	MV2T-24	530439	1875187	16° 57' 37.13"	75° 17' 09.25"	Village: Rawalgundwadi Taluka: Jath District: Sangli
3	MV2T-84	527995	1885615	17° 03' 16.59"	75° 15' 47.09"	Village: Jath Taluka: Jath District: Sangli
4	MV2T-37	529281	1879694	17° 00' 03.85"	75° 16' 30.31"	Village: Untwadi Taluka: Jath District: Sangli

5	MV2T-95	532093	1889113	17° 05' 10.23"	75° 18' 05.90"	Village: Valsang Taluka: Jath District: Sangli
05 WTGs from ReGen Power (By M/s NSL Wind Power Company (Sayamalai) Pvt. Ltd.)						
1	WA-01	368708	1968639	17°48'04.77"	73°45'40.49"	Village: Waki Taluka: Jawali District: Satara
2	S-05	371954	1963633	17°45'22.60"	73°47'31.82"	Village: Sahyadrinagar Taluka: Jawali District: Satara
3	S-06	370038	1968025	17°47'35.01"	73°46'35.99"	Village: Sahyadrinagar Taluka: Jawali District: Satara
4	S-03	371271	1964224	17°45'41.68"	73°47'08.50"	Village: Sahyadrinagar Taluka: Jawali District: Satara
5	WA-02	368870	1968437	17°47'58.23"	73°45'46.04"	Village: Waki Taluka: Jawali District: Satara

The implemented bundled project activity is a Greenfield wind power generation activity. The project activity involves installation of 22 Wind Turbine Generators by four PPs of total 35.5 MW capacity wind power generation project out of which 12 MW by M/s Sispara Renewable Power Private Limited, 6 MW by M/s Kalsubai Power Private Limited, 10 MW by M/s Nilgiri Power Private Limited and 7.5 MW capacity wind power generation project by M/s NSL Wind Power Company (Sayamalai) Pvt. Ltd.

M/s Sispara Renewable Power Private Limited act as project representative (Project Participant) for this bundled project activity.

Project Developer	Number of WTG	Supplier of WTG	Rated Capacity	Total Installed Capacity	Location

M/S Sispara Renewable Power Private Limited	8	Regen Powertech Private Limited	1.5 MW	12 MW	Villages: Puklewadi & Chilarewadi, Taluka: Maan District: Satara State: Maharashtra Country: India
M/S Kalsubai Power Private Limited	4	Regen Powertech Private Limited	1.5 MW	6 MW	Villages: Virali & Puklewadi, Taluka: Maan District: Satara State: Maharashtra Country: India
M/S Nilgiri Power Private Limited	5	INOX	2.0 MW	10 MW	Villages: Valsang ,Untwadi & Rawalgundwadi, Taluka: Jath District: Sangli State: Maharashtra Country: India
M/S NSL Wind Power Company (Sayamalai) Pvt. Ltd.	5	Regen Powertech Private Limited	1.5 MW	7.5 MW	Villages: Sahyadrinagar & Waki, Taluka: Jawali District: Satara State: Maharashtra Country: India
Total Project Capacity				**35.5 MW**	

Start date of the project activity was **13-February-2015** which is the commissioning/commercial operation of the 1st machine (WTG ID: WA-02) and the project activity was fully commissioned on 31-October-2015, which is the date of commissioning/commercial operation of the last set of six machines (WTGs IDs: MV2T-21, MV2T-24, MV2T-84, MV2T-37, MV2T-95 and S-03).

Assessment team checked the commissioning certificate/29/ and confirmed that the dates of commission for all the WTGs are correct. The dates of commissioning were also verified by Assessment team during the onsite audit/36/ that there is no change in project design with reference to previous verification/5/and VCS standard version 4.6 /9/ in section 3.3 of the report. The project is implemented as per the description provided in the registered VCS Joint PD & MR /3/.

The power rating of the WTGs has been verified with the name plates as well as with the technical specifications of WTGs submitted to VKU Assessment Team by PP and also cross checked from the technical manual of the Manufactures/30/. The same could be verified from the VCS Joint Validation & Verification report /4/. Assessment team confirms that the technical parameters are consistent with the registered VCS Joint PD & MR / 3/.

The major technical specifications of the WTG are as follows:

Table No. 11: Technical specifications of WTGs

1. **WTGs supplied by ReGen Powertech**

ReGen Powertech	VENSYS 87
POWER	
Rated power	1500 kW (Peak Output)
Cut-in wind speed (10 min. mean)	3 m/s
Rated Wind Speed (10 min. mean)	approx. 12 m/s
Cut-out wind speed (10 min. mean)	22 m/s
Survival wind speed	52.5 m/s
Generator	Variable Speed, Multi-pole Synchronous with Permanent Magnet Excitation
ROTOR	
Diameter	87
Swept area	5942 sq. m
Speed range (variable)	9 to 17.3 rpm
TOWER AND FOUNDATION	
Hub height	85 m
Design	Tubular, Four sections
Foundation type	Floating foundation
CONTROL AND SAFETY SYSTEMS	
Control of output	Pitch Regulation
Speed control	Variable, Micro-controller based
Low Voltage Ride Through (LVRT)	3 seconds
Primary brake system	Aerodynamic Brake, Single Pitch Control/triple redundant
Pitch System	Electromechanical, Maintenance Free Toothed Belt Drive (Patented)
Remote Monitoring	VPN, Visualization via web-browser
TYPE CLASSES	
Wind turbine type class	GL III B

2. **WTGs supplied by INOX Wind:**

No. of WTGs[2] - 15	
INOX WIND - MODEL[3] WT 2000 DF	
OPERATING DATA	
Rated power	2000 kW

[2]Arrangement of project activity & monitoring points is detailed in the Project Boundary diagram under section B.3

[3]http://www.inoxwind.com/technical-data.html

Cut-in wind speed	3 m/s
Rated wind speed	11.5m/s
Cut-out wind speed	20 m/s
Survival wind speed	52.5 m/sec
Hub height	80 meters
Type class	TC IIIB
Rotor speed	15.9 RPM
Operational mode	Variable speed
Design Standards	Germanischer Lloyd
ROTOR	
Pitch system	Pitch control- electrical, variable speed inverters, power back up with ultra capacitor
Diameter	93 meters
Swept area	6785 sq meters
Blade material type	Epoxy glass fibre
GENERATOR	
Type	Double fed induction generator
Rated power	2000 kW
Rated voltage	690 V AC, 3 Phase
Frequency	50 Hz
Cooling system	Water Cooled
Insulation	Class H
BRAKING SYSTEM	
Aerodynamic brake	Full span independent blade pitching
Mechanical brake	Disc brakes
DRIVE TRAIN	
Drive train	Patented integral drive train with rotor shaft and drive train as single unit
Rated drive torque	1280 kNm
Maximum static torque	2235 kNm
Type of gearing	Two planetary and one parallel shaft gear

Transmission ratio	1: ~ 114.7
Gear lubrication	Forced lubrication
Connection gear / generator	Flexible coupling
YAW SYSTEM	
Type	Driven by 4 gear motors
Bearings	Slide bearings
TOWER	
Type	Conical tubular steel tower
Tower Height	78 meters
Corrosion protection	Protective paint
Average Lifetime	20 years (Reference – CA letter & Technology Provider Specification)

For ReGen Powertech 1.5MW WTGs

- 1700KV; 33KV/690V transformer.

For INOX 2.0MW WTGs:

- 2300KV; 33kV/690V transformer

The assessment team confirmed through onsite visit with PP representative that there is no proposed or actual change to the project design during this monitoring period. It was observed that the monitoring plan was implemented as per the registered VCS Joint PD & MR /3/ and applied methodology ACM0002, Version 17.0 /12/. The organizational role and responsibility as mentioned in the registered VCS Joint PD & MR /3/ is followed onsite. Meters are calibrated as per calibration frequency in registered VCS Joint PD & MR /3/. All the emergency preparedness as mentioned in MR/1/ are followed onsite and no discrepancies were found regarding the same.

The operational team's primary duty is to closely oversee the day-to-day functioning of the wind turbines. In the event of adverse grid conditions or a grid failure, the turbines will automatically halt operation and restart once conditions stabilize. However, there may be occasions when faults necessitate a thorough examination of the machinery before restarting. Furthermore, the operational team is responsible for recording downtime, operational hours for each turbine, and the causes of any downtime.

Every month, the operational team compiles the logbook data and submits it to the head office. To minimize machine breakdowns, the O&M service provider(s), deploys maintenance staff at the plant. They also ensure the availability of critical spare parts and necessary consumables, which are stocked at the project site to reduce machine repair downtime. The O&M service provider maintains a comprehensive collection of tools and equipment on-site, which is

accessible to the project site staff. The site in-charge and the staff work together to conduct routine maintenance checks on major components such as gearboxes, generators, rotor blades, control panels, transformers, and other vital elements. This proactive approach guarantees the smooth and efficient operation of the wind turbines.

The daily operation of the Wind Turbine Generators (WTGs) is overseen by the operator on-site. The operator reports to the Assistant Engineer (AE) - Wind Farm, who is tasked with gathering necessary data from the operator. The AE - Wind Farm records daily generation data for each service connection point and communicates the cumulative generation figures to the management.

Assessment team concludes the following:

a) There are no material discrepancies between project implementation and the project description provided in the registered VCS Joint PD & MR /3/.
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 are no material discrepancies between the actual monitoring system, and the monitoring plan set out in the fixed crediting period of VCS joint project description & monitoring report/3/ and the applied methodology/12/.
d) Materiality threshold applied is 5% as per 4.1.10 (4) of VCS Standard v4.6, It was concluded that the materiality threshold applicable to the project activity based on the type of project i.e., Project is 5%. **This effectively means that there is uncertainty inherent in the estimation of emission reduction of 5%. This is consistent with the section 4.1.10 (4) of VCS standard v4.6 which is equal to 3,484.75 tCO_2e**
e) The GHG emission reductions or removals generated by the project have not been included in any emissions trading program or any other mechanism that includes GHG allowance trading/28/.
f) Complying with clause 3.24.5 of the VCS Standard version 4.6 Assessment Team confirms that the project has not received or pursued any other form of environmental credit, nor has it become eligible to do so since VCS Joint Validation & Verification Report/4/ or previous VCS Verification Report/5/
g) The project Activity is a wind power project and does not involve any supply chain in the project such as manufacturers, wholesalers, distributers and retailers. So, no indirect upstream and downstream GHG emissions are involved in the project activity. Thus, the **Scope 3 emissions are not applicable in this project activity**.

h) The project is registered under VCS[4] and only listed under CDM[5], however PP has declared, that they will not claim same GHG emission reductions of the project from any other GHG programme for the current monitoring period when project is seeking to get GHG emission reduction from VCS only. Audit team also checked the REC/15/ Mechanism database of India and I-REC/16/ mechanism database found that the project activity is not accredited / registered under REC or I-REC mechanism which was verified from the (Renewable Energy Certificate Registry of India) REC/15/ (International-Renewable Energy Certificate Standard Standard) I-REC/16/ website and same was verified by checking in other GHG programs including GS Registry, CDM, GCC, UCR & CR-I, however PP has submitted the declaration/28/ for the same.

i) The project activity complies with indicators for **sustainable development** in the interim approval guidelines for Clean Development Mechanism (CDM) projects from India as discussed under **section 1.12 of MR/1/**. Assessment team has verified the same during on site visit/36/ and found all the indicators to be effective and applicable for the project activity.

As per the VCS standard version v4.6 Page no 79, Appendix 03: Document History and Effective dates, For V4.2, serial number 04 states that "it is required by project proponents to demonstrate contributions to a minimum of three SDGs in all monitoring reports verified after the effective date. Effective immediately for all projects that request registration on or after 20-January-2023. Projects that request registration before 20-January-2023 shall demonstrate contributions to at least three SDGs by 20-January-2025". This is project's ninth Verification of fixed crediting period for the Monitoring Period **01-Januray-2023 to 31 December-2023** (Inclusive of both start and end dates),

Since this project is registered before 20-January-2023, so the Project Proponent (PP) must demonstrate contributions to at least three SDGs by 20-January-2025.

For the current monitoring period, the PP is voluntarily showing contributions to three SDGs, as indicated below but has ***only claimed two SDGs i.e.***,

- **SDG no 7.2: (Renewable energy share in the total final energy consumption)**
- **SDG no 13.2 (13.2.1: Tonnes of greenhouse gas emissions avoided or removed)**

The project activity has implemented activities that results in 3 SDG Contributions; 7.2, 8.5 & 13.2

[4] https://registry.verra.org/app/projectDetail/VCS/1660

[5] https://cdm.unfccc.int/Projects/projsearch.html

Table no: 11 Contributions Over Project Lifetime as considered by PP in MR

S.No.	Monitoring Period Dates (Inclusive of both start and end dates)	Energy Supplied by the project activity to grid during its lifetime (MWh) (SDG 7)	GHG emissions avoided by the project activity during its lifetime (tCO_2e) (SDG 13)	GHG Programme
1.	Seventh Monitoring Period from (01-September-2021 to 30-April-2022)	32,184.85	31,434	VCS
2.	Eighth Monitoring Period from (01-May-2022 to 31-December- 2022)	58,768.79	57,399	VCS
3.	Ninth (Current) Monitoring Period from (01-January-2023 to 31-December-2023)	71,358.10	69,695	VCS
Total Contributions		**161,311.74 MWh**	**158,528 tCO_2e**	**VCS**

Since the project is continuation of activity as per the registered VCS Joint PD & MR, it is a regulatory surplus activity. The green energy target of the Govt of India does not include green energy generated from wind turbines from private parties. This was assessed as the TL is an expert of local regulations and statutes of country India and thus in view of the information as verified above the VKU assessment team is able to conclude that the project has been implemented as described in the registered VCS Joint PD & MR version 2.0 dated 06-February-2017/3/ and MR /1/.

All the above stated information was verified by VKU assessment team during onsite visit/36/ at the project implemented site and also by interviewing the site personnel and by conducting focussed group discussion with them /37/.

There are no potential harmful socio-economic and environmental effects in the project activities. VKU assessment team has assessed the project activity on site and confirms that there were no

negative environmental and socio-economic impacts observed during current monitoring period as all necessary measures were found in place which was confirmed during site visit /36/.

As per the section 1.1 of the MR/01/, PP has provided the audit history as below:

Item	Evidence gathering activities, evidence checked, and assessment conclusion:				
Audit history	**Audit Type**	**Period**	**Program**	**VVB Name**	**Number of years**
	Joint Validation and 1st Verification	13-February-2015 to 31-December-2016 for Verification and 13 February-2015 to 12-February-2025 for Validation	VCS	LGAI Technological Center, S.A. (Applus+)	1 year, 10 months, 19 days
	2 Verification	01-January-2017 to 30-September-2017	VCS	Earthood Services Private Limited	00 Years 9 months 00 days
	3 Verification	01-October-2017 to 31-August-2018	VCS	Earthood Services Private Limited	00 Years 11 months 00 days
	4 Verification	01-September-2018 to 31-October-2019	VCS	Earthood Services Private Limited	1 year, 2 months 00 days

5 Verification	01-November-2019 to 31-October-2020	VCS	LGAI Technological Center, S.A. (Applus+)	1 year 00 months and 00 days
6 Verification	01-November-2020 to 31-August-2021	VCS	LGAI Technological Center, S.A. (Applus+)	00 Years 10 months 00 days
7 Verification	01-September-2021 to 30-April-2022	VCS	VKU Certification Pvt Ltd	00 Years 8 months 00 days
8 Verification	01-May-2022 to 31-December-2022	VCS	VKU Certification Pvt Ltd	00 Years 8 months 00 days
Current Verification	01-January-2023 to 31-December-2023	VCS	VKU Certification Pvt Ltd	01 Years 00 months 00 days
Total	**13-February-2015 to 31-December-2023**	**VCS**	-	**8 years, 10 months, 19 days**

Evidence gathering activities: Keeping in line with the requirements stated in ISO 14064-3: 2019/40/ (E) section 6.1.3 & program requirement, the assessment team has performed the desk-review and reviewed the last verification reports available at the Verra's webpage/13/, during the pre-engagement stage to confirm the duration of the current monitoring period, the last monitoring period & the crediting period of this project activity. Apart from the desk-review the VVB also confirmed the audit history while performing the personnel interview & focussed grouped discussion with PP during the on-site audit.

	Evidence Checked: While contracting VKU to perform this verification, the PP shared the details for the project activity including the audit history i.e., (Details of crediting period, monitoring period & number of verification) thus initially itself VKU confirmed the audit history by cross-checking with the Joint Project Description & Monitoring Report /3/ & VCS Joint Validation & Verification report /4/ already approved by Verra and are accessible to the VVB on Verra's webpage **VVB's Conclusion:** VVB would like to conclude that the above stated activities performed and evidences collected to confirm the audit history is in-line with the ISO 14064-03 & program requirements which is deemed accurate and satisfactory to VKU's assessment team.
Double counting and participation under other GHG programs	**Evidence Gathering Activities: Project's GHG Program Status, Cross-Verification of GHG Benefits & Rejection by other GHG programs:** • The project is registered under VCS only and this project was listed under CDM as individual projects as indicated table below.

Project developer	Project Title under CDM	Current status
M/s Sispara Renewable Power Private Limited	Wind Power Project by M/s Sispara Renewable Power Private Limited in Maharashtra, India.	Under Validation
M/s Kalsubai Power Private Limited	Wind Power Project by M/s Kalsubai Power Private Limited in Maharashtra, India.	Under Validation
M/s Nilgiri Power Private Limited	Wind Power Project by M/s Nilgiri Power Private Limited in Maharashtra, India	Under Validation
M/s NSL Wind Power Company (Sayamalai) Pvt. Ltd.	Sayamalai Wind Power Project in Maharashtra, India	Under Validation

However, these projects were not taken up further by PP; hence, PP is claiming GHG emission reductions from VCS only for current monitoring period.

• The PP has provided the declaration/28/ as evidence to justify "Whether it is registered or seeking registration under any other GHG program". It

	is claimed by PP in the monitoring report, that the project is not registered or seeking registration under any other GHG program. **Evidence Checked:** The Project is not rejected by other GHG programs. A declaration/28/ for the same is checked and found correct by the assessment team. **VVB's Conclusion:** The assessment team assessed the issuance records available on the Verra website and CDM website and has also cross-checked by performed similar comprehensive search across the GHG programs using matching project titles and capacity, as well as Project Proponent details. This diligent examination did not yield any instances of the project being registered under any of the registries or any comparable mechanisms except VCS and thus confirmed & ensured that the emission reduction generated from the project activity are not & will not be double counted hence accepted by the assessment team.
No double claiming with emissions trading programs or binding emission limits	**Evidence Gathering Activities:** The project is not included in an emissions trading program or any other mechanism that includes GHG allowance trading. Project reductions and removals or project activities are not included in any emissions trading program or any other mechanism that includes GHG allowance trading or other binding limits. **Evidence Checked:** PP has provided declaration/28/ as evidence to back the above statement included in the MR. **VVB's Conclusion:** The assessment team confirms that the GHG emission reductions or removals generated by the project have not been included in any emissions trading program or any other mechanism that includes GHG allowance trading.
No double claiming with other forms of environmental credit	**Evidence Gathering Activities:** The project has not sought or received another form of GHG-related environmental credit. **Issuance Records Confirmation:** An exercise of independently searching for such project registration or claim for current monitoring period was performed for other GHG related benefits such as REC/15/ and I-REC/16/ benefits and based on both independent assessment and declaration submitted by PP/28/, the assessment team accepted the claim that there is no double counting from this project activity for current monitoring period. The assessment team has also cross-checked the issuance records available on the Verra website and thus confirmed & ensured that the emission reduction generated from the project activity are not & will not be double counted hence accepted by the assessment team.

	Evidence Checked: PP has provided declaration/28/ as evidence to justify the statement: "project has not sought or received another form of GHG-related environmental credit, including renewable energy certificates, during this monitoring period" **VVB's Conclusion:** The assessment team confirms that there is No double claiming with other forms of environmental credit by the project activity.
Supply chain (scope 3) emissions double claiming	**Evidence Gathering Activities:** The project does not affect emissions associated with any goods or service & hence no impact on the scope-3 emission associated with the supply chain. The project Activity is a wind power project and does not involve any supply chain in the project such as manufacturers, wholesalers, distributers and retailers. So, no indirect upstream and downstream GHG emissions are involved in the project activity. Thus, the Scope 3 emissions are not applicable in this project activity. **Evidence Checked:** The PP has provided declaration/28/ as evidence for "Non-inclusion of scope 3 emissions". **VVB's Conclusion:** As per clause 3.24.7 of VCS standard version 4.6, PP has clarified in CL#02 raised by the assessment team that the project activity is wind power project for which the product is electricity, which does not affect the emission footprint of any product that are part of a supply chain. This justification is deemed acceptable to the VVB
Sustainable development contributions	**Evidence Gathering Activities:** As per the VCS Standard Version 4.6 of Appendix 03: Document History and Effective dates, For V4.2, serial number 04 states that "it is required by project proponents to demonstrate contributions to a minimum of three SDGs in all monitoring reports verified after the effective date. Effective immediately for all projects that request registration on or after 20-January-2023. Projects that request registration before 20-January-2023 shall demonstrate contributions to at least three SDGs by 20-January-2025". This is project's 9th Periodic Verification for the Monitoring Period from 01-January-2023 to 31-December- 2023 (Inclusive of both start and end dates) is registered before 20-January-2023, so the Project Proponent (PP) must demonstrate contributions to at least three SDGs by 20-January-2025. For the current monitoring period, the PP is voluntarily showing contributions to three SDGs, as indicated below: The Project activity has implemented activities that results in 3 SDG Contributions; 7.2, 8.5 and 13.0. **7.2 i.e. (Renewable energy share in the total final energy consumption)** About 71,358.10 MWh of renewable electricity has been supplied to Indian Electricity grid during the current monitoring period which helps to increase the renewable energy share in the energy mix.

	Evidence Checked: VVB has referred previous verification reports approved by VERRA /5/, JMRs/26/, Invoices/27/ **VVB's Conclusion:** VKU found the above claimed renewable electricity supplied to Indian grid is correct and deemed satisfactory. **2. 8.5.1 i.e. (Employment Generation from the project Activity)** A total of 10 people employed during this reporting period **Evidence Checked:** PP has not provided the evidences to confirm this SDG. **VVB's Conclusion:** By Interviewing the stakeholders and site personnels VKU found that the project is eligible to generate this SDG benefit. However, PP is not calming this SDG benefit, hence not quantifying the same. **3. 13.0 i.e. (Tonnes of greenhouse gas emissions avoided or removed)** By generating 71,358.10 MWh of renewable electricity the project has avoided the emission of 69,695 tCO_2e in the atmosphere. Thus, proving that the project generated eco-friendly, GHG free power which contributes to sustainable development of the region. **Evidence Checked:** The supporting documents regarding the RE (Renewable Energy) share in total grid mix and ERs generated for claimed SDG target 7.2 and 13.0 respectively, have been provided by the PP for current monitoring period. However, for SDG 8.5.1 the employment records have not been provided since it is not quantified by PP hence finding CL#01 raised addressing this issue is closed by assessment team. **VVB's Conclusion:** VKU found the above claimed **Tonnes of greenhouse gas emissions avoided or removed** to be correct.
Additional information relevant to the project	The assessment team confirms that as per information provided in the monitoring report submitted by PP; no commercially sensitive information has been excluded from the public versions of project documents & thus conforms with the VCS Program requirements on what may be excluded. The information was cross-checked by interviewing the PP representative during the onsite interviews.

4.2 Safeguards and Stakeholder Engagement

4.2.1 Stakeholder Identification

Item	Evidence gathering activities, evidence checked, and assessment conclusion
Stakeholder identification	**Evidence Gathering Activities:** To identify the stakeholders, PP undertook a stakeholder analysis. The information from the stakeholder analysis is then utilized to assess the interests of the stakeholders that should be addressed in the project plan, policy, program, or other action. The importance of such an analysis lies in the role played by this understanding in the assessment of the socio-political environment surrounding the project. It allows for: • Key stakeholders to be identified. • Identification of the interests, concerns, and potential risks surrounding the stakeholders, as well as conflicts of interests (if any). • Identification of relations between stakeholders that may enable "coalitions" of project sponsorship, ownership, and cooperation, as well as the mechanisms which may have a role in influencing other stakeholders. • Key groups/individuals to be pinpointed who need to be informed about the project. • Identification of the impact and influence of the project on the stakeholders and of the stakeholders on the project. The typical groups of the stakeholders identified are: • Local villagers • Local Gram Panchayat Members • Local Employees **Evidence Checked:** Interviews/37/ and Registered VCS Joint PD & MR /3/. The accuracy and comprehensiveness of the information gathered through the Stakeholder Analysis were verified by cross-checking with interview/focussed group discussions with relevant experts and stakeholder representatives volunteered during the on-site audit conducted by the VVB. The on-site audit was conducted to corroborate

	the findings from desk-based research with the registered VCS Joint PD & MR/3/. **VVB's Conclusion:** Based on the evidence gathered and verified through the Stakeholder Analysis, the Validation and Verification Body (VVB) has identified and documented the key stakeholders associated with the project. The analysis undertook by PP has provided insights into the interests, concerns, potential risks, and conflicts of interests surrounding the stakeholders, as well as the relationships and mechanisms that may influence their involvement or impact on the project. The VVB has evaluated the potential impacts of the project on the identified stakeholders and their respective interests. Recommendations have been made to address the concerns and mitigate the risks associated with the stakeholders, including measures to facilitate effective communication, consultation, and collaboration with the relevant stakeholder groups throughout the project lifecycle. The VVB's conclusion ensures compliance with applicable regulations, standards, and best practices related to stakeholder engagement and management, aiming to promote transparency, inclusivity, and the responsible consideration of stakeholder interests in the project implementation.
Legal or customary tenure/access rights	**Evidence Gathering Activities:** Information on legal/customary tenure rights of stakeholders, IPs, LCs and rights holders was gathered during initial verification. **Evidence Checked:** As it's now the 9th verification year, the evidence from initial verification regarding land tenure and stakeholder consultations has been reviewed for continued validity at the time of project validation/4/, VVB could only confirm the above stated information by cross checking the same with the project proponent & stakeholders during the interview process and discussions conducted with them. **VVB's Conclusion:** Based on initial verification evidence and subsequent review, the VVB concludes:

	• No legal or customary tenure/access rights over territories and resources exist for stakeholders, IPs, LCs and rights holders for this VCS project. • The 35.5 MW Wind Power Project uses land "owned by the PP". No forest land involved. The VVB confirms ongoing compliance with VCS 4.6 standards on stakeholder engagement, land acquisition and tenure rights consideration based on evidence from initial verification.
Stakeholder diversity and changes over time	**Evidence Gathering Activities:** As per desk review with registered VCS Joint PD & MR/3/, interview with stakeholders and assessment of monitoring report. **Evidence Checked:** Onsite visit, consultations with stakeholders, and review of relevant documents and data sources. **VVB's Conclusion:** Based on the evidence gathered during the onsite visit and verified by the VVB, it is concluded that the social, economic, and cultural diversity within stakeholder groups was properly identified and documented at the time of validation. The VVB acknowledges that the PP has maintained continuous interactions and ongoing communication with stakeholders to monitor any changes in the composition of stakeholder groups during the monitoring period. According to the information provided by the PP, the social, economic, and cultural diversity within stakeholder groups has remained stable over time, with no significant changes observed in the composition of each group during the monitoring period. The VVB's conclusion is based on PP's ongoing stakeholder engagement efforts, ensuring compliance with relevant standards and best practices for monitoring and addressing potential changes in stakeholder dynamics.
Expected changes in well-being	**Evidence Gathering Activities:**

As per desk review with registered VCS Joint PD & MR/3/, interview with stakeholders and assessment of monitoring report. The assessment of changes in stakeholder well-being, characteristics, and ecosystem services was conducted through the following:

Continuous stakeholder interactions and ongoing communication: The project proponent (PP) has maintained regular interactions and communication with stakeholders to monitor any changes during the project's operational phase.

Evidence Checked:

The Validation and Verification Body (VVB) has reviewed and verified the evidence provided by the PP, including:

Stakeholder engagement records: The VVB has assessed the PP's records of continuous stakeholder interactions and ongoing communication, including minutes of meeting, attendance sheets, and feedback mechanisms.

VVB's Conclusion:

Based on the evidence gathered and verified, the VVB concludes the following:

No significant changes in stakeholder well-being and characteristics, including changes to ecosystem services identified as important to stakeholders, have been recorded during the current monitoring period.

The operation and maintenance staff and other workers are housed within the project activity or in nearby villages (different villages of Satara and Sangli district of Maharashtra State, India), with an expected improvement in their quality of life.

Local villagers who meet the qualification criteria are given preference for employment opportunities in the wind power project.

The WTGs of this wind project was established on a barren rocky plateau acquired through willing buyer-willing seller arrangements, with no displacement of population.

During the operational phase, positive impacts on the social environment are envisaged.

	The VVB's conclusion is based on the evidence from the ESIA report and the PP's continuous stakeholder engagement efforts, ensuring compliance with relevant standards and best practices for monitoring and addressing stakeholder well-being, characteristics, and ecosystem services.
Location of stakeholders	**Evidence Gathering Activities:** As per desk review with registered VCS Joint PD & MR, interview with stakeholders and assessment of monitoring report. The location of stakeholders, local communities, indigenous peoples, customary rights holders, and areas outside the project area that may experience impacts were identified through the following: Stakeholder mapping and analysis: A comprehensive stakeholder mapping exercise was conducted to identify the stakeholders residing within the project area (different villages of Satara and Sangli district of Maharashtra State, India) and its immediate vicinity. Site visits and field assessments: The project proponent (PP) conducted site visits and field assessments to verify the location of stakeholders and identify any potential areas outside the project boundary that may experience indirect impacts. Consultations with local authorities and community representatives at the time of validation: The PP consulted with local authorities and community representatives to gather information on the presence of indigenous peoples, customary rights holders, and any areas of significance beyond the project boundary. **Evidence Checked:** The Validation and Verification Body (VVB) has reviewed and verified the evidence provided by the PP, including: • Grievance Records/31/ • Consultation records with local authorities and community representatives **VVB's Conclusion:** Based on the evidence gathered and verified, the VVB concludes the following:

	• The majority of identified stakeholders, including local communities, reside within the nearby villages that constitute the project area. • The project land is primarily private land and no forest land involved. Therefore, there are no legal or customary tenure/access rights to territories and resources, including collective and conflicting rights, held by stakeholders, indigenous people (IPs), local communities (LCs), and customary rights holders. • Based on the definition and legal framework in India, the District of Satara and Sangli, where the project is located, is not a Scheduled V area. Consequently, there are no specific indigenous people/local communities identified within the project implementation area. • The PP has not identified any areas outside the project boundary that are predicted to experience indirect impacts, such as environmental changes or socio-economic shifts, due to the nature of the wind power project. The VVB's conclusion ensures compliance with the VCS Standard version 4.6, clause 3.18.1, by providing a detailed description of the location of stakeholders, local communities, indigenous peoples, customary rights holders, and areas outside the project area that may be impacted.
Location of resources	**Evidence Gathering Activities:** The ownership of resources and territories associated with the project, as well as the land acquisition process, were assessed through the following: All the resources and the territories associated with the project are owned by the Project Proponent. Land acquired for the project is on willing buyer - willing seller basis. Land acquisition did not result in rehabilitation and resettlement. There is no settlement on the land acquired. Therefore, no territories and resources of stakeholder directly intersect with the project area. **Evidence Checked:** Focussed Group Discussion and Personnel interviews with PP & local stakeholders/37/ **VVB's Conclusion:**

	Based on the evidence gathered and verified, the VVB concludes the following: • All resources and territories associated with the project are owned by the Project Proponent. • The land acquired for the project was obtained through willing buyer-willing seller transactions, without any forced acquisition or displacement. • The land acquisition process did not result in any rehabilitation or resettlement requirements, as there were no settlements or inhabitants on the acquired land. • As a Wind Power project typically occupies a limited physical space, the stakeholders' territories and resources do not directly intersect with the project area. The VVB's conclusion ensures compliance with relevant standards and best practices related to land ownership, acquisition, and stakeholder engagement. The evidence demonstrates that the project was developed without infringing on stakeholders' territories and resources, and the land acquisition process was conducted through willing transactions without any displacement or resettlement requirements.

4.2.2 Stakeholder Consultation and Ongoing Communication

Item	Evidence gathering activities, evidence checked, and assessment conclusion
Ongoing consultation	**Evidence Gathering Activities:** The project proponent has undertaken the following measures to effectively communicate and consult with stakeholders during the current monitoring period: Implementation of the validated communication plan: The project proponent has followed the communication plan that was validated during the initial project validation, ensuring appropriate channels for stakeholder engagement. Maintenance of Grievance Register/31/: An Input/Grievance Register is maintained at the project site, with copies available at the

	administrative office and the main entrance of the plant. This register provides a publicly accessible location for local stakeholders to record their feedback, concerns, or grievances related to the project. Stakeholder consultation meetings: Regular stakeholder consultation meetings have been organized to provide project updates, address concerns, and receive feedback from stakeholders. **Evidence Checked:** The Validation and Verification Body (VVB) has reviewed and verified the evidence provided by the project proponent, including: • The validated communication plan and its implementation records in registered VCS Joint PD & MR/3/. • On-site inspection of the Grievance Register/31/ and its accessibility with the local stakeholders. • Records of stakeholder consultation meetings, including attendance sheets, meeting minutes, and follow-up actions. **VVB's Conclusion:** Based on the evidence gathered and verified, the VVB concludes that the project proponent has taken appropriate measures to effectively communicate and consult with stakeholders during the current monitoring period, in line with the requirements of the VCS Standard version 4.6, clause 3.18.5. The project proponent has implemented the validated communication plan and maintained accessible channels for stakeholders to provide feedback, raise concerns, and participate in consultation meetings. The Grievance Register provide publicly accessible platforms for stakeholders to engage with the project. The VVB's conclusion ensures that the project proponent has fulfilled the requirements for ongoing communication and consultation with stakeholders, promoting transparency and addressing stakeholder concerns throughout the monitoring period.
Date(s) of stakeholder consultation	**Evidence Gathering Activities:** The date of stakeholder consultation was obtained through the following sources:

	• Review of the registered VCS Joint PD & MR: The VVB cross-checked the date of stakeholder consultation mentioned in the registered VCS Joint PD & MR/3/. • Interview discussions with the project proponent (PP) and site in-charge: During the on-site audit, the VVB conducted interviews/37/ with the PP representatives and the site in-charge to verify the date of stakeholder consultation. **Evidence Checked:** The VVB has reviewed and verified the evidence from the following sources: • Registered Joint Project Description & Monitoring Report (Joint PD & MR) document/3/ • Interview records and notes from discussions with the PP and site in-charge during the on-site audit/37/ **VVB's Conclusion:** Based on the evidence gathered and verified, the VVB concludes that Project Participants have requested all the stakeholders to attend the meeting on 06-February-2014 at the Project Site in Jath Taluka, Sangli district, Maharashtra. The date was cross-checked against the information provided in the registered VCS Joint PD & MR, and further corroborated through interview discussions with the PP and site in-charge during the on-site audit. The VVB's conclusion ensures that the date of stakeholder consultation is accurately recorded and verified, in line with the requirements of the applicable standards and best practices for stakeholder engagement and project documentation.
Communication of monitored results	**Evidence Gathering Activities:** Reviewed the grievance register/31/ to verify the documentation of grievances, investigations, and resolutions related to the communication of monitoring results. • Verified the maintenance of a grievance register and complaint box for stakeholder feedback. • Confirmed the utilization of stakeholder engagement platforms for ongoing communication and ensuring transparency and accountability.

	Evidence Checked: • Grievance register/31/ • Records of community meetings, informational materials, and interactive workshops **VVB's Conclusion:** Based on the evidence gathered and reviewed, it is confirmed that: • Monitoring results were communicated through various channels, including the grievance register (by documenting grievances, investigations, and resolutions), community meetings, informational materials, and interactive workshops, to ensure effective and timely communication with stakeholders. • For ongoing communication, the project proponent (PP) maintains a grievance register for stakeholder feedback, and utilizes stakeholder engagement platforms to ensure transparency and accountability. • The PP has addressed the initial lack of information by providing details on how monitoring results were communicated for local stakeholder consultation and ongoing communication during the current monitoring period, as required by clause 3.18.4 of the VCS Standard version 4.6. This issue is now closed.
Consultation records	**Evidence Gathering Activities:** • Reviewed the process for documenting and recording the outcomes of ongoing communication related to comments or grievances received. • Verified the procedure for acknowledging and storing comments or grievances in the Grievance register. • Reviewed records of monthly management meetings to confirm the discussion and resolution of grievances and any required management input or approval. **Evidence Checked:** • Grievance register/31/ • Procedure for grievance acknowledgment and storage • Minutes of monthly management meetings

	VVB's Conclusion: Based on the evidence gathered and reviewed, it is confirmed that: The outcomes of ongoing communication are documented and recorded as follows: • "Grievance Register," located at the project site office and accessible to all stakeholders. Community members can visit the project site to share their complaints, feedback, or comments in this register. • If the comments are deemed genuine, immediate action will be taken. However, no grievances have been received in the current monitoring period. • Plant in-charge is responsible for addressing the grievances at the plant after due consideration and discussion with the NSL headquarters about the grievances received, NSL headquarters analyse the intensity of the grievance and accordingly the redressal mechanism is planned and discussed with the site in-charge and then action is taken. • Comments or grievances received are presented to the management during the monthly meetings, along with the action taken to resolve them. • If any input or approval is required from the management, it is discussed and resolved during the monthly management meetings. The management may decide to further assess or carry out additional investigations if necessary The process for documenting and addressing comments or grievances received, are verified through the evidence provided.
Stakeholder input	**Evidence Gathered:** • Stakeholder consultation • Transparency and inclusivity measures (e.g., disclosure policies, engagement plans) **Evidence Checked:** No stakeholder inputs received during the current monitoring period. **VVB's Conclusion:** • Procedures in place to carefully review and analyse stakeholder inputs, considering feasibility, impacts, and project alignment.

	• PP maintains transparency and inclusivity measures to ensure stakeholders are informed and engaged in decision-making, despite no inputs received. • Commitment to an inclusive and transparent consultation process demonstrated.

4.2.3 Free, Prior, and Informed Consent

Item	Evidence gathering activities, evidence checked, and assessment conclusion
Consent	**Evidence Gathering Activities:** Reviewed the documentation of the process and agreements reached to assess transparency and stakeholder understanding. Checked for any ongoing or unresolved conflicts during the current monitoring period and the project's influence on such conflicts. Reviewed the process and documentation related to obtaining consent from concerned parties, including local communities (LCs). Verified the measures taken to ensure a transparent and inclusive process, such as engaging in meaningful dialogue, providing relevant information in accessible formats, and addressing concerns or questions raised. **Evidence Checked:** Personnel interviews/37/ and focussed group discussion with the PP and site in-charge. **VVB's Conclusion:** Consent from concerned parties, including local communities (LCs) was obtained through a transparent and inclusive process. This involved engaging in meaningful dialogue, providing relevant information in accessible formats, and addressing any concerns or questions raised. Agreements were reached through consensus-building and ensuring that all parties had the opportunity to express their views and negotiate terms. Transparency was maintained by documenting the process and agreements reached and ensuring that all stakeholders understood the implications of their consent. During the current monitoring period there are no ongoing or unresolved conflicts and the project neither exacerbate nor influence the outcomes of unresolved conflicts.

Outcome of FPIC discussion	**Evidence Gathering Activities:** Reviewed the Free, Prior, and Informed Consent (FPIC) process. • Verified the transparency agreement between the project proponent and concerned parties, including local communities (LCs). • Checked the disclosure of comprehensive project information, potential impacts, and mitigation measures to stakeholders during the Local Stakeholder Consultation (LSC). • Confirmed the accessibility of information provided, including the use of local languages. • Verified the project proponent's declaration/28/ regarding non-encroachment of land, non-relocation of people, and avoidance of forced physical or economic displacement. **Evidence Checked:** Personnel interviews/37/ and focussed group discussion with the PP and site in-charge. **VVB's Conclusion:** Based on the evidence gathered and reviewed, it is confirmed that: • The outcome of the FPIC process resulted in a transparent agreement between the project proponent and all concerned parties, including local communities (LCs). • Prior to establishing the agreement, comprehensive information regarding the project's scope, potential impacts, and mitigation measures was disclosed to stakeholders in accessible formats and local languages during the LSC. • The project proponent has declared that the project has not encroached on any land, does not relocate people, or cause forced physical or economic displacement. • All project activities have been conducted in accordance with regulatory norms and terms outlined in the transparent agreement, ensuring the protection of rights and interests of all stakeholders involved. The audit has verified the FPIC process, the establishment of a transparent agreement, the disclosure of relevant information, and compliance with regulatory norms and agreed terms, thereby confirming the protection of stakeholder rights and interests.

4.2.4 Grievance Redress Procedure

Item	Evidence gathering activities, evidence checked, and assessment conclusion
Grievance received and steps taken to resolve the grievance including the outcomes of the resolution	**Evidence Gathering Activities:** • Reviewed the grievance register or relevant records to verify if any grievances were received during the current monitoring period. • Checked the procedures for grievance resolution, including steps taken to address grievances and document the outcomes. **Evidence Checked:** • Grievance register or relevant records/31/ • Grievance resolution procedures **VVB's Conclusion:** Based on the evidence gathered and reviewed, it is confirmed that: • There were no grievances recorded or received during the current monitoring period. As a part of continuous feedback from stakeholders, there were no other major comments or protest raised by the stakeholders and they were totally in support for setting up of these kinds of projects in the region. • The procedures for grievance resolution, including steps to address grievances and document the outcomes, were reviewed, but no grievances were received during this period to assess the implementation of these procedures. No grievances were recorded during current monitoring period However, the existence of procedures and the maintenance of records were confirmed.
Grievance redress procedure	To resolve the issues/comments from local stakeholders; PP is maintaining a grievance register at project site for stakeholders to provide their feedback/ comments/ suggestions. The grievance register is located at the administrative office at the project site office. Thus, it is an appropriate publicly accessible

	location at which local stakeholders can provide their feedback on the project.

4.2.5 Public Comments

Comments received	Actions taken by the project proponent	Evidence gathering activities, evidence checked, and assessment conclusion
No comments were received outside of the public comment period and also during the current monitoring period. During the Local Stakeholder Consultation at the time of validation the villagers raised questions about the project's benefits, employment opportunities, land fertility, and future plans. They were assured of local employment, no impact on land fertility, and promised economic development contributing to improved infrastructure and facilities in the area.	Since there were no comments received during the current monitoring period and outside of the public comment period, no actions were taken and there are no updates to project design. As a part of continuous feedback from stakeholders, PP is maintaining a grievance register and a complaint/ suggestion box for feedback collection, ensuring effective communication and resolution of concerns. There were no other major comments or protests raised by the stakeholders till now. The local stakeholders were totally in support of setting up of the project in the region.	**Evidence Gathering Activities:** • Reviewed grievance records to verify if any comments were received outside the public comment period and during the current monitoring period. • Checked the grievance register for any feedback received from stakeholders. • Reviewed records of the Local Stakeholder Consultation during the validation phase to understand the comments and concerns raised by stakeholders. **Evidence Checked:** • Records of comments received (if any) • Grievance register • Local Stakeholder Consultation records during validation **VVB's Conclusion:** Based on the evidence gathered and reviewed, it is confirmed that: No comments were received outside the public comment period and during the current monitoring period.

		During the Local Stakeholder Consultation at the time of validation, villagers raised questions about project benefits, employment opportunities, land fertility, and future plans. The project proponent (PP) assured them of local employment, no impact on land fertility, and promised economic development contributing to improved infrastructure and facilities in the area. Since no comments were received during the current monitoring period and outside the public comment period, no actions were taken, and there were no updates to the project design. The audit confirmed the absence of comments during the specified periods and the PP's measures to address stakeholder concerns raised during the validation phase. The grievance register demonstrates the PP's commitment to ongoing stakeholder engagement and feedback mechanisms.

4.2.6 Risks to Local Stakeholders and the Environment

Item	Evidence gathering activities, evidence checked, and assessment conclusion
Risks to stakeholder participation	**Evidence Gathering Activities:** • Assessed the potential risks to stakeholder participation in the project activities. • Verified the measures taken by the project proponent (PP) to ensure open and transparent dialogue with stakeholders.

- Confirmed the inclusion and participation of women in the consultation process.
- Reviewed the documentation of meaningful consultations with affected local communities, especially project-affected persons.
- Checked if all aspects of the project, including environmental and social impacts and mitigation measures, were discussed during the consultations.
- Verified the adherence to necessary steps and processes to ensure the local community's first-hand knowledge about the project, impacts, and mitigation measures.

Evidence Checked:

- Records of stakeholder consultations and dialogues at validation
- Documentation of women's participation in consultation at validation
- Consultation records with affected local communities and project-affected persons
- Information disclosure materials and records related to project aspects, impacts, and mitigation measures
- Process documentation for ensuring local community knowledge and understanding

Assessment Conclusion: Based on the evidence gathered and reviewed, it is confirmed that:

- No risks to stakeholder participation were identified in the project activities.
- The PP ensured open and transparent dialogue with stakeholders.
- Women's participation in the consultation process was ensured.
- Meaningful consultations were conducted with affected local communities, including project-affected persons.
- All aspects of the project, environmental and social impacts, and mitigation measures were discussed during these consultations.
- Necessary steps were taken to ensure the local community had first-hand knowledge about the project, its impacts, and the mitigation measures implemented by the company.
- All processes were diligently followed during the public consultations.
- The audit verified the PP's efforts to mitigate risks to stakeholder participation, promote open and transparent dialogue, ensure women's participation, and conduct meaningful consultations with

	affected communities, adhering to the required processes and information disclosure.
Working conditions	**Evidence Gathering Activities:** • Reviewed the working conditions, safety protocols, training programs, and provision of personal protective equipment (PPE) for employees. • Assessed the employment practices, including fair wages, job security, and skill development opportunities. • Verified compliance with internationally accepted human and labour rights standards and labour laws. • Evaluated the project's contribution to socio-economic development in the region. **Evidence Checked:** During on-site audit, assessment team conducted focussed group discussion and Personnel interviews/37/ with the designated team heads to conclude the following: • Safety protocols and risk mitigation measures • Training records and materials • PPE records and inventories • Employment contracts and wage records • Skill development and training programs • Human and labour rights policies and compliance records • Socio-economic impact assessment reports • NSL Policies /25/ **Assessment Conclusion:** Based on the evidence gathered during the on-site audit and reviewed, it is confirmed that: The project proponent (PP) has diligently maintained exemplary working conditions, ensuring the safety, health, and well-being of all employees involved. During onsite visit of the project activity assessment team observe that all the site personnel who are involve in technical job roles are working with proper safety procedures and using proper PPE kits. Thus, AT confirm that Robust safety protocols, comprehensive training programs, and the provision of adequate personal protective equipment have been implemented to effectively mitigate potential risks associated with working conditions.

	• The PP complies with fair employment practices and honours internationally accepted human and labour rights and labour standards. • Fair wages, job security, and opportunities for skill development have been prioritized, safeguarding the welfare of the workforce and contributing positively to the socio-economic development of the region. • The working conditions on the project are exemplary, reflecting the PP's dedication to fostering a safe, prosperous, and sustainable working environment. • The audit has verified the PP's commitment to maintaining exemplary working conditions, ensuring employee safety and well-being, adhering to fair employment practices and labour standards, and contributing to the socio-economic development of the region through its workforce management practices.
Safety of women and girls	**Evidence Gathering Activities:** • Reviewed the safety protocols, workplace safety regulations, and their implementation by the project proponent (PP). • Evaluated the training programs and initiatives to promote a culture of respect, equality, and safety for women and girls. • Verified the measures taken to mitigate potential risks related to the safety of women and girls in the workplace. • Assessed the work environment and the level of participation and contribution of women and girls in the project's success. **Evidence Checked:** • Safety protocols and risk mitigation measures • Training records and materials related to workplace safety and gender equality • Compliance records with relevant laws and regulations • Policies and initiatives promoting a respectful and inclusive work environment • Workplace safety assessments and incident reports • Employment records and participation levels of women and girls • NSL Policies/25/ **Assessment Conclusion:** Based on the evidence gathered and reviewed, it is confirmed that:

	• The PP offers a safe and healthy workplace for all employees, including women and girls, by maintaining stringent safety protocols and adhering to relevant Indian regulations governing workplace safety. • Compliance with The Factories Act, 1948, and the Sexual Harassment of Women at Workplace (Prevention, Prohibition, and Redressal) Act, 2013, has been ensured, effectively mitigating potential risks related to the safety of women and girls. • Comprehensive training programs and the promotion of a culture of respect and equality have been implemented, creating a work environment where all individuals, including women and girls, feel valued, empowered, and protected from harm. • The project provides a safe and secure workplace for women and girls, fostering an environment conducive to their participation and contribution to the project's success. However currently at site there is no women/girl employee. The women/girl employees are working at head-office, one of which was present during the on-site audit. • The audit has verified the PP's efforts in maintaining a safe and secure workplace, particularly for women and girls, through adherence to regulations, implementation of safety protocols, promotion of a respectful and inclusive culture, and enabling the active participation and contribution of women and girls in the project's success.
Safety of minority and marginalized groups, including children	**Evidence Gathering Activities:** • Reviewed the project proponent's (PP) equal rights and non-discrimination policies and practices. • Assessed the measures taken to prevent and address any forms of harassment or discrimination in the project. • Evaluated the PP's appreciation and promotion of diversity within the project. • Verified the proactive engagement with local communities, stakeholder consultations, and sensitivity to cultural diversity. • Assessed the creation of a safe and supportive environment for the participation and empowerment of minority and marginalized groups, including children. • Reviewed the project's social responsibility and ethical practices contributing to the safety and security of all individuals.

Evidence Checked: During on-site audit while conducting personnel interviews/37/ and focussed group discussion with PP & representatives following was cross-confirmed:

- Equal rights and non-discrimination policies
- Harassment prevention and reporting mechanisms
- Diversity and inclusion initiatives and records
- Community engagement and stakeholder consultation records
- Cultural sensitivity training and awareness programs
- Policies and practices promoting the participation and empowerment of minority and marginalized groups
- NSL Policies/25/

Assessment Conclusion: Based on the evidence gathered during the on-site audit and desk-review, it is confirmed that:

- The PP is an equal rights employer, and no discrimination based on race, religion, political opinion, gender, age, national origin, sexual orientation, marital status, or disability is allowed in the project.
- All types of harassment are prohibited, and measures are in place to eliminate any such instances immediately.
- The PP appreciates and promotes diversity within the project, considering it a competitive advantage.
- Through proactive engagement with local communities, stakeholder consultations, and sensitivity to cultural diversity, the PP has created a safe and supportive environment that promotes the participation and empowerment of minority and marginalized groups, including children.
- The project's commitment to social responsibility and ethical practices further reinforces its dedication to ensuring the safety and security of all individuals, leaving no room for risks or vulnerabilities to go unaddressed.
- The audit has verified the PP's commitment to equal rights, non-discrimination, and the promotion of diversity, as well as its efforts to create a safe and supportive environment for the participation and empowerment of minority and marginalized groups through community engagement, stakeholder consultations, and ethical practices.

Pollutants (air, noise, discharges to water, generation of waste, release of hazardous materials)	**Evidence Gathering Activities:** • Reviewed the inherent characteristics and operational processes of the Wind power project. • Assessed the potential risks related to pollutants, including air emissions, noise pollution, water discharges, waste generation, and hazardous material releases. • Evaluated the environmental footprint of the wind power project in comparison to traditional power plants. • Verified the project's plans and procedures for end-of-life management, including decommissioning, component removal, and site restoration. **Evidence Checked:** • Technical specifications and operational data of the Wind power project/30/ • EHS policy/25/ **Assessment Conclusion:** Based on the evidence gathered and reviewed, it is confirmed that: • The non-polluting nature wind power project inherently presents minimal risks related to pollutants. • Energy generation from wind turbines is a clean and renewable energy source that does not produce air pollutants such as carbon dioxide, sulphur dioxide, or nitrogen oxides during operation. The WTGs operate seamlessly, eliminating the risk of noise pollution. The project does not discharge pollutants to water bodies, generate significant amounts of waste, or release hazardous materials during its lifecycle. • The environmental footprint of the wind power project is significantly lower compared to traditional power plants, making it a sustainable and environmentally friendly energy option with minimal risks related to pollutants. • The audit has verified the minimal risks related to pollutants associated with the Wind power project, its environmentally friendly nature, and the plans in place for responsible end-of-life management.

4.2.7 Respect for Human Rights and Equity

4.2.7.1 Labor and Work

Item	Evidence gathering activities, evidence checked, and assessment conclusion
Discrimination and sexual harassment	**Evidence gathering activities:** Desk-review, personnel interview & focussed grouped discussion/37/ • Reviewed NSL People Policy document named "Commitment to Gender sensitivity, non-discrimination, anti- harassment, employee & stakeholders' welfare and work life balance version 01 dated 15-Novemeber-2023" on non-discrimination and prohibition of harassment /25/ • Noted adherence to the Sexual Harassment of Women at Workplace Act, 2013 • Checked the policy review statements for three different months failing under current monitoring data/25/ for any reported instances during the period • Confirmed during the onsite visit conducted by assessment team. **Evidence checked:** The Project Proponent (PP) has provided the policy/25/ & policy review statements which confirms that no incidents of discrimination or sexual harassment have occurred within the project. • NSL People Policy statements on equal opportunity, non-discrimination, and prohibiting harassment • Specific reference to Chapter IV, Article 19 (a) of the Sexual Harassment Act on employer's duty to provide a safe workplace • Confirmation that no discrimination or harassment cases were identified or reported in the monitoring period • Assessment team's Onsite visit and interviews with personnel have confirmed the same. **Assessment Conclusion:** There have been no reports of such incidents during the current monitoring period. This commitment to maintaining a respectful and inclusive environment underscores the project's dedication to upholding ethical standards and ensuring the well-being of all stakeholders involved. NSL maintains comprehensive policies prohibiting all forms of discrimination and harassment in alignment with legal requirements. Procedures are in place for prevention, reporting, investigation and redressal.

	The monitoring data showing zero instances reported, further confirmed through onsite visit and personnel interviews/37/ demonstrates effective implementation of the policies and training during this period. However, continued vigilance through regular reinforcement of the zero-tolerance stance, encouraging reporting without fear of retaliation, and prompt corrective action, when needed, will be crucial to sustaining an equitable and safe workplace environment long-term.
Management experience	**Evidence gathering activities:** Desk-review, Personnel interview & focussed group discussion/37/ **Evidence checked:** The Project Proponent (PP) has provided the declaration and also cross checked with the details available on project webpage. No new entity has been involved in project design or implementation, hence **not applicable**. **Assessment Conclusion:** In conclusion, the project has maintained continuity in its design and implementation, with no new entities being involved in the process during the current monitoring period. This stability indicates a consistent approach to project management and suggests that the existing project framework and partnerships have been effective in driving progress towards its objectives.
Gender equity in labor and work	**Evidence gathering activities:** Desk-review, Personnel interview & focussed grouped discussion/37/ • Reviewed NSL People Policy document named "Commitment to Gender sensitivity, non-discrimination, anti- harassment, employee & stakeholders' welfare and work life balance version 01 dated 15-Novemeber-2023" on non-discrimination and prohibition of harassment/25/ • Noted compliance with Equal Remuneration Act, 1976 • Checked monitoring data for any reported instances of gender discrimination or pay disparity • Confirmed details of ongoing training programs on gender inclusivity **Evidence checked:** • The Project Proponent (PP) has provided the policy/25/ & policy review statements on fair, transparent, competitive rewards based on laws/agreements • Specific reference to Chapter II, Article 4(1) of Equal Remuneration Act prohibiting lower pay based on gender

	• Confirmation of zero instances of gender discrimination or pay disparity reported in monitoring period • Details of training programs promoting gender inclusivity and addressing unconscious biases **Assessment Conclusion:** NSL maintains non-discriminatory policies and robust procedures aligned with laws and international standards to ensure gender equity in employment, work opportunities and compensation practices. This includes transparent hiring, regular pay scale reviews, and ongoing employee training and awareness programs. The lack of any reported grievances related to gender bias or pay disparity during the monitoring period indicates effective implementation of these policies and practices. Continued leadership commitment to embodying the principles of gender equality and creating an inclusive organizational culture will be crucial for sustaining fair and equitable labour practices in the long run.
Human trafficking, forced labor, and child labor	**Evidence gathering activities:** Desk-review, Personnel interview & focussed group discussion/37/ Noted compliance with Bonded Labour System (Abolition) Act, 1976, Child Labour (Prohibition and Regulation) Act, 1986, and Factories Act, 1948 **Evidence checked:** • Adherence to relevant Indian laws prohibiting bonded/forced labour and child labour as mentioned above. • Processes for regular audits and inspections to verify compliance within workforce • No instances of human trafficking, forced labour or child labour identified during the monitoring period • NSL Policies/25/ **Assessment Conclusion:** The project enforces comprehensive policies and procedures aligned with Indian laws to prevent and detect any instances of human trafficking, forced labour or child labour within its operations and supply chain. This includes thorough vetting of suppliers/contractors and regular audits/inspections. No violations were identified during the monitoring period, demonstrating effective implementation of these safeguards. Continued vigilance through periodic risk assessments, unannounced audits, grievance redressal

	mechanisms and awareness programs will be essential to ensure the project's ethical sourcing standards are consistently upheld by all suppliers and contractors.

4.2.7.2 Human Rights

The following demonstrations show how the project is committed to safeguard the rights of Indigenous People (Ips), Local communities (LCs), and customary right holders, while following the international human rights law, the UNDRIP and ILO Convention 169-

Item	Evidence gathering activities, evidence checked, and assessment conclusion
Human rights	**Evidence gathering activities:** Desk-review, Personnel interview & focussed grouped discussion/37/ **Evidence checked:** Adherence to relevant laws and rights pertaining to Indigenous People (IPs), Local communities (LCs), and customary right holders **Assessment Conclusion:** The project maintains a commitment to upholding the rights of IPs, LCs, and customary rights holders, aligning with international human rights standards, including the UN Declaration on the Rights of Indigenous Peoples and ILO Convention.

4.2.7.3 Indigenous Peoples and Cultural Heritage

Based on the nature of the project activity involving the production and implementation of wind turbines inside the premises of private land, it is concluded that:

Item	Evidence gathering activities, evidence checked, and assessment conclusion
Preservation and protection of cultural heritage	**Evidence Gathering Activities:** • Focussed Group discussion with local stakeholders that volunteered during the on-site audit/37/ & potentially affected by the project were carried out, ensuring their free, prior, and informed consent. • Engagement with stakeholders regarding knowledge holders to understand their cultural practices, traditional lands, and sacred sites. • Assessment of the potential impacts on Indigenous Peoples' livelihoods, access to resources, traditional land use patterns and traditional knowledge systems.

	Evidence Checked: • Verification of the accuracy and authenticity of the gathered information through cross-referencing and collaboration with independent experts and stakeholder representatives. • Ensuring the comprehensiveness of the evidence, taking into account both tangible and intangible aspects of cultural heritage. • On-site audit and field assessments to corroborate the findings from desk-based research and consultations.

1. **No Impact on Tangible[6] Cultural Heritage:** The project activity does not impact any tangible cultural heritage of the stakeholders.

2. **No Negative Impact on Intangible Cultural Heritage:** There have been no negative impacts of the project activity on the intangible cultural heritage of the stakeholders. Instead, the project fosters cultural harmony by involving diverse groups without affecting their customs, traditions, or beliefs.

   This conclusion underscores the project's commitment to preserving and respecting the cultural heritage of the stakeholders while promoting sustainable development.

4.2.7.4 Property Rights

It is not applicable for the project activity in current monitoring period, as the Project Proponent owns the land where all 22 WTGs are located.

Item	Evidence gathering activities, evidence checked, and assessment conclusion
Disputes over rights to territories and resources	N/A; Since there are no disputes over rights to territories and resources, hence nothing can be stated here.
Respect for property rights	**Evidence gathering activities:** Desk-review, Personnel interview & focussed grouped discussion/37/ **Evidence checked:** it is confirmed through onsite interview with local stakeholders and site personnel/37/

[6] Tangible cultural heritage consists of non-physical intellectual wealth, such as folklore, customs, beliefs, traditions, knowledge, and language

	Assessment Conclusion: In conclusion, the project activity involves installation of 22 WTGs with a total capacity of 35.5 MW (AC) Wind power project & has not incorporated any land or property of the stakeholders, including Indigenous Peoples (IPs), Local Communities (LCs), and customary rights holders. Furthermore, the project has obtained the free, prior and informed consent of the nearby stakeholders, where project is implemented, including the IPs, LCs and customary rights holders. This ensures that their land and property rights are protected and respected throughout the project implementation. Ongoing measures to protect property rights include upholding agreements made before land acquisition, respecting customary rights, and ensuring transparent and equitable compensation processes. Regular consultations and grievance mechanisms are maintained to address any concerns promptly.

4.2.7.5 Benefit Sharing

Item	Evidence gathering activities, evidence checked, and assessment conclusion
Summary of the benefit sharing plan	Since the above section 4.2.7.4 is not applicable, hence this section is also not applicable.
Benefit sharing during the monitoring period	N/A

4.2.8 Ecosystem Health

Item	Evidence gathering activities, evidence checked, and assessment conclusion	
	Risk Identified	Mitigation or preventative measure taken during the monitoring period
Impacts on biodiversity and ecosystems	No risk identified	**Evidence gathering activities:** Desk-review of registered VCS Joint PD & MR/3/, Personnel interview & focussed grouped discussion/37/ **Evidence checked:** Witness of the project implemented area during onsite visit. Baseline

		biodiversity assessments and impacts, biodiversity monitoring records maintained by the project, photographs and drone imagery of the project site and surrounding areas from routine inspections. **Assessment Conclusion:** No risks to biodiversity or ecosystems were identified. Monitoring data showed no significant changes in local flora/fauna populations. Site inspections revealed the project's minimal footprint and absence of emissions/effluents that could impact ecosystems
Soil degradation and soil erosion	No risk identified	**Evidence gathering activities:** Review of soil management plans, erosion control measures **Evidence checked:** Approved soil management and erosion control plans. **Assessment conclusion:** No risks related to soil degradation or erosion were observed. Wind projects typically employ land management practices that minimize soil disturbance, ensuring soil health and stability are preserved.
Water consumption and stress	No risk identified	**Evidence gathering activities:** Review of water management plans. **Evidence checked:** Approved water management plan **Assessment conclusion:** No significant risks to water resources were identified. The project's water demands were almost zero due to non-water demanding nature of the project. Local water bodies showed no signs of stress or depletion due to the implementation/operation of project activity.
Usage of fertilizers	No risk identified	**Evidence gathering activities:** Review of project documentation, including site maintenance

		records and interviews with project site personnel/37/ **Evidence checked:** Site maintenance logs, interviews with personnel responsible for site maintenance, and site inspection reports. **Assessment conclusion:** No risks related to the usage of fertilizers were identified during the monitoring period. Wind Turbines installations typically do not require the use of fertilizers, and the project has not employed any fertilizers, eliminating the potential for environmental contamination or ecosystem disruption.

4.2.8.1 Rare, Threatened, and Endangered species

Item	Evidence gathering activities, evidence checked, and assessment conclusion
Species or habitat	**Evidence gathering activities:** Not Applicable **Evidence checked:** Not Applicable **Assessment Conclusion*:*** Given that the project activity involves the installation of 22 WTGs with a total capacity of 35.5 MW (AC) Wind power project & is located at Satara & Sangli district in state Maharashtra which is not situated in or near habitats for rare, threatened, or endangered species, there are no direct impacts on these species or their habitats. The installation and operation of 35.5 MW (AC) Wind power project is typically conducted in industrial or commercial settings that are separate from natural habitats. As a result, the project does not pose a risk to these species or their habitats, and the assessment for this particular aspect is not applicable.

4.2.8.2 Introduction of Species

It is not applicable, as this is a renewable energy project not an AFOLU project. So, there is no introduction of species in this project activity

Species introduced	Evidence gathering activities, evidence checked, and assessment conclusion

Species introduced	Classification	Justification for use	Adverse effects and mitigation
N/A	N/A	N/A	N/A

Existing invasive species	Evidence gathering activities, evidence checked, and assessment conclusion
N/A	N/A

4.2.8.3 Ecosystem conversion

Item	Evidence gathering activities and evidence checked
Ecosystem conversion	**Evidence gathering activities:** Not Applicable **Evidence checked:** Not Applicable **Assessment Conclusion**: Since the project activity is not an Afforestation and Reforestation (ARR) project, Agroforestry and Agro-silvo pastoral Systems (ALM) project, Wetland Restoration and Conservation (WRC) project, nor an Avoided Conversion of Grasslands and Shrublands (ACOGS) project, the information related to these specific project types is not applicable. This means that the project does not fall under any of these categories and therefore does not need to be evaluated based on the criteria specific to these types of projects.

4.3 Accuracy of Reduction and Removal Calculations

The equations and choices provided in the methodology /12/ and all other methodological tools are correctly quoted in the MR /1/. The emission reductions of the project activity are calculated using the formulae mentioned in the applied methodologies i.e., ACM0002 Version 17.0 /12/. The assessment team has reviewed the emission reduction spread sheets (ER sheets) /2/ and checked all the formulae and found they are correct and are in accordance with the monitoring plan of the VCS Joint PD & MR /3/ and the applied monitoring methodology /12/.

The project monitoring plan involves total 04 parameter to be monitored;

1) $EG_{facility,y}$ (Quantity of Net Electricity exported to the grid by the project WTGs to the grid during the year y.);
2) $EG_{JMR,NSL,export,y}$ (Quantity of Electricity exported by the Project WTGs connected to the feeder i to the grid during the year y.)
3) $EG_{JMR,NSL,import,y}$ (Quantity electricity imported by the Project WTGs connected to the feeder i from the grid during the year y)

4) $EG_{Controller,gen}$ (Quantity electricity generated by the project activity WTGs recorded at respective controller meters)

All monitored parameters are according to the monitoring plan and monitoring report/1/.

The monitoring plan specified in the registered VCS Joint PD & MR version 02, dated 06-February-2017/3/, is diligently being followed at the site. The assessment team has conducted a thorough verification of the entire information flow, starting from data generation and aggregation to recording, calculation, and reporting of the relevant parameters in the Monitoring Report (MR/1/). The emission reductions are based on the net electricity generated and exported from the project.

The project proponent (PP) has provided all the necessary data for the current monitoring period, ensuring a comprehensive and accurate assessment. The values of the parameter " Quantity of net electricity generation supplied to the grid," which were used in deriving the greenhouse gas (GHG) emission reduction, have been found to be well correlated between the data sets and the Emission Reduction (ER) spreadsheet provided by the PP.

The verification of each monitoring parameter has been discussed later in section 4.

The appropriateness of default values used in the monitoring report is elaborated below:

Table No: 13 Data and Parameters Available at Validation or Ex-ante parameters:

Parameter	Unit	Description	Value
$EF_{grid,CM,y}$	tCO_2/MWh	Combined Margin CO_2 Emission Factor in year y	**0.9767 tCO_2/MWh** is consistent with the registered VCS Joint PD & MR version 02 dated 06-February-2017/3/ Combined Margin Emission Factor ($EF_{grid,CM,y}$) is calculated as the weighted average of Operating Margin Emission Factor ($EF_{grid,OM,y}$) and Build Margin Emission Factor ($EF_{grid,BM,y}$) and tool to calculate the emission factor for an electricity system/19/
$EF_{grid,OMsimple,y}$	tCO_2/MWh	Simple operating margin emission factor of Indian Grid	**0.9857 tCO_2/MWh** is consistent with the registered VCS Joint PD & MR version 02 dated 06-February-2017/3/ Calculated

			from CEA database, Version 10, December-2014/21/
$EF_{grid,BM,y}$	tCO_2/MWh	Combined Margin CO_2 Emission Factor in year y	**0.9495 tCO_2/MWh** is consistent with the registered VCS Joint PD & MR version 02 dated 06-February-2017/3/ Calculated from CEA database, Version 10, December-2014/21/

According to applied methodology ACM0002; Version 17.0 /12/ the emissions are calculated as below:

According to applicable methodology ACM0002; Version 17.0[7]

Under section 5 of Baseline Methodology Procedure with further description

Under section 5.4-page 12 about Project emissions & under section 5.6-page 18 about Leakage emissions that since project activity is a Wind power project and no other kind of fossil fuel has been used in the current monitoring period on site thus no leakage emission is considered according to the methodology used & since this is a renewable project activity no project emissions from the project activity are considered.

Leakage emissions: $LE_y = 0\ tCO_2$

Project Emissions: $PE_y = 0\ tCO_2$

Methods and formulae set out in the project description for calculating actual emissions for current monitoring period.

The calculation of emission reduction has been done in accordance with the applied methodology used i.e., ACM0002 Version 17.0 /12/. As per the applied methodology, the values of project emission and leakages are considered as zero for the project activity. The equation used for calculation of baseline emission is given below:

The calculation of **$EG_{PJ,y}$** for Greenfield plants ..... Equation (8)

$EG_{PJ,y} = EG_{facility,y}$
Where,

[7] https://cdm.unfccc.int/UserManagement/FileStorage/D5YFS9I3VKBT18MQNGX0LPZ6U7AWCO

$EG_{PJ,y}$	=	Quantity of net electricity generation that is produced and fed into the grid as a result of the implementation of the project activity in year y (MWh/yr)
$EG_{facility,y}$	=	Quantity of Net Electricity exported to the grid by the project WTGs to the grid during the year y (MWh/yr)

Baseline emissions are calculated as follows: ..... Equation (7)

Where,

$BE_y = EG_{pj,y} X EF_{grid,CM,y}$	
BE_y =	Baseline Emissions (tCO_2/year)
$EG_{pj,y}$ =	Quantity of net electricity generation that is produced and fed into the grid as a result of the implementation of the project activity in year y (MWh/yr)
$EF_{grid,CM,y}$ =	Combined margin CO_2 emission factor for grid connected power generation in year y calculated using the latest version of the "Tool to calculate the emission factor for an electricity system" (tCO_2/MWh)

As per calculation mentioned in section 3.4 of registered VCS Joint PD & MR Version 02 dated 06-February-2017/3/

Estimated Emission Reduction as in VCS Joint PD & MR for the equivalent period of the current Monitoring period, 01-January-2023 to 31-December-2023 (Inclusive of both the days):	
Monitoring Period Start Date	01-January-2023
Monitoring Period End Date	31-December-2023
Days in Current Monitoring period	**365**
Annual VCUs as per VCS Joint PD & MR	**60,746** (tCO_2e)
Estimated Emission Reduction as in VCS Joint PD & MR for the equivalent period of the current Monitoring period	**=** (Annual Estimated GHG emission reductions as per revised VCS Joint PD & MR /Total days in a year) *days in current monitoring period **= (60,746/365) * 365 = 60,746 (tCO_2e)**
Achieved Emission Reductions for current monitoring period	**69,695** (tCO_2e)
Percentage Difference	**+14.7 % higher** than the estimated

Section 5.4 of the Monitoring Report (MR/1/) presents detailed calculations, which have been cross-checked and verified through the compiled Emission Reduction (ER/2/) spreadsheet. The assessment team ensured the accuracy of these calculations by referencing the Joint Meter Readings (JMRs & Credit notes/26/) and cross-checking the data with invoices /27/.

PP has submitted all the evidences like JMRs & Credit notes /26/ and Invoices /27/ to VKU Assessment Team for verification and assessment of ER Sheet/2/

Hence VKU Assessment Team can state that the calculation method and formulae used in calculating baseline emission is following the methodology used i.e., ACM0002: "Grid connected electricity generation from renewable sources - Version 17.0" /12/.

4.4 Quality of Evidence to Determine Reductions and Removals

When verifying the reported emission reduction, VKU ensured that there was a clear audit trail that contained the evidence and records that validate the stated figures. All source documents that form the basis for assumptions and other information underlying the GHG data are shown above.

When assessing the audit trails, VKU also examined:

1. Whether sufficient evidence was available, both in terms of frequency and in covering the full monitoring period
2. The source and nature of the evidence
3. If comparable information was available from sources other than that used in the monitoring report/1/, VKU cross-checked the monitoring report against the other sources to confirm that the stated figures were correct. The sources and the data referenced are shown in Section 2.2 above.

All records needed for monitoring are archived in line with the requirements of the registered monitoring plan. No significant, lack of evidence and missing data were detected during verification. Hence, the assessment team confirms that the monitoring system ensures required quality of the monitoring system to ensure the quality of the monitored data. All internal data are subjected to QA/QC measures.

There are total 04 parameters to be monitored;

1) $EG_{facility,y}$ (Quantity of Net Electricity exported to the grid by the project WTGs to the grid during the year y.);
2) $EG_{JMR,NSL,export,y}$ (Quantity of Electricity exported by the Project WTGs connected to the feeder i to the grid during the year y.)
3) $EG_{JMR,NSL,import,y}$ (Quantity electricity imported by the Project WTGs connected to the feeder i from the grid during the year y)
4) $EG_{Controller,gen}$ (Quantity electricity generated by the project activity WTGs recorded at respective controller meters) according to the monitoring plan and monitoring report/1/.

The below table describe how the parameter $EG_{facility,y}$ (Quantity of Net Electricity exported to the grid by the project WTGs (i.e., total 22 WTGs) to the grid during the year y), that 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 been thoroughly assessed and that the calibration requirements are met:-

Table No: 14 Assessment of Parameter $EG_{facility,y}$ (Quantity of Net Electricity exported to the grid by the project WTGs (i.e. total 22 WTGs) to the grid during the year y)

Parameter	**$EG_{facility,y}$** (Quantity of Net Electricity exported to the grid by the project WTGs (i.e. total 22 WTGs) to the grid during the year y)	
Means of verification	**Criteria/Requirements**	**Assessment/Observation**
	Measuring /Reading /Recording frequency	The parameter is calculated parameter and recorded at least monthly by energy meter. The quantity of net electricity exported to the grid by WTGs is recorded with the aid of energy meter for each feeder in MWh for cross check of import and export electricity. Quantity of Net Electricity exported to the grid by the project WTGs (i.e., total 22 WTGs) to the grid during the year y, is calculated as: $EG_{facility,y} = \sum EG_{JMR, Project, export} - \sum EG_{JMR, Project, import}$ Where, $\sum EG_{JMR, Project, export} = EG_{JMR, Project, export, y}$ = Quantity of Electricity exported by the Project WTGs connected to the feeder i to the grid during the year y. $\sum EG_{JMR, Project, import} = EG_{JMR, Project, import, y}$ = Quantity electricity imported by the Project WTGs connected to the feeder i from the grid during the year y
	Is measuring and reporting frequency in accordance with the monitoring plan and monitoring methodology? (Yes / No)	Yes. The reporting frequency is in line with the monitoring plan as outlined in the registered VCS Joint PD & MR/3/ and monitoring methodology/12/.

	Monitoring equipment	No monitoring equipment is used as this parameter is calculated. However, the parameter $EG_{JMR,\ export,\ y}$ and $EG_{JMR,\ import,\ y}$ are measured values, are continuously monitored, hourly measured and monthly recorded.
	Is accuracy of the monitoring equipment as stated in the monitoring plan? If the monitoring plan does not specify the accuracy of the monitoring equipment, does the accuracy of the monitoring equipment comply with local/national standards, or as per the manufacturer's specification?	The accuracy of the monitoring equipment used to measure the input values used to calculate $EG_{JMR,\ export,\ y}$ and $EG_{JMR,\ import,\ y}$ is 0.2s, which is as per the registered VCS Joint PD & MR/03/ which is as per the norm defined in PPA /23/
	Is the accuracy valid for the entire measuring range or do different accuracy levels apply to different measuring ranges?	Yes, the accuracy is valid for entire measuring rage for the entire current monitoring period i.e., **01-January-2023 to 31-December-2023** (Inclusive of both the days)
	Calibration frequency /interval:	The Calibration frequency /interval of the monitoring equipment used to measure the input values ($EG_{JMR,Export}$ and $EG_{JMR,\ Import}$), which is used to calculate $EG_{JMR,\ Project,\ export,y}$ and $EG_{JMR,\ Project,\ import,\ y}$ is once in three years, which is as per section 4.3 of the registered Joint PD & MR/03/ which is as per the norm defined in PPA /24/
	Is the calibration interval in line with the monitoring plan and/or methodology? If the monitoring plan does not specify the frequency of calibration, is the selected	Yes, it is in line with the monitoring plan & registered methodology. Outlined in the registered VCS Joint PD & MR dated 06-February-2017/3/ The calibration frequency is once in three years as per PPA/24/

		frequency in accordance with the local/national standards, or as per the manufacturer's specifications?	
		Is the calibration of measuring equipment carried out by an accredited person or institution?	**Yes,** Calibration of the measuring equipment's is **carried out by State DISCOM i.e., Maharashtra State Electricity Distribution Company Limited.** This is a calculated Parameter. However, a calibrated energy meter is used for monitoring and measuring the input values of ($EG_{JMR, Export}$ and $EG_{JMR, Import}$), which is used to calculate $EG_{JMR, Project, export, y}$ and $EG_{JMR, Project, import, y}$: All the meters are tested by Maharashtra State Electricity Distribution Company Limited on a periodic basis.
		Is(are) calibration(s) valid for the whole reporting period?	**Yes,** the calibration is valid throughout the reporting period **i.e., from 01-January-2023 to 31-December-2023 (Inclusive of both the days).** This is a calculated Parameter. However, a calibrated energy meter is used for monitoring and measuring the input values of ($EG_{JMR, Export}$ and $EG_{JMR, Import}$), which is used to calculate $EG_{JMR, Project, export, y}$ and $EG_{JMR, Project, import, y}$:
		Is the calibration carried out for a measuring range comparable with the range for which measurements have been carried out?	**Yes,** the calibration is carried out appropriately for current monitoring as per the registered monitoring plan and VCS VVS manual version 3.2/10/and as per PPA/24/. This is a calculated Parameter. However, a calibrated energy meter is used for monitoring and measuring the input values of ($EG_{JMR, Export}$ and $EG_{JMR, Import}$), which is used to calculate $EG_{JMR, Project, export, y}$ and $EG_{JMR, Project, import, y}$:
		How were the values in the monitoring report verified?	Cumulative value of $EG_{facility,y}$ for entire monitoring period **01-January-2023 to 31-December-2023** (inclusive of both dates) is

			reported in the monitoring report/1/, and monthly values in the ER calculation sheet/2/ in MWh. The monthly values were verified from the JMRs/26/ and cross checked from invoices/27/ thus found to be consistent. Value of this parameter for the current monitoring period was verified as **71,358.10 MWh**.
		If applicable, has the reported data been cross-checked with other available data?	The monthly reported values of $EG_{facility,y}$ in JMRs/26/ were further cross checked with the monthly invoices /27/ raised by the PP to Maharashtra State Electricity Distribution Co. Ltd. (MSEDCL) which is found to be consistent with the PPA/24/
		Does the data management ensure correct transfer of data and reporting of emission reductions and are necessary QA/QC processes in place?	On site personnel interview/37/ with the project personnel of the project activity confirms that the necessary QA/QC procedures are in place and the data management system is effective and reliable. Every month these meter readings will be recorded by MSEDCL representative and plant personnel. The meters at the substation will be two-way meters and will be in the custody of MSEDCL. The quantity of net electricity supplied is cross-verified from the invoice raised on MSEDCL by the project proponent
Findings	CL#01 is raised and resolved		
Conclusion	The parameter has been monitored appropriately, in accordance with the registered monitoring plan (as per measurement methods and procedures to be applied) and applied methodology. The monitoring results were recorded consistently as per the approved frequency in the monitoring plan. The emission reduction calculation for the project activity is estimated based on the electricity supplied by the project. Since 100% data was verified, the team can ascertain that the values taken for emission reduction calculation are free from material errors.		

The below table describe how the parameter **EG $_{JMR,Poject,Import,y}$** (Quantity electricity imported by the Project WTGs connected to the feeder i from the grid during the year y), that 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 been thoroughly assessed and that the calibration requirements are met:-

Table No: 15 Assessment of Parameter EG $_{JMR,Project,Import,y}$ (Quantity electricity imported by the Project WTGs connected to the feeder i from the grid during the year y)

Parameter	EG $_{JMR,Project,Import,y}$ (Quantity electricity imported by the Project WTGs connected to the feeder i from the grid during the year y)	
Means of verification	Criteria/Requirements	Assessment/Observation
	Measuring /Reading /Recording frequency	The parameter **EG $_{JMR,Project,Import,y}$** is calculated from measured parameter **EG $_{JMR, Import}$** (*Electricity imported by all the WTGs (project WTGs & non-project WTGs)*) would be calculated using the apportioning procedure. The parameter is reported monthly in the credit note, which is prepared for each project developer separately. The electricity imported by each WTG is recorded with the aid of energy meter for individual feeders in kWh for cross check of export and net export supplied to the grid.
	Is measuring and reporting frequency in accordance with the monitoring plan and monitoring methodology? (Yes / No)	Yes. The reporting frequency is in line with the monitoring plan as outlined in the registered VCS Joint PD & MR/3/ and monitoring methodology/12/. This was verified by assessment team during desk review and by Team Leader during onsite visit and interviews/37/ with site personnel.
	Monitoring equipment	Monitoring equipment is not utilized since this particular parameter **EG $_{JMR,Project,Import,y}$** is derived through calculation. The value of **EG $_{JMR,Project,Import,y}$** is calculated by apportioning the values of parameter **EG $_{JMR, Import.}$** However, the parameter **EG $_{JMR, Import}$** is

			directly measured by using calibrated energy meters. Nonetheless, the input values essential for determining this parameter are continually under observation; they are gauged on an hourly basis and documented on a monthly basis. The wind turbine generators (WTGs) associated with the project are linked to various distribution feeders, and each feeder has its own distinct metering setup situated at the project site. It's worth noting that the WTGs from other projects, not part of this activity, are also interconnected with these same feeders. All generated electricity, originating from both the WTGs within the project and those external to it, is channelled into the Indian grid. On a monthly basis, the electricity output of all WTGs linked to each feeder is meticulously recorded. This documentation occurs during Joint Meter Reading (JMR) sessions, which involve representatives from MSEDCL and officials from the "Inhouse" and "Renom Energy Services" Operations and Maintenance (O&M) ensuring transparency. Using the data amassed from the JMRs and the individual WTG controller meter readings, the electricity contributed to the grid exclusively by the WTGs associated with the project is calculated by MSEDCL. This computation employs an allocation procedure to fairly distribute the electricity production among all WTGs connected to the feeders. Subsequently, MSEDCL compiles credit notes for each developer participating in the project, detailing their respective contributions based on the calculated electricity supply.

		Is accuracy of the monitoring equipment as stated in the monitoring plan? If the monitoring plan does not specify the accuracy of the monitoring equipment, does the accuracy of the monitoring equipment comply with local/national standards, or as per the manufacturer's specification?	The accuracy of the monitoring equipment used to measure the input values i.e., $EG_{JMR, Import}$, which is used to calculate $EG_{JMR, Project, import, y}$ is 0.2s, which is as per the registered VCS Joint PD & MR/3/ which is as per the norm defined in PPA.
		Is the accuracy valid for the entire measuring range or do different accuracy levels apply to different measuring ranges?	Yes, the accuracy is valid for the entire current monitoring period i.e., **01-January-2023 to 31-December-2023** (Inclusive of both the days)
		Calibration frequency /interval:	The Calibration frequency /interval of the monitoring equipment used to measure the input values i.e., $EG_{JMR, Import,}$ which is used to calculate $EG_{JMR, Project, import, y}$ is once in three years, which is as per section 4.3 of the registered Joint PD & MR/01/ which is as per the norm defined in PPA /24/
		Is the calibration interval in line with the monitoring plan and/or methodology? If the monitoring plan does not specify the frequency of calibration, is the selected frequency in accordance with the local/national standards, or as per the manufacturer's specifications?	Yes, it is in line with the monitoring plan & registered methodology. Outlined in the registered VCS Joint PD & MR dated 06 February-2017/3/ The calibration frequency is once in three years as per PPA/24/
		Is the calibration of measuring equipment	Yes, Calibration certificates /24/ of the measuring equipment's is **carried out by State**

		carried out by an accredited person or institution?	**DISCOM i.e., Maharashtra State Electricity Distribution Company Limited.**
		Is(are) calibration(s) valid for the whole reporting period?	Yes, the calibration is valid throughout the reporting period i.e., from **01-January-2023 to 31-December-2023 (Inclusive of both the days).**
		Is the calibration carried out for a measuring range comparable with the range for which measurements have been carried out?	Yes. The calibration is carried out appropriately for current monitoring as per the registered monitoring plan and VCS VVS manual version 3.2/10/& as per PPA/24/
		How were the values in the monitoring report verified?	Cumulative value of **$EG_{JMR,Project,Import,y}$** for entire monitoring period **01-January-2023 to 31-December-2023** (inclusive of both dates) is reported in the monitoring report/1/, and monthly values in the ER calculation sheet/2/ in kWh. The monthly values were verified from the JMRs/26/ and cross checked from invoices/27/ thus found to be consistent. Value of this parameter for the current monitoring period was verified as **66.33 MWh.**
		If applicable, has the reported data been cross-checked with other available data?	The monthly reported values of **$EG_{JMR,Project,Import,y}$** were verified from JMRs and credit notes issued to PP by state entity i.e., MSEDCL which were further cross checked with the monthly invoices /27/ raised by the PP to respective captive user as specified in PPA/24/ and thus found to be consistent
		Does the data management ensure correct transfer of data and reporting of emission reductions and are necessary QA/QC processes in place?	On site personnel interview/37/ with the project stakeholder of the project activity confirms that the necessary QA/QC procedures are in place and the data management system is effective and reliable. The electricity imported by the WTGs is recorded. The electricity imported is adjusted

		against the export by the project activity to the grid. To be cross-checked with monthly invoices or receipts of payments.
Findings	CL#01 is raised and resolved	
Conclusion	The parameter has been monitored appropriately, in accordance with the registered monitoring plan (as per measurement methods and procedures to be applied) and applied methodology. The monitoring results were recorded consistently as per the approved frequency in the monitoring plan. The emission reduction calculation for the project activity is estimated based on the electricity supplied by the project. Since 100% data was verified, the team can ascertain that the values taken for emission reduction calculation are free from material errors.	

The below table describe how the parameter **EG $_{JMR,Project,Export,y}$** (Quantity electricity exported by the Project WTGs connected to the feeder i from the grid during the year y), that 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 been thoroughly assessed and that the calibration requirements are met:-

Table No: 16 Assessment of Parameter EG $_{JMR,Project,Export,y}$ (Quantity electricity exported by the Project WTGs connected to the feeder i from the grid during the year y)

Parameter	**EG $_{JMR,NSL,Export,y}$ (Quantity electricity exported by the Project WTGs connected to the feeder i from the grid during the year y)**	
Means of verification	**Criteria/Requirements**	**Assessment/Observation**
	Measuring /Reading /Recording frequency	The parameter is calculated parameter. The parameter is reported monthly in the credit note, which is prepared for each project developer separately. The electricity exported by each WTG is recorded with the aid of energy meter for individual feeders in kWh for cross check of export and net export supplied to the grid.

		Is measuring and reporting frequency in accordance with the monitoring plan and monitoring methodology? (Yes / No)	Yes. The reporting frequency is in line with the monitoring plan as outlined in the registered VCS Joint PD & MR/3/ and monitoring methodology/12/. Also, in current monitoring period there is no deviation from the stated procedures in the registered monitoring plan. This was verified by assessment team during desk review and by Team Leader during onsite visit and interviews/37/ with site personnel.
		Monitoring equipment	Monitoring equipment is not utilized since this particular parameter **EG** $_{JMR,Project,Export,y}$ is derived through calculation. The value of **EG** $_{JMR,Project,Export,y}$ is calculated by apportioning the values of parameter **EG** $_{JMR,Export.}$ However, the parameter **EG** $_{JMR,Export}$ is directly measured by using **calibrated energy meters**. Nonetheless, the input values essential for determining this parameter are continually under observation; they are gauged on an hourly basis and documented on a monthly basis. The wind turbine generators (WTGs) associated with the project are linked to various distribution feeders, and each feeder has its own distinct metering setup situated at the project site. It's worth noting that the WTGs from other projects, not part of this activity, are also interconnected with these same feeders. All generated electricity, originating from both the WTGs within the project and those external to it, is channelled into the Indian grid. On a monthly basis, the electricity output of all WTGs linked to each feeder is meticulously recorded. This documentation occurs during Joint Meter Reading (JMR) sessions, which involve representatives from MSEDCL and officials from the "Inhouse" and "Renom Energy

			Services" Operations and Maintenance (O&M) ensuring transparency. Using the data amassed from the JMRs and the individual WTG controller meter readings, the electricity contributed to the grid exclusively by the WTGs associated with the project is calculated by MSEDCL. This computation employs an allocation procedure to fairly distribute the electricity production among all WTGs connected to the feeders. Subsequently, MSEDCL compiles credit notes for each developer participating in the project, detailing their respective contributions based on the calculated electricity supply.
		Is accuracy of the monitoring equipment as stated in the monitoring plan? If the monitoring plan does not specify the accuracy of the monitoring equipment, does the accuracy of the monitoring equipment comply with local/national standards, or as per the manufacturer's specification?	The accuracy of the monitoring equipment used to measure the input values i.e., $EG_{JMR, Export}$, which is used to calculate ($EG_{JMR, Project, Export, y}$) is 0.2s, which is as per the registered joint PD & MR/3/ which is as per the norm defined in PPA.
		Is the accuracy valid for the entire measuring range or do different accuracy levels apply to different measuring ranges?	Yes, the accuracy is valid for the entire current monitoring period i.e., 01-January-2023 to 31-December-2023 (Inclusive of both the days)
		Calibration frequency /interval:	The Calibration frequency /interval of the monitoring equipment used to measure the input values i.e., $EG_{JMR, Export,}$ which is used to calculate $EG_{JMR, Project, export, y}$ is once in three years, which is as per section 4.3 of the registered Joint PD & MR/3/ which is as per the norm defined in PPA /24/

		Is the calibration interval in line with the monitoring plan and/or methodology? If the monitoring plan does not specify the frequency of calibration, is the selected frequency in accordance with the local/national standards, or as per the manufacturer's specifications?	Yes, it is in line with the monitoring plan & registered methodology. Outlined in the registered VCS Joint PD & MR dated 06-February-2017/3/ The calibration frequency is once in three years as per PPA/24/.
		Is the calibration of measuring equipment carried out by an accredited person or institution?	Yes, Calibration certificates /24/ of the measuring equipment's is **carried out by State DISCOM i.e., Maharashtra State Electricity Distribution Company Limited.** All the meters are tested by Maharashtra State Electricity Distribution Company Limited on a periodic basis. In case of any faulty readings observed appropriate corrective action will be taken. If the error is found beyond the permissible limits, the PP will inform the respective agency so as to immediately rectify the error in the instrument, which was confirmed during onsite visit while interviewing the site personnel at project site/37/.
		Is(are) calibration(s) valid for the whole reporting period?	Yes, the calibration is valid throughout the reporting period. i.e., **01-January-2023 to 31-December-2023** (Inclusive of both the days).
		Is the calibration carried out for a measuring range comparable with the range for which measurements have been carried out?	Yes. The calibration is carried out appropriately for current monitoring as per the registered monitoring plan and VCS VVS manual version 3.2/10/& as per PPA/24/.
		How were the values in the monitoring report verified?	Cumulative value of **EG** $_{JMR,Project,Export,y}$ for entire monitoring period **01-January-2023 to 31-December-2023** (inclusive of both dates) is reported in the monitoring report/1/, and monthly values in the ER calculation sheet/2/

			in MWh. The monthly values were verified from the JMRs/26/ & Credit Notes and cross checked from invoices/27/ thus found to be consistent. Value of this parameter for the current monitoring period was verified as **71,424.43 MWh.**
		If applicable, has the reported data been cross-checked with other available data?	The monthly reported values of **$EG_{JMR,Project,Export,y}$** were verified from JMRs issued to PP by state entity i.e., MSEDCL which were further cross checked with the monthly invoices /27/ raised by the PP to respective captive user as specified in PPA/24/ and thus found to be consistent
		Does the data management ensure correct transfer of data and reporting of emission reductions and are necessary QA/QC processes in place?	On site personnel interview/37/ with the project stakeholder of the project activity confirms that the necessary QA/QC procedures are in place and the data management system is effective and reliable. The electricity imported by the WTGs is recorded. The electricity imported is adjusted against the export by the project activity to the grid. To be cross-checked with monthly invoices or receipts of payments.
Findings	CL#01 is raised and resolved		
Conclusion	The parameter has been monitored appropriately, in accordance with the registered monitoring plan (as per measurement methods and procedures to be applied) and applied methodology. The monitoring results were recorded consistently as per the approved frequency in the monitoring plan. The emission reduction calculation for the project activity is estimated based on the electricity supplied by the project. Since 100% data was verified, the team can ascertain that the values taken for emission reduction calculation are free from material errors.		

The below table describe how the parameter **$EG_{Controller,gen}$** (Quantity electricity generated by the project activity WTGs recorded at respective controller meters), that 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 been thoroughly assessed and that the calibration requirements are met: -

Table No: 17 Assessment of Parameter EG $_{Controller, gen}$ (Quantity electricity generated by the project activity WTGs recorded at respective controller meters)

Parameter	EG $_{Controller, gen}$ (Quantity electricity generated by the project activity WTGs recorded at respective controller meters)	
Means of verification	**Criteria/Requirements**	**Assessment/Observation**
	Measuring /Reading /Recording frequency	The parameter will be monitored continuously and recorded at least monthly by LCS meter (Controller meter). The electricity generated by each individual wind turbine generator (WTG) is recorded using an LCS meter, which measures the gross electricity generated in kilowatt-hours (kWh). This data is used for cross-checking the export and net electricity supplied to the grid, ensuring accurate monitoring of the project's electricity generation.
	Is measuring and reporting frequency in accordance with the monitoring plan and monitoring methodology? (Yes / No)	Yes. The reporting frequency is in line with the monitoring plan as outlined in the registered VCS Joint PD & MR/3/ and monitoring methodology/12/. Also, in current monitoring period there is no deviation from the stated procedures in the registered monitoring plan. This was verified by assessment team during desk review and by Team Leader during onsite visit and interviews/37/ with site personnel.
	Monitoring equipment	This parameter is measured through LCS meter (Controller meter) integrated with WTG and monitored via online monitoring system (SCADA) used for continuously measuring, and recording the Gross electricity generated by each WTG details are provided in section 4.3 of MR/1/.

		Is accuracy of the monitoring equipment as stated in the monitoring plan? If the monitoring plan does not specify the accuracy of the monitoring equipment, does the accuracy of the monitoring equipment comply with local/national standards, or as per the manufacturer's specification?	**Not Applicable for this parameter.**
		Is the accuracy valid for the entire measuring range or do different accuracy levels apply to different measuring ranges?	**Not Applicable for this parameter.**
		Calibration frequency /interval:	**Not Applicable for this parameter.**
		Is the calibration interval in line with the monitoring plan and/or methodology? If the monitoring plan does not specify the frequency of calibration, is the selected frequency in accordance with the local/national standards, or as per the manufacturer's specifications?	**Not Applicable for this parameter.**
		Is the calibration of measuring equipment carried out by an accredited person or institution?	It is not possible to calibrate controller because it is integral part of WTG cannot be removed during operation. Same has been confirmed through interviews of site personnel during on site assessment/37/.

		Is(are) calibration(s) valid for the whole reporting period?	**Not Applicable for this parameter.**
		Is the calibration carried out for a measuring range comparable with the range for which measurements have been carried out?	Each WTG is equipped with a precise microprocessor-based multi-function relay (MFR) LCS meter. This relay utilizes software to accurately sample and process generated electricity data. The recorded information is automatically entered into the SCADA system, ensuring minimal likelihood of data misinterpretation. The O&M contractor generates daily reports from SCADA-recorded data, which then serve as the foundation for monthly generation reports. The robust monitoring procedures ensure accurate data transmission
		How were the values in the monitoring report verified?	Cumulative value of **$EG_{Controller,\ gen}$** for entire monitoring period **01-January-2023 to 31-December-2023** (inclusive of both dates) is reported in the monitoring report/1/, and monthly values in the ER calculation sheet/2/ in kWh. The monthly values were verified from the Monthly generation reports recorded in electronic format by the "O&M team" for WTGs from INOX and ReGen/24/ thus found to be consistent. Value of this parameter for the current monitoring period was verified as **74,050.44 MWh.**
		If applicable, has the reported data been cross-checked with other available data?	The monthly reported values of **$EG_{Controller,\ gen}$** in logged electronically on a monthly basis by the "O&M team" for WTGs from Regen Powertech Private Limited and INOX on its online portal. The value of this parameter shall be compared with the value of $EG_{facility,\ y}$.

	Does the data management ensure correct transfer of data and reporting of emission reductions and are necessary QA/QC processes in place?	Yes, on a monthly basis, this data parameter is electronically logged by the "Inhouse" O&M for WTGs from Regen Powertech Private Limited and "O&M team" for WTGs from INOX on the online portal. The value of this parameter is compared with the value of $EG_{facility, y}$, and the conservative approach is taken by the PP for estimating the net electricity supplied value for the calculation of emission reduction. This was confirmed by the assessment team during on-site personnel interview/37/ with the site personnel of the project activity & thus confirms that the necessary QA/QC procedures are in place and the data management system is effective and reliable.
Findings	CL#01 is raised and resolved	
Conclusion	The parameter has been monitored appropriately, in accordance with the registered monitoring plan (as per measurement methods and procedures to be applied) and applied methodology. The monitoring results were recorded consistently as per the approved frequency in the monitoring plan. The emission reduction calculation for the project activity is estimated based on the electricity supplied by the project. Since 100% data was verified, the team can ascertain that the values taken for emission reduction calculation are free from material errors.	

Calibration of meters:

During the verification assessment of the project activity, accuracy of all the metering have been checked and found appropriate by assessment team during onsite visit/36/. The installation and working conditions of the meters were checked during the site inspection/36/ and were found to be satisfactory as compared to the provision of calibration/testing frequency, prescribed under the VCS Joint PD & MR/3/, the meters are supposed to undergo testing/calibration once in three years. The meter calibration is not under the purview of PP. MSEDCL is the sole authority to conduct the meter calibration.

Details of meters are provided in below table:

Table No: 18 Calibration details of Feeder meters:

(1) Billing Meter for M/s Sispara Renewable Power Private Limited & M/s Kalsubai Power Private Limited

Metering Points	Meter Details				Previous Calibration date	Due Date of Last calibration	Recent Calibration date	Due Date of Calibration
	Serial no	Make	Type	Accuracy class				
FEEDER No. 01 at 220/33 kV Hiwarwadi Substation	Main meter – 13277649 Check meter – 02814525	Elster	A-1800	0.2s	03-February-2022	02-February-2025	25-July-2023	24-July-2026
FEEDER No. 5 at 220/33 kV Hiwarwadi Substation	Main meter – 13277639 Check meter – 13277640	Elster	A-1800	0.2s	03-February-2022	02-February-2025	25-July-2023	24-July-2026

It is to be noted from above table that there is no delay in meter calibration has happened for the M/s Sispara Renewable Power Private Limited and M/s Kalsubai Power Private Limited for the current monitoring period.

(2) Billing Meter for M/s Nilgiri Power Private Limited

Metering Points	Meter Details							
	Serial no	Make	Type	Accuracy class	Previous Calibration date	Due Date of Last calibration	Latest Date of Calibration	Due Date of Calibration
FEEDER No. 04 at 220/33KV Shedyal Substation	Main meter – 02862952 Check meter – 02862957	WALLABY	MK6E	0.2s	20-September-2019	19-September-2022	03-February-2022	02-February-2025
FEEDER No. 05 at 220/33KV Shedyal Substation	Main meter – HT01131245 Check meter – HT01131246	WALLABY	MK6E	0.2s	20-September-2019	19-September-2022	03-February-2022	02-February-2025
FEEDER No. 08 at 220/33KV Shedyal Substation	Main meter – HT01140166 Check meter – HT01140167	WALLABY	MK6E	0.2s	20-September-2019	19-September-2022	03-February-2022	02-February-2025

It is to be noted from above table that there is no delay in meter calibration has happened for the current monitoring period. Meter calibration is not purview of PP. MSEDCL is the sole authority to conduct the meter calibration and as per CEA order dated 17-March-2006; It is evident from para 18(b) that "all the meters shall be tested once in five years."

(3) M/s NSL Wind Power Company (Sayamalai) Pvt. Ltd.

It is to be noted that there was total 5 WTGs connected to MEDHA substation out of which 3 WTGs (S-5, S-6, S-7) are still connected to MEDHA Substation and 2 WTGs (WA-1 and WA-2) are shifted to WAI Substation.

Please refer the tables below for details:

Metering Points	Meter Details					Test Result	Due Date of Calibration	Remark
	Serial no	Make	Type	Accuracy class	Latest Date of Calibration			
33KV TS Wind Feeder at 33/220KV Medha Substation	Main meter: 05269304 Check meter: 15687950	Elster	A 1800	0.2S	16-February2023	Satisfactory	15-February-2026	No Delay

Metering Points	Meter Details					Test Result	Due Date of Calibration	Remark
	Serial no	Make	Type	Accuracy class	Latest Date of Calibration			
33 KV TS Wind Feeder at 132/33/22 KV WAI Substation	Main meter: 16268020 Check meter: 16268022	Elster	A 1800	0.2	16-February-2023	Satisfactory	15-February-2026	No Delay

It is clarified that there is no delay in meter calibration has happened for the current monitoring period as due date for meter calibration is outside the project monitoring period.

Hence assessment team confirms that no delay in meter calibration has happened during the current monitoring period. As per registered VCS Joint PD & MR/3/ the frequency of meter calibration was ***"Once in three years"*** and the existing meters calibration is already in-line with the calibration frequency therefore no error factor for delay is applied. Assessment team confirmed the same during site visit by physically inspecting the meters installed at site and by cross checking the calibration certificates /24/

There are 22 WTGs and seven feeders at different pooling substation involved for measure the electricity import and export. The provision of calibration/testing frequency for all the meters shall be tested once in three years, prescribed under the VCS Joint PD & MR/3/. Thus, validity of the calibration is considered for three years. This is verified by assessment team from the calibration certificates/24/ submitted by the PP. As per VCS Joint PD & MR "The project adheres to all the mandatory regulatory and statutory requirements at the state as well as national level & hence acceptable to VKU assessment team.

The energy meter calibration certificates/24/ are checked and found that the calibration details provided in the MR /1/ are correct. From the verification of above table, assessment team also confirms that the energy meter calibrations are valid for the complete monitoring period i.e., from **01-January-2023 to 31-December-2023**, including both the start and end dates.

The meters in use are two-way devices that measure both electricity import and export, providing the net electricity consumption data. According to the Power Purchase Agreements/23/ with the electricity distribution utility, there are seven set (Each Contain a main meter and a check meter) of energy meters. Both function as two-way export-import meters, calculating both exported and imported electricity to the grid.

If the meters operate outside allowable limits (As per technical standards it is 0.2% accuracy class), they will either be replaced or calibrated. When the main meter malfunctions, the consumption recorded by the check meter is used. If both metering systems fail, malfunction details, timestamps, parameters, and load survey data will be retrieved from the main meter. The nature of the malfunction is then determined and the recorded consumption in the main meter is adjusted accordingly.

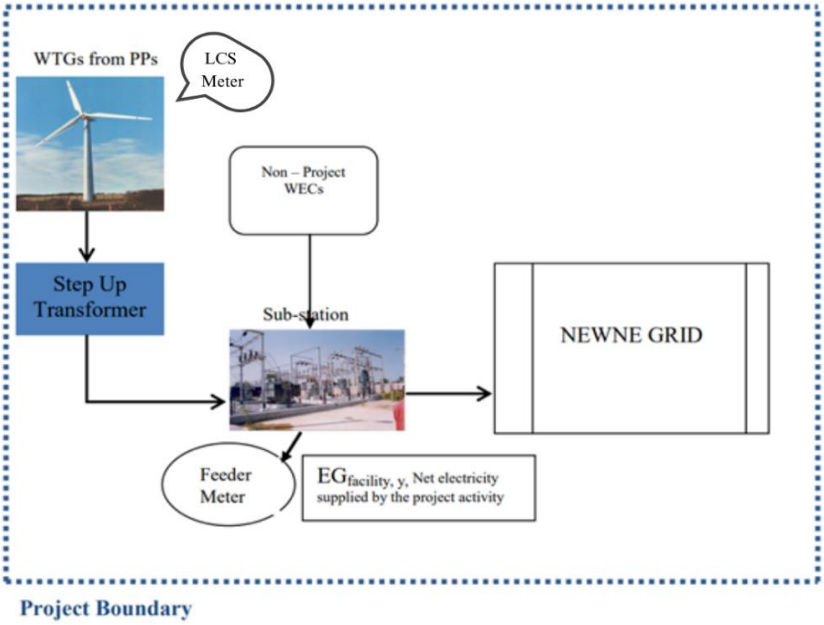


Figure No 2.1: Project Single Line Diagram

Power is generated in individual WTG and step up at 33kV by using a step-up transformer placed near to each Individual WTG & directly sent to substation through a common transmission 33kV line (Common for project and non-project WTGs) connected to the particular feeder. Billing meters are installed at Grid Substation. The meter readings at the substations are taken jointly by the representatives of Project participant representative and Maharashtra State Electricity Distribution Company Limited (MSEDCL) representative and recorded in the JMR.

The electricity generated by both the project activity WTGs and non-project WTGs is metered at a feeder-wise common metering point[8]. This metering point comprises a main meter and a check meter, both having an accuracy of 0.2s. These meters measure parameters such as export and import for all connected WTGs. The net electricity supplied to the grid is calculated by summing up the net electricity export figures of individual WTGs. The difference is then multiplied by the applicable meter multiplication factor.

Calculation procedure is explained fully in next paragraph.

The As per CEA database version 13 (released in June 2018) In previous years before April 2016, the Indian electricity system was divided into two grids, the NEWNE and Southern Grid. These are now integrated as a single "Indian Grid" covering all the states. Thus, the project activity earlier was considered under Southern Grid which is now referred as Indian Grid.

Refer Deviation requested regarding Feeder change in this verification in section 3.2 of this report.

Calculation of net electricity export to the grid by project activity WTG:

To compute the net electricity supplied by individual wind turbines (WTGs), main meter readings are allocated based on Local Control Station (LCS) meter readings from each WTG. LCS meter readings for project activity WTGs are electronically archived continuously. Monthly joint meter readings are taken at the MSEDCL substation, using cumulative LCS meter readings for monthly allocation purposes. Both main and check meters undergo calibration once in every three years.

Apportioning Procedure followed:

The allocation of net electricity supplied to the grid by the project activity is determined using a specific apportioning procedure, which is outlined as follows:

$EG_{JMR, Export}$ = Electricity exported by all the WTGs (project WTGs & non-project WTGs), as recorded by the main meter at the substation

$EG_{JMR, Import}$ = Electricity imported by all the WTGs (project WTGs & non-project WTGs), as recorded by the main meter at the substation

$EG_{Controller, gen}$ = Electricity exported by a project WTG, as measured at the controller

$EG_{Controller, gen, total}$ = Electricity exported by all the WTGs (project activity & non project activity) connected to the main meter at the substation, measured at the controller of each WTG

$\sum EG_{Controller, gen}$ = Summation of electricity generated by the project activity WTGs recorded at respective LCS meters.

$EG_{JMR, Project, export}$ = Electricity exported by a WTG to the grid, calculated

$EG_{JMR, Project, import}$ = Electricity imported by a WTG from the grid, calculated.

Electricity exported by each WTG is apportioned on the basis of electricity exported recorded at the controller of each WTG and the electricity exported at the main meter and mentioned in the JMR. The export multiplication factor is calculated as follows-

Export Multiplication Factor = $EG_{JMR, Export} \div EG_{Controller, gen, total}$ ..... (1)

Thus, the energy exported by a WTG to the grid is given by the equation-

$EG_{JMR, Project, export}$ = Export Multiplication factor X $\sum EG_{Controller, gen}$..... (2)

As the controller meter doesn't record import, the apportioning of energy imported by each WTG is also done on the basis of electricity exported recorded at the controller of each WTG and the electricity imported at the main meter and mentioned in the JMR. The import multiplication factor is calculated as follows-

Import Multiplication Factor = $EG_{JMR, Import} \div EG_{Controller, gen, total}$ ..... (3)

Thus, the energy imported by a WTG to the grid is given by the equation-

$EG_{JMR, NSL, import}$ = Import Multiplication factor X $\sum EG_{Controller, gen}$ ..... (4)

The net electricity exported by the WTGs of the project is given by the equation-

$EG_{facility,y} = \sum EG_{JMR, Project, export} - \sum EG_{JMR,Project, import}$ ..... (5)

$\sum EG_{JMR, NSL, export} = EG_{JMR, Project, export, y}$

$\sum EG_{JMR, NSL, import} = EG_{JMR, Project, import, y}$

Based on the above calculation, a monthly statement is prepared, signed by the Project Proponent (PP) representatives, and endorsed by the state utility (MSEDCL). This statement includes three key figures: total electricity exported to the grid, total electricity imported from the grid, and net electricity supplied. Net electricity supplied is calculated as the difference between electricity exported and imported by the project activity for that month.

Upon receiving the "Monthly Statement/credit note," the Project Participant generates invoices for the sale of electricity and submits them to the respective district-level MSEDCL office. MSEDCL then makes payments based on these invoices. The value of net electricity supplied, as stated in the monthly statement, can be cross-checked with the amounts specified in the monthly invoices, ensuring accuracy and transparency in the payment process.

Daily data at the project site is collected electronically, while monthly data is documented in hard copies. The Project Proponent is responsible for maintaining comprehensive and precise records of all this data as part of the monitoring process. These records must be retained for a minimum of 2 years after the end of the crediting period or the last issuance of Verified Carbon Units (VCUs) for the project activity, whichever comes later. This practice ensures the availability of historical project data for compliance and auditing purposes.

The project proponent has inhouse "Operation and Maintenance" for ReGen make Machines (WTGs) and have signed a "Operation and Maintenance" contract with Renom Energy services Pvt. Ltd. for INOX make machines. Operations and maintenance team of respective machines oversees daily monitoring of respective WTGs generation, ensures operational safety, and manages scheduled and breakdown maintenance. They maintain a logbook that records daily generation details for each WTG within the project, as metered at the wind farm.

The registered VCS Project Description & Monitoring Report version 2.0 dated 06-February-2017/3/ and MR /1/ and site audit observations confirm that the metering equipment are sealed and maintained by the Maharashtra State Electricity Distribution Company Limited (MSEDCL).

Each WTG has a LCS meter (Controller meter) installed in electronical panel of WTG for recorded continuously by the online monitoring station. This reading can also be seen in the electronic panel installed inside the WTG tower. The LCS meter (Controller meter) do not require calibration as the energy readings of electricity generated at the LCS meter is cross verified by the energy calculated by inverting system installed in the WTGs. Each feeder has a dedicated set of main and check meter to record frequency quantities of active and reactive energy for energy exported to and imported from the grid during settlement periods. All meters are sealed in the presence of the Maharashtra State Electricity Distribution Company Limited (MSEDCL) (DISCOM) and the Company, with the seal remaining intact unless broken for testing and calibration by a testing laboratory. Measuring instrument accuracy class requirements are 0.2% for kWh measurement of meters, 0.2% for KVArh measurement of meters, and 0.5% for current and voltage transformers. The meter calibration is not under the purview of PP. MSEDCL is the sole authority to conduct the meter calibration.

The daily generation schedule is prepared by the plant team by reviewing the weather forecasting reports, machines availability, grid availability and the Power is sold to the Maharashtra State Electricity Distribution Co. Ltd. (MSEDCL) according to the (PPAs/23/). The operational and Maintenance team of respective machines is responsible for monitoring the generation of the Wind Turbine Generators (WTGs) on daily and maintains a log book recording daily generation details for each WTG within the project, as measured at the wind farm.

The monitoring and measurement of electricity at the project metering point are carried out continuously, while the recording is done on a monthly basis through Joint Meter Readings/Group Credit Notes, performed jointly by representatives of the State Utility and the project proponent (PP).

During onsite visit /36/ the assessment team checked all the meters and confirmed that the meters were working satisfactorily. Also, the calibration of meters is completely under purview of Maharashtra State Electricity Distribution Company Limited (MSEDCL) and PP has no control over the same as confirmed through interviews of site personnel /37/ and PPAs /23/.

Hence it can be concluded that the approach followed by the PP is conservative and in line with the guidelines provided under paragraph 3.4.2 of Validation and verification manual version 3.2/10/.

The assessment team has verified the JMRs & Credit notes/26/ issued by DISCOM to PP & Invoices/27/ issued to DISCOM identified in the PPAs /23/ by M/s Sispara Renewable Power Private Limited for 12 MW, M/s Kalsubai Power Private Limited for 6 MW, M/s Nilgiri Power Private Limited for 10 MW and M/s NSL Wind Power Company (Sayamalai) Pvt. Ltd. for 7.5 MW confirmed that only the data recorded through main meters is used to calculate net electricity supplied to the grid consequently for ER calculations recorded in ER sheet /2/.

In view of the above discussion the VKU assessment team is able to confirm that evidence used to determine the GHG reductions and removals are sufficient and appropriate with respect to quality and quantity.

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:

$$BE_y = EG_{PJ,y} * EF_{grid,CM,y}$$

Where:

BE_y	=	Baseline emissions in year y (tCO2e/yr)
$EG_{PJ,y}$	=	Quantity of net electricity generation that is produced and fed into the grid as a result of the implementation of the VCS project activity in year y (MWh/yr)
$EF_{grid,CM,y}$	=	Combined margin CO2 emission factor for grid connected power generation in year y calculated using the latest version of the "Tool to calculate the emission factor for an electricity system" (t CO2/MWh)

Calculation of $EG_{PJ,y}$

The project activity being a greenfield project,

$$EG_{PJ,y} = EG_{facility,y}$$

Where:

$EG_{PJ,y}$	=	Quantity of net electricity generation that is produced and fed into the grid as a result of the implementation of the VCS project activity in year y (MWh/yr)
$EG_{facility,y}$	=	Quantity of net electricity generation supplied by the project plant/unit to the grid in year y (MWh/yr)

And

$$EF_{Co2} = EF_{GridCM,y}$$

EF_{Co2}	=	CO_2 Emission Factor in year y (tCO_2e/MWh)
$EF_{GridCM,y}$	=	Combined margin CO_2 Emission Factor of Indian Grid (tCO_2e/MWh)

Parameter	Unit	Value
$EG_{PJ,y}$	MWh	71,358.10
EF_{Co2}	tCO_2e	0.9767
BE_y	=	71,358.10 * 0.9767
	=	69,695.46 (Round down value)
PEy (tCO_2e)	(tCO_2e)	0
LEy (tCO_2e)	(tCO_2e)	0
Net GHG emission reductions or removals tCO_2e	(tCO_2e)	69,695.46 (tCO_2e) (For vintage 2023)

Emission Reduction Achievement:

Year	Baseline emissions or removals (tCO_2e)	Project emissions or removals (tCO_2e)	Leakage emissions (tCO_2e)	Net GHG emission reductions or removals (tCO_2e)
Vintage 2023 (01-January-2023 to 31-December-2023)	69,695	0	0	69,695
Total	69,695	0	0	69,695

The assessment team attests to the correctness of the formulas and methodologies used to compute baseline emissions. The applied default values, emission factors, and assumptions in the calculations are all reasonable. The assumptions, emission factors and default values that were applied in the calculations are justified. The actual emission reduction achieved during the current monitoring period are +14.7% higher than the estimated ERs in the registered VCS Joint PD & MR/3/. We as VKU Assessment Team accepted this as this is mainly due to the variations in higher PLF, High wind speed and minor shutdown during the monitoring period. The assessment team further performed the analysis of the achieved PLF against the ex-ante PLF for current monitoring period and also compared the data with the previous monitoring periods for the months of June to September using the PLF data made available by PP by providing the Monthly Generation Reports/PLF Details from SCADA/33/ data. Hence based on the data provided by PP. the following deductions were made.

Table No: 19 Variation of PLF from ex-ante estimation for current monitoring period 01-January-2023 to 31-December-2023 (Inclusive of both start and end dates)

Monitoring Period	PLF achieved per month %	PLF ex ante	Average PLF achieved for this monitoring period
January-23	8.26%	20.00%	22.95%
February-23	9.81%	20.00%	
March-23	13.22%	20.00%	
April-23	11.22%	20.00%	
May-23	17.74%	20.00%	
June-23	44.58%	20.00%	
July-23	56.11%	20.00%	
August-23	44.50%	20.00%	
September-23	36.18%	20.00%	
October-23	9.50%	20.00%	
November-23	11.23%	20.00%	
December-23	12.10%	20.00%	
Total	**22.95%**	**20.00%**	
PLF achieved at Project level for current Monitoring Period: **22.95%%** Breaching Value is **26.7%** *Above results clearly show that the PLF with breaching value is higher than actual PLF achieved hence project remains additional			

Estimated PLF as per registered VCS Joint PD & MR	**20%**
Total generation	**71,358.10 MWh**
Total no. of days	**365**
Capacity	**35.5 MW**
Actual PLF (Achieved) (for current monitoring period)	**22.95% %**
Breaching value of PLF as per VCS Joint PD & MR	**26.70%%**

Based upon the details in table above, it is clear that the monthly trend of PLF, from June to September-2023 is higher than the estimated and after September-2023 the trend of PLF is lower than the estimated. Since June to September is considered a high wind season and PLF is higher during these months as cross checked with the reports of earlier Monitoring periods /05/ This is reflected in higher emission reductions for the current monitoring period at +14.7%. It is to note that PLF for current monitoring period is 22.95% whereas the Breaching value of PLF as per VCS Joint PD & MR is 26.70% which concludes that the PLF limit is under control and the project's additionality stands eligible and unaffected.

The higher generation during the current verification period is due to high seasonal wind flow, grid availability, high PLF & scheduled & unscheduled breakdown/32/ as verified and traced through evidences and calculative computation by VKU assessment team during desk review, onsite visit and interview with site personnels. Hence the +14.7% higher emission reduction achieved during the current monitoring period neither affects additionality nor there is any deviation from the registered monitoring plan, which was verified by the VKU Assessment Team during onsite visit.

The electricity produced by a wind plant relies on the amount of wind passing through it, and changes in wind availability can have an impact on its output. The flow of wind is a natural phenomenon and nobody have control over it, which can, in turn, affect the amount of electricity generated. The fluctuation in the wind flow is not under the control of the project proponent. Hence, it is acceptable to the VKU Assessment Team.

All the data were have been available to the assessment team by PP during site visit/36/ and supporting evidences have been monitored and submitted. The means of verification for the values of parameters, used for baseline emission calculation, is described above.

The assessment team has checked and confirmed the emission reduction calculations in the spreadsheet and found to be accurate. The monitoring report/1/ is supported by emission reduction spreadsheet/2/. The consistency and formula were verified and found to be accurate.

VKU is of the opinion that this method of calculation of emission reductions is accurate and results in conservative estimation of emission reduction and is in line with the applicable VCS requirements set out in section 3.15 of VCS standard version 4.6 and that the verification of the GHG statement was conducted in in accordance with ISO 14064-3; 2019/40/.

4.5 Non-Permanence Risk Analysis

There is no non-permanence risk that could lead to material errors, omissions or misstatements rating determined by the project proponent for the project activity and no risk was identified in the audit/verification plan hence not applicable.

5 VERIFICATION OPINION

5.1 Verification Summary

VKU Certification Pvt. Ltd. has performed the ninth verification for Monitoring period from **01-January-2023 to 31-December-2023** (Inclusive of both start and end dates) of the fixed crediting period of 10 years (13-February-2015 to 12-February-2025 which is inclusive of both dates) for the project activity **"Wind Bundle Project in Maharashtra by Sispara"** in India, VCS Registry Project ID 1660, with regard to the relevant requirements for VCS activities. The project amounts to **69,695 tCO_2e** of carbon dioxide equivalent (tCO_2e). These reported reductions have been assessed in accordance with the relevant requirements outlined in the VCS Standard, version 4.6/9/.

The project proponents of **"Wind Bundle Project in Maharashtra by Sispara"** is responsible for:

- The preparation of greenhouses gas emissions data and the reported greenhouse gas emission reductions from the project on the basis set out in the monitoring plan contained in the registered VCS Joint PD & MR version 2.0 dated 06-February-2017 /3/
- The development and maintenance of records and reporting procedures in accordance with that plan, including the calculation and determination of greenhouse gas emission reductions of the project.

It is the responsibility of VKU to express an independent verification opinion about the project's conformity with the requirements of VCS standard version 4.6/9/ and GHG program applied, on the reported greenhouse gas emission reductions from the project.

Based on documented evidence and corroborated by an on-site assessment, VKU can confirm that:

- The project has been implemented and operated as per the registered VCS Joint PD & MR version 2.0 dated 06-February-2017 /3/
- The monitoring is in place as per the applied baseline and monitoring methodology; ACM0002. Consolidated baseline methodology for grid connected electricity generation from renewable sources Version 17.0 /12/
- The monitoring report and other supporting documents provided are complete and verifiable and in accordance with the applicable VCS Standard version 4.6/9/ requirements.

VKU Certification 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. VKU Certification planned and performed the verification by obtaining evidence and other information and explanations that VKU Certification considered necessary to give **reasonable assurance** that reported GHG emission reductions are fairly stated.

As per VCS standard version 4.6, clause 4.1.23, 4.1.24 and 4.1.25, VKU is of opinion that GHG emission reduction stated in the monitoring report version 1.2 dated 14-July-2024 and ER Sheet version 1.1 dated 14-July-2024 for the "**Wind Bundle Project in Maharashtra by Sispara"** in India for the period **01-January-2023 to 31-December-2023** (Inclusive of both start and end dates) **are fairly and correctly stated.**

5.2 Verification Conclusion

VKU Certification 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. VKU Certification planned and performed the verification by obtaining evidence and other information and explanations that VKU Certification considered necessary to give **reasonable assurance** that reported GHG emission reductions are fairly stated

Verification period: From [01-January-2023] to [31-December-2023]

Vintage period	Baseline emissions (tCO_2e)	Project emissions (tCO_2e)	Leakage emissions (tCO_2e)	Reduction VCUs (tCO_2e)	Removal VCUs (tCO_2e)	Total VCUs (tCO_2e)
Year 2023 (01-January-2023 to 31-December-2023)	69,695	0	0	69,695	0	69,695
Total	**69,695**	**0**	**0**	**69,695**	**0**	**69,695**

For projects required to assess permanence risk:

i) Provide a conclusion on the following information:

The non-permanence risk rating (%)	NA
If applicable, the Long-term Average (LTA), whether it has been properly updated, and if it has been reached.	NA
Whether a loss has been appropriately accounted for, in accordance with the VCS Program rules, if applicable.	NA

ii) Complete the table below:

Vintage period	Baseline emissions (tCO_2e)	Project emissions (tCO_2e)	Leakage emissions (tCO_2e)	Buffer pool allocation (tCO_2e)	Reductions VCUs (tCO_2e)	Removals VCUs (tCO_2e)	Total VCU issuance (tCO_2e)
DD-MMM-YYYY to 31-Dec-YYYY	NA	NA	NA	NA	NA	NA	NA
Total	NA	NA	NA	NA	NA	NA	NA

5.3 Ex-ante vs Ex-post ERR Comparison

Verified GHG emission reductions and removals in the above verification period, broken down by calendar year:

Vintage period	Ex-ante estimated reductions/ removals	Achieved reductions/ removals	Percent difference	Explanation for the difference
Vintage 2023 (01-January-2023 to 31-December-2023)	**60,746**	**69,695**	**+14.7 %** higher than the estimated value	The actual Emission Reductions (ER) achieved during the monitoring period are higher than the originally estimated ER. This discrepancy is primarily attributed to a higher Plant Load Factor (PLF) experienced during the current monitoring period. High wind availability and grid availability resulting in an increased overall PLF for the period, which in turn impacted the expected emissions reductions. It is to note that the PLF comparison is provided in ER sheet/2/. The achieved PLF for current monitoring period is 22.95%% which is less than as estimated breaching value i.e., 26.70% provided in the VCS Joint PD & MR/3/ and thus the additionality of the project remains eligible. Hence the above provided justification is found to be correct by VKU assessment team.
Total	60,746	69,695		

APPENDIX 1: COMMERCIALLY SENSITIVE INFORMATION

Section	Information	Justification
NA	NA	NA

APPENDIX 2: ABBREVIATIONS

Abbreviations	Full texts
BE	Baseline Emissions
CAR	Corrective Action Request
CDM	Clean Development Mechanism
CDM M&P	Modalities and Procedures CDM
CER(s)	Certified Emission Reduction(s)
CH_4	Methane
CL	Clarification Request
CO2	Carbon dioxide
CO_2e	Carbon dioxide equivalent
DNA	Designated National Authority
DOE	Designated Operational Entity
EB	Executive Board
EF	Emission Factor
ER	Emission Reductions
PPA	Energy Wheeling Agreement
FAR	Forward Action Request
GHG(s)	Greenhouse gas(es)
GWP	Global Warming Potential
IPCC	Intergovernmental Panel on Climate Change
MoV	Means of Verification
MR	Monitoring Report
MSEDCL	Maharashtra State Electricity Distribution Company Limited
NGO	Non-governmental Organization
ODA	Official Development Assistance
PD	Project Design Document
PE	Project Emission
PP(s)	Project Proponent(s)

PPA	Power Wheeling Agreement
PSA	Power Sale Agreement
Ref.	Document Reference
SLDC	State Load Dispatch Centre
SS(s)	Sectoral Scope(s)
TA(s)	Technical Area(s)
UNFCCC	United Nations Framework Convention on Climate Change
VCU	Verified Carbon Unit
VKU	VKU Certification Ltd.
VVS	Validation and Verification Standard

APPENDIX 3: AUDIT FINDINGS

CL: Clarification Request_02

CAR: Corrective Action Request_05

FAR: Forward Action Request_00

Description of Clarification Requests (CLs) raised by VVB:

Finding No. __01____	Date: 22-April-2024
Finding Type- CAR ☐ CL ☒ FAR ☐	
Stage of finding raised: Desk Review ☒ On-site/remote/hybrid assessment ☐ Technical Review ☐ Project Review Report by Registry ☐	
Requirement	
Clause 3.5.4, 3.26.3 of the VCS Standard version 4.6	
Non-Conformity	
Sufficient Data and supporting evidence regarding the implementation of monitoring plan, SDG 8.5 ER Calculation is not provided to VVB.	
Evidence	
1. During desk review & onsite observation, it has been observed that some evidences/records regarding the Trainings, O&M Agreement, ownership of the project activity, electricity generation, Calibration, Commissioning, Technical Specification of Implemented technology were missing as per the implemented monitoring plan mentioned in MR. 2. The supporting document regarding quantification of the estimated and actual GHG emissions reductions and removals were also missing. 3. Supporting document of claimed project contributions in section 1.11 of MR with SDG indicator 8.5" is not provided	
1st Response from PP	Date: 23-June-2024
1. The required documentation to confirm project implementation has been provided to the VVB. 2. The supporting documentation for GHG quantification has been submitted to the VVB The supporting documentation for SDGs is provided	
Documents provided by PP for review	
Power Purchase Agreement, Training records, JMRs, Invoices, Generation Records, commissioning certificates, calibration certificates are submitted.	

1st Review by Assessment Team	Date: 05-July-2024
1. PP has submitted the Power Purchase Agreement, Training records, JMRs, Invoices, Generation Records, commissioning certificates, calibration certificates, as verified by the assessment team. 2. PP has submitted the ER Calculation Sheet, JMRs, Invoices, Generation Records, as verified by the assessment team. 3. PP has provided the evidence for the 2 SDGs out of 3. However, 1 SDG is not claimed by PP, as verified by the assessment team. **Hence Finding No.#01 is closed**	

Finding No. __02____	Date: 22-April-2024
Finding Type- CAR ☐ CL ☒ FAR ☐	
Stage of finding raised: Desk Review ☒ On-site/remote/hybrid assessment ☐ Technical Review ☐ Project Review Report by Registry ☐	
Requirement	
Clause 3.23.2, 3.24.4, 3.26.3 of the VCS Standard version 4.6	
Non-Conformity	
1 Assessment team not able to trace any declaration to support this statement of “project not Participating under other GHG Programs” in current monitoring period. 2 PP has not provided any evidence for “no double counting” and “non-inclusion of scope 3 emissions” in current monitoring period. 3 PP has not submitted any evidence for personnel trainings conducted by technology supplier twice a year and the records were not found during onsite visit.	
Evidence	
1 In Section 1.9 of Monitoring Report version 01 dated 15-March-2024, PP has claimed that it has submitted the declaration for not participation under other GHG Programme. 2 In Section 1.10 of Monitoring Report version 01 dated 15-March-2024, PP has confirmed that credits generated in current monitoring period do not form part of any other national or international scheme including Renewable Energy Certificates. Also, the project does not affect emissions associated with any goods or service, hence the Scope 3 emission associated with the supply chain.	

3 In Section 4.3 of Monitoring Report version 01 dated 15-March-2024, and by interviewing the site personal's, Assessment team found that PP has Provided personnel trainings by technology supplier twice a year and the records were not found during onsite visit.	
1st Response from PP	Date: 23-June-2024
1. "Project not Participating under other GHG Programs" declaration has been submitted to the VVB 2. Declaration related to non-inclusion of scope 3 emissions & No double counting is submitted to the VVB 3. The required training records are submitted to the VVB	
Documents provided by PP for review	
A deceleration form PP for not participation under other GHG Programme, not form part of any other national or international scheme including Renewable Energy Certificates. Also, the project does not affect emissions associated with any goods or service, hence the Scope 3 emission associated with the supply chain Training Records	
1st Review by Assessment Team	Date: 05-July-2024
1. PP has submitted a declaration for not participation under other GHG Programme, which is acceptable to VVB. 2. PP has submitted a declaration for confirmed that credits generated in current monitoring period do not form part of any other national or international scheme including Renewable Energy Certificates. Also, the project does not affect emissions associated with any goods or service, hence the Scope 3 emission associated with the supply chain, which is acceptable to VVB. 3. PP has submitted the training records as verified by the assessment team. **Hence Finding No.#02 is closed**	

Finding No. __03____	Date: 22-April-2024
Finding Type- CAR ☒ CL ☐ FAR ☐	
Stage of finding raised: Desk Review ☒ On-site/remote/hybrid assessment ☐ Technical Review ☐ Project Review Report by Registry ☐	
Requirement	
VCS Monitoring Report Template version 4.3	

Non-Conformity	
1 MR does not adhere to all instructional text with respect to the VCS Monitoring Report template.	
Evidence	
1 It was found that PP has not followed some instructions and guidelines like Not deleted instruction in MR, Inconsistency in format and file name, Insufficient information regarding implementation process, Not mentioned the details of current monitoring period in audit history table, inconsistency in table section and date of stakeholder consultation.	
1st Response from PP	Date: 23-June-2024
The MR has been revised to template version 4.3	
Documents provided by PP for review	
PP will list out here the documents submitted to support the response	
1st Review by Assessment Team	Date: 05-July-2024
1. PP has updated the MR as per the guidelines of MR template version 4.3, as verified by the assessment team. **Hence Finding No.#03 is closed**	

Finding No. __04____	Date: 22-April-2024
Finding Type- CAR ☒ CL ☐ FAR ☐	
Stage of finding raised: Desk Review ☒ On-site/remote/hybrid assessment ☐ Technical Review ☐ Project Review Report by Registry ☐	
Requirement	
Clause 3.5.4 of the VCS Standard version 4.6 Clause of 5.1.6 of ISO 14064-3 VCS Monitoring Report Template version 4.3	
Non-Conformity	

1 Inconsistency was found in end date of monitoring period in MR with signed contract with VVB. 2 PLF for current monitoring period i.e., from 01-January-2023 to 31-December-2023 has not demonstrated in MR.
Evidence
1 As per section 5.1.6 of ISO 14064-3, during the desk review, it was found that the mentioned date of monitoring period in MR version 01 is not consistent with the agreed verification scope of monitoring period (i.e. 01-January-2023 to 31-December-2023) in the contract signed with the VVB throughout the monitoring report. 2 As per the desk review, assessment team identified that PP has demonstrated the PLF for year 2022 and not for current monitoring period i.e., from 01-January-2023 to 31-December-2023

1st Response from PP	Date: 23-June-2024
1. The monitoring period has been revised PLF for year 2023 has been updated.	
Documents provided by PP for review	
PP will list out here the documents submitted to support the response	
1st Review by Assessment Team	Date: 05-July-2024
1. PP has revised the Monitoring period date throughout the monitoring report and now consistent throughout the report as verified by the assessment team. 2. PP has updated the PLF calculations in revised MR, as verified by the assessment team. **Hence Finding No.#04 is closed**	

Finding No. __05____	Date: 22-April-2024
Finding Type- CAR ☒ CL ☐ FAR ☐	
Stage of finding raised: Desk Review ☐ On-site/remote/hybrid assessment ☒ Technical Review ☐ Project Review Report by Registry ☐	
Requirement	
VCS Monitoring Report Template version 4.3, clause 3.16.3 of VCS Standard Version 4.6.	
Non-Conformity	
1 PP has demonstrated a contradictory statement in section 3.1 for the breakdown and lull hrs of the project activity. 2 PP has not accounted the breakdown and lull hrs for the current monitoring period i.e. 01-January-2024 to 31-Decmber-2023 as evident in Appendix 4 of MR.	

Evidence
1 During onsite visit, PP has shown Breakdown sheet to assessment team which states that every machine remained non-operational for some durations for its scheduled maintenance and there are some short periods of breakdown. 2 During onsite visit, PP has shown Breakdown sheet to assessment team which states that there are lull hrs and breakdown hrs during current monitoring period (01-January-2023 to 31-December-2023) which is not included by PP in Appendix-4 of MR.
1st Response from PP Date: 23-June-2024
1. The statements have been removed and section 3.0 has been revised. 2. Now included
Documents provided by PP for review
PP will list out here the documents submitted to support the response
1st Review by Assessment Team Date: 05-July-2024
1. PP has incorporated the breakdowns in MR and ER that was occurred during the current monitoring period. AT team verified these breakdowns with the breakdown records submitted by PP. 2. PP has incorporated the duration of Lull Hrs in MR and ER that was occurred during the current monitoring period. AT team verified these monthly records submitted by PP. **Hence Finding No.#05 is closed**

Finding No. __06____	Date: 22-April-2024
Finding Type- CAR ☒ CL ☐ FAR ☐	
Stage of finding raised: Desk Review ☐ On-site/remote/hybrid assessment ☒ Technical Review ☐ Project Review Report by Registry ☐	
Requirement	
VCS Monitoring Report Template version 4.3, clause 3.16.4 of VCS Standard Version 4.6.	
Non-Conformity	
1 Entity responsible for Operation and Maintenance of the project activity. 2 Latest date of calibration.	
Evidence	

1 During Site visit, Assessment team interviewed the Site Personnels, O&M Team and found that Operation and Maintenance are carried out by inhouse team of project proponent since 2020. 2 During Site visit, calibration certificates shown by PP to assessment team states that latest date of calibration was 25-July-2023. However, PP has mentioned 03-February-2022 as latest date of calibration in Appendix-3 of MR.	
1st Response from PP	Date: 23-June-2024
1. Section 4.3 has been revised for revised operation and maintenance entity 2. The calibration dates have been revised	
Documents provided by PP for review	
Calibration Certificate	
1st Review by Assessment Team	Date: 05-July-2024
PP has revised the latest calibration dates in MR, which were verified by the assessment team by reviewing the calibration certificate submitted by PP. **Hence Finding No.#06 is closed**	

Finding No. __07____	Date: 10-July-2024
Finding Type- CAR ☒ CL ☐ FAR ☐	
Stage of finding raised: Desk Review ☐ On-site/remote/hybrid assessment ☐ Technical Review ☒ Project Review Report by Registry ☐	
Requirement	
VCS Monitoring Report Template version 4.3 Clause 3.8 and 3.5.6 of VCS Standard Version 4.6.	
Non-Conformity	
1. Inconsistency found in the “Project Start Date” in MR with the Joint PD & MR version 2.0 dated 06-February-2017. 2. Time period of the current monitoring period mentioned in Footnote of section 1.12 is inconsistent 3. Section 2.3.4 in the MR is not in line with the VCS MR Template version 4.3 guidelines. 4. In section 3.1 of the MR, Breakdown details are not mentioned which is not in line with the VCS MR Template version 4.3.	

Evidence	
1. In section 1.6 of MR version 1.1 dated 23-June-2024 the Project start date is "30-March-2014" which in not in line with the one mentioned in registered VCS Joint PD & MR version 2.0 dated 06-February-2017. 2. In section 1.12 of MR version 1.1 dated 23-June-2024 the Dates mentioned in the footnote for the current monitoring period is not in line with the MP dates mentioned in the contract signed, ER sheet and MR. 3. In the section 2.3.4 of MR justification is not provided which is not in line with the VCS MR Template version 4.3 guidelines. 4. In the section 3.1 of MR version 1.1 dated 23-June-2024 the breakdown details for the current monitoring period are not mentioned which is not in line with the filling guidelines for this section as per the VCS MR Template version 4.3.	
1st Response from PP	Date: 13-July-2024
1. The date was a typo error, it has been rectified. 2. The current monitoring period in the footnote has been revised. 3. It has been revised. 4. The details of breakdown have been added and values has been revised both in ER and MR.	
Documents provided by PP for review	
MR version 1.2 and ER sheet Version 1.1 dated 14-July-2024	
1st Review by Assessment Team	Date: 26-July-2024
1. PP has clarified that the project start date is wrongly mentioned due to typo which has been corrected now. Assessment team revied the same and cross checked with the Joint PD & MR and found consistent. 2. Time period of the current monitoring period mentioned in Footnote of section 1.12 is updated by PP and now it is consistent with the monitoring period stated in ER Sheet, as verified by the assessment team. 3. Section 2.3.4 of MR is updated as per the requirements of VCS MR Template version 4.3 guidelines, as verified by the assessment team. 4. PP has mentioned the breakdown details under section 3.1 of MR version 1.2 dated 14-July-2024. There are minor breakdowns during current monitoring period but there is not any impact on ER calculation. **Hence Finding No.#07 is closed**	

Description of Forward Action Requests (FARs) raised by VVB:

~~Finding No. __00____~~	~~Date: DD Month YYYY~~
~~Finding Type~~ CAR ☐ CL ☐ FAR ☒	
~~Stage of finding raised:~~ ~~Desk Review~~ ☐ ~~On site/remote/hybrid assessment~~ ☐ ~~Technical Review~~ ☐ ~~Project Review Report by Registry~~ ☐	
~~Requirement~~	
~~Non Conformity~~	
~~Evidence~~	
~~1st Response from PP~~	~~Date: DD Month YYYY~~
~~Documents provided by PP for review~~	
~~1st Review by Assessment Team~~	~~Date: DD Month YYYY~~

APPENDIX 4: COMPETENCE STATEMENT

Team Leader cum Technical Expert T,A 1.2

Certification Pvt. Ltd.

VKU.F50W. Competence Statement

COMPETENCE STATEMENT

Name	Shivani Chauhan
Nationality	Indian
Countries of Experience	India, Kenya, Madagascar, Fiji
Education Qualification	M.Sc. Environmental Science B.Sc. Environmental Science
Year of Experience	3 years +
Area of Expertise	Climate Change &Environment Industry
Eligible Sectoral Scope	TA 1.2 - Energy generation from renewable energy sources TA 3.1. Energy demand

Roles

Project Trainee	NO
Validator/Verifier Trainee	NO
Validator	YES
Verifier	YES
Team Leader	YES
Technical Reviewer	NO
Local Expert (Country Wise)	YES
TA Expert (TA 1.2 & TA 3.1)	YES
Financial Expert	NO

Reviewed by	Apoorva Gupta (Quality Manager)	Date	25.10.2023
Approved by	Barun Kumar (Technical Manager)	Date	25.10.2023

Validator/Verifier

Certification Pvt. Ltd.

VKU.F50W. Competence Statement

COMPETENCE STATEMENT

Name	Anil Dhankar
Nationality	Indian
Countries of Experience	India
Education Qualification	B.Sc. (BCZ) M.Sc. (Environmental Science)
Year of Experience	1 Year 4 Months
Area of Expertise	Climate Change & Environment/Industry
Eligible Sectoral Scope	NA

Roles

Project Trainee	NO
Validator/Verifier Trainee	NO
Validator	YES
Verifier	YES
Team Leader	NO
Technical Reviewer	NO
Local Expert (Country Wise)	NO
TA Expert (X.X)	NO
Financial Expert	NO

Reviewed by	Apoorva Gupta (Quality Manager)	Date	13/02/2024
Approved by	Barun Kumar (Technical Manager)	Date	13/02/2024

Project Trainee

Certification Pvt. Ltd. VKU.F50W. Competence Statement

COMPETENCE STATEMENT

Name	Shreea Singh
Nationality	Indian
Countries of Experience	India
Education Qualification	M.Sc. (Environmental Sciences) B.Sc. (Life Sciences)
Year of Experience	Fresher
Area of Expertise	NA
Eligible Sectoral Scope	NA

Roles

Project Trainee	YES
Validator/Verifier Trainee	NO
Validator	NO
Verifier	NO
Team Leader	NO
Technical Reviewer	NO
Local Expert (Country Wise)	NO
TA Expert (X.X)	NO
Financial Expert	NO

Reviewed by	Apoorva Gupta (Quality Manager)	Date	12/01/2024
Approved by	Barun Kumar (Technical Manager)	Date	12/01/2024

Technical Reviewer cum Technical Expert T.A 1.2

Certification Pvt. Ltd.

VKU.F50W. Competence Statement

COMPETENCE STATEMENT

Name	Sunil Kathuria
Nationality	Indian
Countries of Experience	Malaysia, Uganda, Kenya, South Africa, Nigeria Bangladesh, China, Vietnam, Thailand, Philippines, United Kingdom, Germany, USA
Education Qualification	B.E. (Electrical Power)
Year of Experience	40 Years
Area of Expertise	Climate Change & Environment Energy Generation / Distribution GHG Footprints Manufacturing Sector
Eligible Sectoral Scope	TA 1.1 – Thermal energy generation TA 1.2 – Renewables TA 2.1 - Energy distribution TA 3.1 - Energy Demand TA 4.1 – Cement and lime production (Manufacturing Industries) TA 13.1 Solid Waste & Wastewater

Roles

Project Trainee	NO
Validator/Verifier Trainee	NO
Validator	YES
Verifier	YES
Team Leader	YES
Technical Reviewer	YES
Local Expert (Country Wise)	YES
TA Expert (1.1, 1.2, 2.1, 3.1, 4.1, 13.1)	YES
Financial Expert	NO

Reviewed by	Apoorva Gupta (Quality Manager)	Date	16/10/2023
Approved by	Barun Kumar (Technical Manager)	Date	16/10/2023