



# SATARA WIND POWER PROJECT IN MAHARASHTRA, INDIA

Document Prepared By



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<b>VCS Standard Version</b>	4.6
<b>Client</b>	NSL Wind Power Company (Satara) Pvt. Ltd.
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## Summary:

VKU Certification Pvt. Ltd. (hereafter referred as VKU) has been commissioned by NSL Wind Power Company (Satara) Pvt. Ltd. (hereafter referred as PP) to verify the greenhouse gas emission reductions reported for the project activity “**Satara Wind Power Project in Maharashtra, India.**” (VCS ID 1519<sup>1</sup>) in India. This is the ninth verification of monitoring period from **01-January-2023 to 05-March-2024 (Inclusive of both dates)** under fixed crediting period from **06-March-2014 to 05-March-2024 (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 PD/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 PD/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 4.4/6/, VCS Standard Version 4.6/7/, VCS Validation and Verification Manual version 3.2/8/, CDM M&P, the latest version of the CDM Validation and Verification Standard 3.0 /9/, 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

<sup>1</sup> <https://registry.terra.org/app/projectDetail/VCS/1519>

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 **(08)** findings were identified, comprising of **(05) Corrective Action Request (CARs); (03) Clarification Requests (CLs) and (00) Forward Action Request (FAR)**. All the raised findings were successfully resolved/closed after necessary corrections/clarifications by the client. The same has been discussed in [Appendix B](#) 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 16.0: Grid-connected electricity generation from renewable sources /10/, Tool for the demonstration and assessment of additionality; Version 07.0.0 /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 PD (version 03) dated 08-February-2016/3/

#### **Verification Conclusion:**

Based on VKU's thorough assessment, it is their professional judgment that the project activity “Satara Wind Power Project in Maharashtra, India.” (VCS ID 1519) fully complies with the applicable requirements of VCS standard version 4.6 /7/ 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 16.0 /10/.

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 **67,468 tCO<sub>2e</sub>** during the ninth verification for monitoring period, which spans from **01-January-2023 to 05-March-2024 (Inclusive of both dates)** of fixed crediting period of 10 years from (06-March-2014 to 05-March-2024; Including both dates). This certification affirms the project's substantial contributions towards mitigating greenhouse gas emissions.

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# 1 INTRODUCTION

## 1.1 Objective

NSL Wind Power Company (Satara) Pvt. Ltd. (hereafter referred as PP) commissioned VKU Certification (here after referred as VKU) to carry out ninth verification of the project “Satara Wind Power Project in Maharashtra, India” (VCS ID 1519) project in India for the period from 01-January-2023 to 05-March-2024 (Inclusive of both start and end dates) under fixed crediting period from 06-March-2014 to 05-March-2024 (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 /6/, VCS standard version 4.6 /7/ and GHG program applied, on the basis of the registered VCS PD Version 03 dated 08-February-2016/3/.

This is the ninth verification under **fixed crediting period of 10 years from (06-March-2014 to 05-March-2024)**, (Inclusive of both dates) for a period of fourteen months & five days i.e., from **01-January-2023 to 05-March-2024** (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 PD Version 03 dated 08-February-2016/3/.

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

Periodic Verification No.	Monitoring Period (Inclusive of both dates)	Number of years
1 <sup>st</sup> in VCS	<u>06-March-2014 to 31-December-2015</u>	1 Year 9 months 26 days
2 <sup>nd</sup> in VCS	<u>01-January-2016 to 30-September-2017</u>	1 Year 9 months 00 days
3 <sup>th</sup> in VCS	<u>01-October-2017 to 31-August-2018</u>	00 Year 11 months 00 days
4 <sup>th</sup> in VCS	<u>01-September-2018 to 31-October-2019</u>	1 Year 02 months 00 days
5 <sup>th</sup> in VCS	<u>01-November-2019 to 31- October-2020</u>	1 Year 00 months 00 days
6 <sup>th</sup> in VCS	<u>01- November-2020 to 31-August-2021</u>	00 Year 10 months 00 days
7 <sup>th</sup> in VCS	<u>01-September-2021 to 30-April-2022</u>	00 Year 8 months 00 days
8 <sup>th</sup> in VCS	<u>01-May-2022 to 31-December-2022</u>	00 Year 8 months 00 days
9 <sup>th</sup> (Current Monitoring Period) in VCS	<b>01-January-2023 to 05-March-2024</b>	01 Year 02 months 05 days

Total	06-March-2014 to 05-March-2024	10 Years 00 months 00 days
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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 PD Version 03 dated 08-February-2016 /3/ & MR /1/ and that all physical features (technology employed, technical specifications of the WTGs /30/, 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 16.0 /10/ 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 "Satara Wind Power Project in Maharashtra, India". The verification of this project is based on the validated & registered VCS PD Version 03 dated 08-February-2016/3/ & 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:

- VCS Programme Guide (Version 4.4) /6/
- VCS Standard (Version 4.6) /7/
- VCS Program Definitions (Version 4.4) /4/
- VCS Registration & Issuance Process (Version 4.4) /5/
- VCS validation and verification manual version 3.2/8/
- CDM Approved methodology ACM0002 Version 16.0 /10/
- Tool to calculate the emission factor for an electricity system (Version 05.0)/19/
- Tool for the demonstration and assessment of additionality, Version 07.0.0/20/
- CDM Validation and Verification Standard version 3.0/9/

**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 voluntary 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

- Desk review of VCS Project Description Version 03 dated 08-February-2016/3/ and other supporting documents listed in **Table-04**;
- Interviews & Focussed Group Discussions with PP representatives & Stakeholders involved in project's implementation during the onsite visit of project.
- Independent Internal Technical Review.
- VKU's Completeness/Quality Check.
- 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 4.6/7/.

The verification report is based on the Monitoring report/1/, ER Sheet/2/, registered VCS PD /3/ & supporting documents that were made available to the VKU's assessment team references provided in **Table-04** and information collected through performing interviews with PP Representatives/Local Stakeholders during on-site visit /39/

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 TA 1.2, (Local Expert – Country: India)	Chauhan	Shivani
Validator/Verifier	Dhankar	Anil

Project Trainee	NA	Shreea
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**Table No 03: The Technical Reviewer Team comprises of:**

Role/Qualification of Technical Team	Last Name	First Name
Technical Reviewer & Technical Expert TA 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 supply of electricity is confirmed from registered VCS Project Description version 03 dated 08-February-2016/3/, Group credit notes issued by MSEDCL (Maharashtra State Electricity Distribution Co. Ltd.), Invoices raised by PP to MSEDCL (Maharashtra State Electricity Distribution Co. Ltd.) /27/ and, last verification report/12/ and interview with PP/39/. The spatial extent of the project boundary is the NEWNE (Now Unified Indian Grid) located in Village: Mann in Satara district of state- Maharashtra.

### 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 total capacity of the project activity when it got commissioned was 30 MW.

**Start date of this project activity is earliest date of commissioning of the 1<sup>st</sup> machine (WTG) of project activity i.e., on 06-March-2014 and the project was fully commissioned on date of commissioning of last machine (20th WTG) i.e., 31-March-2014, dates are verified against registered VCS Project Description version 03 dated 08-February-2014/3/ and commissioning certificates/29/.**

This activity involves installation and operations of 20 numbers of Wind turbine generators (WTGs) of rated capacity 1.5 MW each. The WTGs are of Vensys V87 type, supplied by ReGen Power Tech Pvt. 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 PD/3/ previous Verification report /5/ and

commissioning certificates/29/ which were submitted by the PP to the assessment team as a response to the findings raised by the assessment team during verification assessment as per section 3.26 of the VCS standard version 4.6/7/ it is an obligation for the project proponent to make the required supporting documents available to the validation/verification body.

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

<b>Baseline/Source</b>	Generation of electricity by fossil fuel- dominated grid connected power plants
<b>Project Equipment/Sink</b>	<p>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 part -2</p> <p>Renewable Energy Projects do not create sinks, they avoid emissions through their technology i.e., Through installed Wind Power Project.</p>
<b>Baseline GHG emission source reduced/avoided</b>	CO <sub>2</sub> emissions from fossil fuels and other fuel fired grid connected plants/projects.

Hence VKU in adherence to the section 3.1, clause 3.1.8 of the VCS standard version 4.6/7/ conforms that the capacity of the project has been verified from the commissioning certificates/29/ and later verified during site visit while interviewing the site personnel and hence declare that the project capacity is in line with the defined methodology ACM0002 version 16.0 /10/.

This information has been verified during on site assessment /38/and found to be in line with the details provided in the registered VCS Project Description version 03 dated 08-February-2016/3/. The net electricity generated by the project activity that was evacuated to the grid during the current monitoring period (9<sup>th</sup> monitoring period) from **01-January-2023 to 05-March-2024** (inclusive of both the dates) is **69,078 MWh**. The total emission reductions achieved in this monitoring period i.e., from **01-January-2023 to 05-March-2024** (inclusive of both the dates) is **67,468 tCO<sub>2</sub>e**.

## 2 VERIFICATION PROCESS

The registered VCS project “Satara Wind Power Project in Maharashtra, India” (VCS ID 1519) is undergoing ninth periodic verification of fixed crediting period under VCS with VKU Certification Pvt. Ltd. from **01-January-2023 to 05-March-2024**, inclusive of both the 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 /6/, VCS standard document version 4.6 /7/. The project activity does not fall under category “grouped projects”, hence no sampling methods was employed by the assessment team and during onsite visit /38/ 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 16.0 /10/
- Scope: 01 - Energy Industries (renewable /non-renewable sources)
- Project type: Type I - Renewable energy projects

Tools used for GHG Calculations are as follows as per registered PD /3/:

- Tool to calculate the emission factor for an electricity system, Version 05.0.0 /19/

Keeping in line with ISO (14064-3; 2019, clause 06 & 14065-2020, 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 project. 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/42/ and submit it to [auditing@verra.org](mailto:auditing@verra.org), 15 business days before the opening 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 4.6/7/
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/approval via email.
10. **Document Review:** Relevant documents, such as the previous verification reports, monitoring plan, methodology, VCS PD 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 "Satara Wind Power Project in Maharashtra, India." version 1.0 dated 05-February-2024 and final Version 1.2 dated 17-June-2024 /1/ and the emission reduction calculations spreadsheet for "Satara Wind Power Project in Maharashtra, India." Version 1.0 dated 27-May-2024 /2/ and final Version 1.1 dated 17-June-2024. In addition, the registered VCS Project Description version 03 dated 08-February-2016/3/ has been specifically referred for baseline estimations and the monitoring plan for the project was reviewed. The following **table-04** lists the documentation that was reviewed during the verification.

As per section 3.26 and clause 3.26.3 of the VCS standard version 4.6/7/ 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: 04; Lists of the documentation that were reviewed during the current verification:**

Current Verification Reference Documents	
/1/	VCS Monitoring Report for “Satara Wind Power Project in Maharashtra, India” <ul style="list-style-type: none"> <li>Version 1.0 dated 05-February-2024</li> <li>Version 1.1 dated 27-May-2024</li> <li>Version 1.2 dated 17-June-2024</li> </ul>
/2/	Emission Reduction Calculation Spreadsheet for “Satara Wind Power Project in Maharashtra, India” <ul style="list-style-type: none"> <li>Version 1.0 dated 27-May-2024</li> <li>Version 1.1 dated 17-June-2024</li> </ul>
Background Documents/Weblinks	
/3/	<u>Registered VCS PD for the project ‘Satara Wind Power Project in Maharashtra, India.’ version 03 dated 08-February-2016</u>
/4/	<u>VCS Program Definitions (Version 4.4) of 29-August-2023</u>
/5/	<u>VCS Registration &amp; Issuance Process (Version 4.4) of 04-October-2023</u>
/6/	<u>VCS: VCS Program Guide, version 4.4 of 29-August-2023</u>
/7/	<u>VCS Standard, version 4.5 dated 04-October-2023</u> <u>VCS Standard, version 4.6 dated 21-March-2024</u>
/8/	<u>Validation and verification manual version 3.2 dated 19-October-2016</u>
/9/	<u>CDM Validation and Verification Standard version 3.0 dated 09-September-2021</u>
/10/	<u>CDM Executive Board: Baseline and Monitoring Methodology “ACM0002: Grid-connected electricity generation from renewable sources- version 16.0</u>
/11/	<u>LGAI Technological Center, S.A (Applus+ Certification): Validation Report: Satara Wind Power Project in Maharashtra, India, Version 01, dated 10-February-2016</u>
/12/	VKU Certification Pvt. Ltd. Verification Report: “Satara Wind Power Project in Maharashtra, India”, Version 1.1, dated 25-April-2024
/13/	<u>VERRA: Project search</u>
/14/	<u>UNFCCC: Project search</u>
/15/	<u>Renewable Energy Certificate Registry of INDIA - Registered RE Generator List (recregistryindia.nic.in)</u>
/16/	<u>I-REC Standard - The International REC Standard Foundation (irecstandard.org)</u>
/17/	<u>Gold Standard Foundation</u>
/18/	<u>EIA NOTIFICATION dated 14-September-2006</u>

/19/	<u>Tool to calculate the emission factor for an electricity system, Version 05.0</u>
/20/	<u>Tool for the demonstration and assessment of additionality, Version 07.0.0</u>
/21/	<u>CO2 Baseline Database for the Indian Power Sector</u>
/22/	Central Electricity Authority (Installation and Operation of Meters) Regulations Notified on 17-March-2006 <u>No. 502/70/CEA/DP&amp;D</u> Amendments Notified on 26-June-2010 <u>No. 502/6/2009/DP&amp;D/D-I</u>  <u><a href="https://cea.nic.in/wp-content/uploads/2020/02/meter_reg.pdf">https://cea.nic.in/wp-content/uploads/2020/02/meter_reg.pdf</a></u>  <u>Metering Regulations Archives - Central Electricity Authority (cea.nic.in)</u>
<b>Reference/Supporting documents submitted by PP to VVB</b>	
/23/	1. Wind Energy Purchase Agreement between M/s NSL Wind Power Company (Satara) Pvt Ltd and Maharashtra State Electricity Distribution Company Limited for 12 MW Wind Power Project (08 Nos. X 1500 kW Regen Make) at Village Virali & Chilarwadi, Tal: Mann, District: Satara.  2. Wind Energy Purchase Agreement between M/s NSL Wind Power Company (Satara) Pvt Ltd and Maharashtra State Electricity Distribution Company Limited for 7.5 MW Wind Power Project (05 Nos. X 1500 kW Regen Make) at Village Virali & Chilarwadi, Tal: Mann, District: Satara  3. Wind Energy Purchase Agreement between M/s NSL Wind Power Company (Satara) Pvt Ltd and Maharashtra State Electricity Distribution Company Limited for 10.5 MW Wind Power Project (7 Nos. X 1500 kW Regen Make) at Village Virali & Chilarwadi, Tal: Mann, District: Satara
/24/	Certificates of Calibration for all the energy meters for the project activity active during current monitoring period ( <b>01-January-2023 to 05-March-2024</b> , inclusive of both start and end dates) issued by MAHAVITRAN (A Govt of Maharashtra Undertaking).
/25/	O & M (Service Agreement) between Satara Wind Power Project in Maharashtra, India and ReGen Power Tech Private Limited
/26/	JMRs Issued by Maharashtra State Electricity Distribution Company Limited to PP i.e., NSL Wind Power Company Private Limited
/27/	Invoices issued by PP to DISCOM i.e., Maharashtra State Electricity Distribution Company (MSEDCL)
/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 ( <b>01-January-2023 to 05-March-2024</b> , inclusive of both start and end dates)
/29/	Commissioning Certificates of all 20 Machines (Wind Turbine Generators) of the project activity issued by Maharashtra State Electricity Distribution Company Limited.



/30/	Technical Specifications of Wind Turbine Generators (WTGs) of “Satara Wind Power Project in Maharashtra, India.” project as specified by manufacturer ReGen Power Tech Private Limited.
/31/	Grievance Register/Grievance-Resolution Letters present on project implemented site; more information related to the same has been included in <a href="#">Section 4.2</a> of this report
/32/	<a href="#">Tripping/Breakdown Details</a>
/33/	Monthly Generation Reports/PLF Details
/34/	NSL Policy Document: Commitment to Gender sensitivity, non-discrimination, anti- harassment, employee & stakeholders’ welfare and work life balance version 01 dated 15-Novemeber-2023
/35/	NSL Policy Review Statements for the month of December 2023, February 2024 & May 2024
<b>VVB Documents used during Current Verification</b>	
/36/	GPS Google earth software used for Location; <a href="#">Google Earth</a>
/37/	<a href="#">GPS Map Camera: Geotag Photos &amp; Add GPS Location</a>
/38/	Onsite visit on 08-April-2024 to Project implemented site i.e. Village: Mann of District- Satara, State- Maharashtra, Country- India.  On-site Visit Photographs/Evidences
/39/	Personnel Interviews and Focussed Group Discussions during onsite visit dated 08-April-2024 detailed in <a href="#">section 2.3</a> of this report
/40/	VKU-Attendance Sheet of Onsite Audit_ VKU.VER.174.23_VCS_1519
/41/	VKU-Audit and Sampling Plan_ VKU.VER.174.23_VCS_1519
/42/	<a href="#">Notice of Validation/Verification Services (NOVS) Form- VCS_1519</a>

## 2.3 Interviews

An on-site inspection /38/ was performed by the VKU assessment team (VKU). The representatives of the PP were interviewed personally on 08-April-2024; i.e., Tables 05 & 06 provide a comprehensive overview of the onsite interview process/39/ 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: 05: Details of Personnel Interview**



S.No.	Name	Gender	Designation	Topic of Discussion
1	Abhay S. 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	Mohan Suryavanshi	Male	AM (O&M) NSL Power	
3	Dayanand Bhalekar	Male	Senior Engineer NSL Power	
4	Anand Waghmode	Male	Senior Engineer NSL Power	

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, internal audit and archiving procedures. The assessment was based on the feedback received during onsite interview/39/ coupled with the documentation.

During Onsite Visit/38/, local stakeholders involved in the projects /39/ have been also interviewed to verify implementation of grievance mechanism and process of it's resolution, as mentioned in the Monitoring report/1/ (refer section 02 of MR/1/). It also included confirmation of sustainable development claims and verification of the socio-economic impact made by the project on the local community. Assessment team also checked records and observed that the PP has provided opportunities for the locals to express their opinions and grievances, Project developer has put efforts to resolve any issues through effective communication & consultation with stakeholders. Assessment team could verify & confirm all the above statements via focussed group discussions and personal interview/39/ with stakeholders as tabulated below:

S.No.	Name	Gender		Category	Topic of Discussion
1	Sachin S Shinde	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
2.	Ganesh Mohite	Male			
3.	Satyawan Sapan	Male	Site Operator		The ongoing communication procedure and the address of their grievance mechanism

4.	Bajrang Sopandhu	Male			followed by the project proponent
5.	Aniket N. Gorak	Male			Scope and generation of employment in the locality due to the implementation of said project activity in the area.
6.	Somnath Jadhav	Male			The ongoing trainings provided to the locals for self-employment.

The VKU Assessment Team meticulously documented the information obtained during the interviews with site personnel /39/. This data was recorded using VKU's dedicated form, specifically VKU.F46W, known as the Attendance Sheet for Audit/42/. 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 4.2.2](#) below.

## 2.4 Site Visits

### Site Location visited:

Location: near Village – Mann village, in the district Satara, state of Maharashtra, Country- 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 4.6/7/

An On-site visit has been undertaken by the verification team to the project location identified in the MR/1/ at Village – Mann in District- Satara of State- Maharashtra of India on 08-April-2024/38/, to carry out the following;

- An assessment of the implementation and operation of the registered project activity as per the registered VCS PD Version 03 dated 08-February-2016/3/ and VCS MR/1/.
- A review of information flows that have been used to generate, aggregating and reporting of the monitoring parameters.
- Interviews/39/ with relevant personnel to determine whether the operational and data collection procedures are implemented in accordance with the monitoring plan in the registered VCS Project Description (PD) version 03 dated 08-February-2016/3/.
- 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 calibration performance and observations of monitoring practices against the requirements of the VCS PD Version 03 dated 08-February-

- 2016/3/ 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 **08 Findings (00 FARs, 03 CLs and 05 CARs)** were raised during this verification which were closed successfully and details are provided under [Appendix B](#) of this report.

### 2.5.1 Forward Action Requests

Based on the review of the VCS Validation Report/11/ and previous VCS Verification Report /12/, no FAR was raised during Validation and previous Verification which needs to be closed during

this verification and no FAR has been raised during current verification, (01-January-2023 to 05-March-2024; 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 and does not hold accreditation for validation of any relevant sectoral scope. Hence this section is not applicable. It is to further conclude that during current verification there is no validation assessment undertaken either by VKU itself or parallelly by other certification bodies, as the same was confirmed with focussed group discussions and interview with the PP /39/ during on site visit/38/.

Assessment team assessed the VERRA's website at the time of submission of this report: <https://verra.org/validation-verification/vku-certification-pvt-ltd/#vcs> wherein the scope of services of VKU Certification Pvt. Ltd. is mentioned as verification. VKU Certification Pvt. Ltd. is currently undergoing validation accreditation with ANAB for which witness audit has already been conducted. Thus, ensuring that the accreditation details mentioned in FVR is consistent and correct.

### 3 VALIDATION FINDINGS

The registered VCS project “Satara Wind Power Project in Maharashtra, India” (VCS ID 1519) is undergoing ninth periodic verification of fixed crediting period under VCS with VKU Certification Pvt Ltd from 01-January-2023 to 05-March-2024, both dates included. The fixed crediting period start from 06-March-2014 to 05-March-2024 (both dates included).

This project activity is a stand-alone wind project and is not part of a grouped or 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 (2<sup>nd</sup> monitoring period) which have already been approved and carried forward into the current verification. The project does not undergo baseline reassessment during the monitoring period.

#### 3.1 Methodology Deviations

No instances of methodology deviation have been identified throughout the current monitoring period from **01-January-2023 to 05-March-2024** (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 Validation and previous VCS Verification processes which were confirmed from the VCS Validation report /11/ and previous VCS Verification reports/12/, affirming the project's steadfast commitment to upholding the designated methodologies and ensuring accurate and reliable results.

#### 3.2 Project Description Deviations

There are no Project description deviations applied/requested by PP during current monitoring period i.e., **01-January-2023 to 05-March-2024** (Inclusive of both the days).

The VKU Assessment Team conducted an assessment of Previous verification reports, Validation Report/11/ and there were not any evidences of project description deviation. 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 PD /3/ and approved monitoring plan. The project activity is a wind energy project with total capacity of 30 MW, comprising of 20 Wind Turbine Generators (WTGs) of rated capacity 1500 kW each of Regen Powertech, commissioned from 06-March-2014 to 31-March-2014/29/. The project start date is 06-March-2014 which is confirmed with the registered VCS PD/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) is exported to Maharashtra State Electricity Distribution Company Limited (MSEDCL), which falls under the Northern, Eastern, Western and North-Eastern regional grids (NEWNE) grid of India. The spatial extent of the project boundary is NEWNE grid which is now Unified Indian Grid. The Project WTGs are currently operational and during the current monitoring period (01-January-2023 to 05-March-2024; 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 were calculated to be **9,539.17 hours** /32/. It is important to note that these breakdowns have a considerable impact on the project activity's reduction of greenhouse gas (GHG) emissions. There was some unexpected downtime of some WTGs due to routine maintenance & breakdown of some WTGs due to generator failure and other reasons. etc.

**Table No: 07: Breakdown Hours for the current Monitoring Period (01-January-2023 to 05-March-2024)**

Monitoring Period	Total Hours for the Month	Total available production hours for project activity=A	Actual Production Hours as per the generation report submitted by PP /33/=B	% of Actual Production Hours (B/A*100)	Breakdown Hours as per the generation report submitted by PP /33/=C	% of Breakdown Hours (C/A*100)	Lull Hours as per the generation report submitted by PP /33/=D (Hours)	% of Lull Hours (D/A*100)
01-January-2023 to 05-March-2024	(No. of days in month* 24 hours) (Hours)	(Total Hours for the Month*N o. of WTGs) (Hours)						

Januray-2024	744	14,880	11,541.2	77.56%	237.9	1.60%	3,101.3	20.84%
February-2023	672	13,440	11,703.8	87.08%	275.1	2.05%	1,461.8	10.88%
March-2023	744	14,880	12,280.0	82.53%	858.0	5.77%	1,742.8	11.71%
April-2023	720	14,400	10,630.2	73.82%	1913.1	13.29%	1,857.4	12.90%
May-2023	744	14,880	12,141.1	81.59%	1279.1	8.60%	1,460.5	9.82%
June-2023	720	14,400	13,205.5	91.70%	1086.9	7.55%	108.3	0.75%
July-2023	744	14,880	14,108.7	94.82%	769.2	5.17%	2.6	0.02%
August-2023	744	14,880	14,519.1	97.57%	273.2	1.84%	88	0.59%
September-2023	720	14,400	12,688.5	88.11%	511.3	3.55%	1,200.7	8.34%
October-2023	744	14,880	12,380.1	83.20%	1029.8	6.92%	1,470.7	9.88%
November-2023	720	14,400	12,609.4	87.57%	530.3	3.68%	1,260.7	8.75%
December-2023	744	14,880	13,384.9	89.95%	140.9	0.95%	1,354.6	9.10%
January-2024	744	14,880	13,174.9	88.54%	300.8	2.02%	1,405.2	9.44%
February-2024	696	13,920	11,481.6	82.48%	291.2	2.09%	2,147.4	15.43%
Mar-24	120	2,400	2,077.0	86.54%	42.4	1.77%	280.6	11.69%
<b>TOTAL</b>	<b>10,320</b>	<b>206,400</b>	<b>177,926</b>	<b>86.20%</b>	<b>9,539.17</b>	<b>4.62%</b>	<b>18,942.63</b>	<b>9.18%</b>

Total Operational Hours of WTGs.....: = 206,400

Actual Operating Hours .....: = 177,926

Breakdown Hours .....: = **9,539.17**

Lull Hours .....: = **18,942.63**

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

The breakdowns were due to scheduled maintenance activity as per the manufacture specification. 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 due 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

The project activity was operational for a total of **218,880 hours**, representing **430 days** under the current monitoring period. There were some scheduled and unscheduled breakdowns lasting **9,539.17 hours**, caused by either internal or external grid failures, breakdowns, plant maintenance and service. Additionally, there were some Lull Hours lasting **18,942.63hours**, as detailed in Appendix 2 of the monitoring report (MR)

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/38/ 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 B of MR/1/.

The assessment team also conducted interviews with key personnel, including senior engineers, junior engineers, and an assistant manager along with physical inspection of the WTGs especially the ones that are shut-down due to major concerns along with other WTGs that were operational to confirm if the plant is working efficiently/39/. These interviews took place on 08-April-2024 during the onsite visit /38/.

The assessment team thus concludes 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/33/, breakdown sheet/32/ present on project site and tripping details for each month) submitted to VKU Assessment Team by PP and thorough of these documents confirms that the plant has supplied 69,078 MWh of electricity, and thus contributing to 67,468 tCO<sub>2</sub>e GHG emission reductions in current monitoring period. The emission reduction for this monitoring period pro rata comparing with registered VCS PD is 60,477 tCO<sub>2</sub>e, whereas actual emission reductions achieved are 67,468 tCO<sub>2</sub>e, which is 11.56% higher than the estimated emission reductions for the current verification period. Further explanation is provided in section 4.5 of this report The ERs achieved in this monitoring period are higher basically due to high wind, higher PLF during this monitoring period.

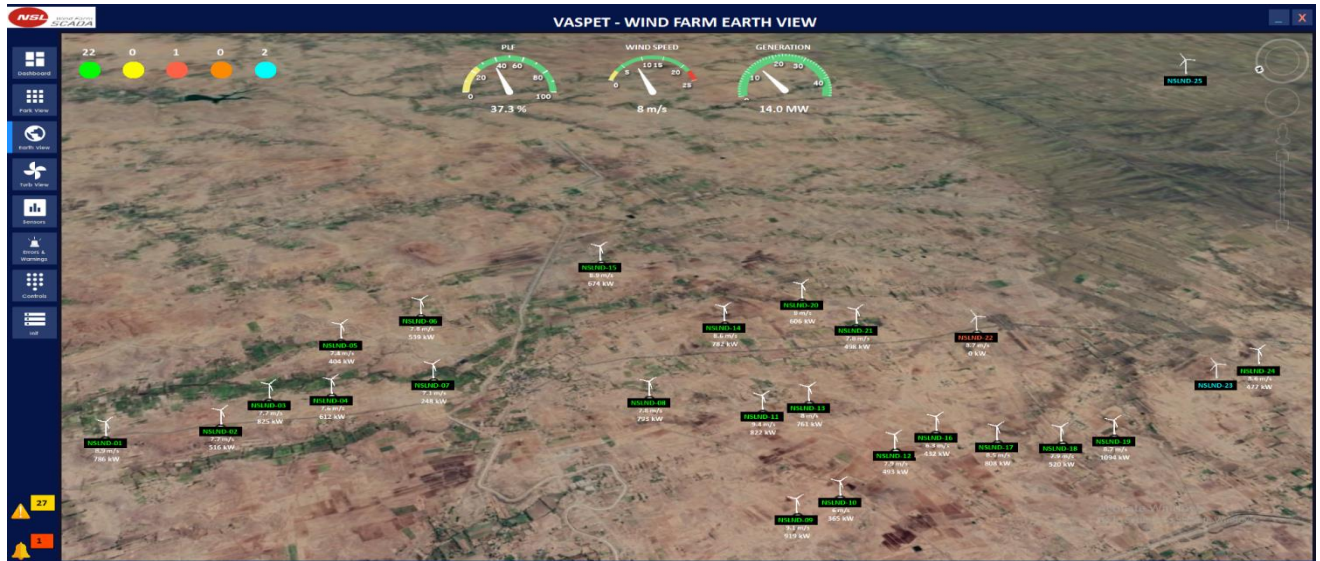


Figure 01: Real Time WTG working mapped down from SCADA installed at project implemented site collected as evidence by VVB.

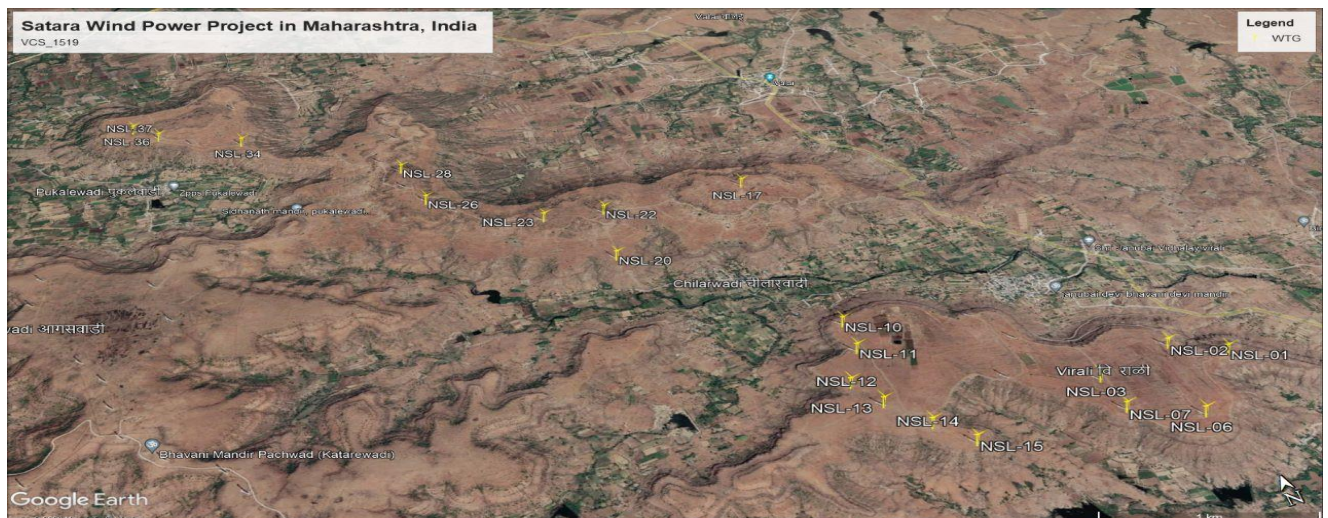


Figure 02: Project implemented Location verified and mapped down WTG-wise

The project location was verified by the assessment team through [Google earth pro/36/](#) during desk review and GPS map camera/37/ software during onsite visit /36/. Moreover, assessment team confirm that the latitude and longitude as mentioned in the registered VCS PD dated 08-February-2016/3/, VCS Validation Report/11/, VCS MR/1/ are consistent.

**Table no 08: The WTG wise commissioning dates, latitudes and longitudes are confirmed below:**

**Make of all WTGs – Vestas**

WTG Ref. No.	Date of Commissioning	Geo-Coordinates			
		UTM (Universal Transverse Mercator) format		DD-MM-SS (Degree/minutes/Seconds) format	
		Easting (m)	Northing (m)	Latitude (N)	Longitude (E)
NSL-1	06-March-2014	469336	1934816	<u>17 ° 29' 57.52" N, 74 ° 42' 40.12" E</u>	
NSL-2		469066	1934960	<u>17 ° 30' 2.19" N, 74 ° 42' 30.96" E</u>	
NSL-10		467591	1935712	<u>17 ° 30' 26.58" N, 74 ° 41' 40.90" E</u>	
NSL-11		467555	1935467	<u>17 ° 30' 18.61" N, 74 ° 41' 39.69" E</u>	
NSL-12		467395	1935210	<u>17 ° 30' 10.24" N, 74 ° 41' 34.28" E</u>	
NSL-13		467477	1935008	<u>17 ° 30' 3.67" N, 74 ° 41' 37.07" E</u>	
NSL-14		467616	1934769	<u>17 ° 29' 55.90" N, 74 ° 41' 41.80" E</u>	
NSL-15		467758	1934607	<u>17 ° 29' 50.64" N, 74 ° 41' 46.62" E</u>	
NSL-3	30-March-2014	468573	1934832	<u>17 ° 29' 58.01" N, 74 ° 42' 14.25" E</u>	
NSL-6		468893	1934421	<u>17 ° 29' 44.64" N, 74 ° 42' 25.13" E</u>	
NSL-7		468559	1934585	<u>17 ° 29' 49.97" N, 74 ° 42' 13.79" E</u>	
NSL-20		466692	1936734	<u>17 ° 30' 59.79" N, 74 ° 41' 10.36" E</u>	
NSL-22		466784	1937215	<u>17 ° 31' 15.45" N, 74 ° 41' 13.45" E</u>	
NSL-17	31-March-2014	467652	1937233	<u>17 ° 31' 16.08" N, 74 ° 41' 42.89" E</u>	
NSL-23		466388	1937239	<u>17 ° 31' 17.0" N, 74 ° 41' 01.1" E</u>	
NSL-26		465839	1937687	<u>17 ° 31' 30.76" N, 74 ° 40' 41.37" E</u>	
NSL-28		465767	1938105	<u>17 ° 31' 44.36" N, 74 ° 40' 38.91" E</u>	
NSL-34		464907	1938830	<u>17 ° 32' 7.90" N, 74 ° 40' 9.7" E</u>	

NSL-36		464416	1939096	<u>17 ° 32' 16.53" N, 74 ° 39' 53.02 E"</u>
NSL-37		464263	1939245	<u>17 ° 32' 21.37" N, 74 ° 39' 47.83" E</u>

The implemented project activity is a Greenfield wind power generation activity. The project activity involves installation of 20 Wind Turbine Generators of rated capacity 1.5 MW each with total installed capacity of 30 MW by NSL Wind Power Company (Satara) Pvt. Ltd. (Project Proponent). Start date of the operation of the project activity is commissioning of WTG Ref. No. (NSL-1, NSL-2, NSL-10, NSL-11, NSL-12, NSL-13, NSL-14 and NSL-15) on 06-March-2014 which is the date of commissioning/commercial operation of the 1<sup>st</sup> set of 9 WTGs and the project activity was fully commissioned on 31-March-2014 which is the date of commissioning/commercial operation of the last set of 7 WTGs (NSL-17, NSL-23, NSL-26, NSL-28, NSL-34, NSL-36 and NSL-37). Assessment team checked the commissioning certificates/29/ and confirmed that the dates of commissioning for all the WTGs are correct. The Assessment team during the onsite audit/36/ also confirmed that there is no change in project design with reference to previous verification/12/and VCS standard version 4.6 /7/ in section 3.3 of the report. The project is implemented as per the description provided in the registered VCS PD/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 Validation Report/11/ Assessment team confirms that the technical parameters are consistent with the registered VCS PD/ 3/. The major technical specifications of the WTG are as follows:

**Table no 09: Technical specifications of generator:**

ReGen Powertech	VENSYS 87
<b>POWER</b>	
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
<b>ROTOR</b>	
Diameter	87
Swept area	5942 sq. m
Speed range (variable)	9 to 17.3 rpm
<b>TOWER AND FOUNDATION</b>	
Hub height	85 m
Design	Tubular, Four sections
Foundation type	Floating foundation
<b>CONTROL AND SAFETY SYSTEMS</b>	

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
<b>TYPE CLASSES</b>	
Wind turbine type class	GL III B
<b>Generation Voltage</b>	
Voltage	620 V
<b>Transformer at WTG</b>	
Capacity	1.7 MVA
Voltage	620 V to 33 KV
Type	Step up Transformer
Location	At individual WTG
<b>Transformer at Substation</b>	
Capacity	100 MVA
Voltage	33 KV to 220 KV
Type	Step up Transformer
Location	At Substation

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 PD/3/ and applied methodology ACM0002, Version 16.0 /10/. The organizational role and responsibility as mentioned in the registered VCS PD/3/ is followed onsite. Meters (installed at the 33KV Hirawadi Substation) are calibrated as per calibration frequency in registered PD/3/. All the emergency preparedness as mentioned in MR/1/ are followed onsite and no discrepancies were found regarding the same.

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.

The VCS Project Coordinator has the responsibility of annually assessing the achieved emission reduction and documenting these results. This coordination ensures that the project maintains a systematic record of its emissions reductions for compliance and reporting purposes.

Assessment team concludes the following:

- a) There are no material discrepancies between project implementation and the project description provided in the registered VCS PD /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 project description/3/ and the applied methodology/10/.
- 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 3,373.4 tCO<sub>2</sub>e**
- 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 Validation or previous VCS Verifications/12/
- g) The project Activity is a wind power project and does not involve any supply chain in the project such as manufacturers, wholesalers, distributors 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 <sup>2</sup>, however PP has submitted the declaration/28/stating, 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. 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/38/ and found all the indicators to be effective and applicable for the project activity.

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

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<sup>2</sup> <https://registry.verra.org/app/projectDetail/VCS/1519>

S.No.	Monitoring Period Dates (Inclusive of both start and end dates)	Energy Supplied by the project activity to grid during its lifetime (MWh)	GHG emissions avoided by the project activity during its lifetime (tCO <sub>2</sub> e)	GHG Programme
1.	Seventh Monitoring Period from  01-September-2021 to 30-April- 2022	28,034	27,381	VCS
2.	Eighth Monitoring Period from  01-May-2022 to 31-December- 2022	50,410	49,235	VCS
3.	Current Monitoring Period from  01-January-2023 to 05-March- 2024	69,078	67,468	VCS
<b>Total Contributions</b>		<b>147,522 MWh</b>	<b>144,084 tCO<sub>2</sub>e</b>	<b>VCS</b>

Since the project is continuation of activity as per the registered VCS PD, 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 Project Description version 03 dated 08-February-2016/3/and MR /1/.

All the above stated information was verified by VKU assessment team during onsite visit/38/ at the project implemented site and also by interviewing the site personnel and by conducting focussed group discussion with them /39/.

Item	Evidence gathering activities, evidence checked, and assessment conclusion:				
Audit history	Audit Type	Period	Program	VVB Name	Number of years

	Validation	06-March-2014 to 05-March-2024	VCS	<u>LGAI Technological Center, S.A.</u> (Applus+)	NA
	1 Verification	06-March-2014 to 31-December-2015	VCS	<u>LGAI Technological Center, S.A.</u> (Applus+)	01 Year 09 months 26 days
	2 Verification	01-January-2016 to 30-September-2017	VCS	<u>Earthood Services Pvt. Ltd.</u>	01 year 09 months 00 days
	3 Verification	01-October-2017 to 31-August-2018	VCS	<u>Earthood Services Pvt. Ltd.</u>	00 Years 11 months 00 days
	4 Verification	01-September-2018 to 31-October-2019	VCS	<u>Earthood Services Pvt. Ltd.</u>	01 Year 02 months 00 days
	5 Verification	01-November-2019 to 31-October-2020	VCS	<u>LGAI Technological Center, S.A.</u> (Applus+)	01 Year 00 months and 00 days
	6 Verification	01-November-2020 to 31-August-2021	VCS	<u>LGAI Technological Center, S.A.</u> (Applus+)	00 Years 10 months 00 days
	7 Verification	01-September-2021 to 30-April-2022	VCS	VKU Certification Pvt Ltd	00 Years 08 months 00 days

	8 Verification	01-May-2022 to 31-December-2022	VCS	VKU Certification Pvt Ltd	00 Years 08 months 00 days
	Current 9 Verification	01-January-2023 to 05-March-2024	VCS	VKU Certification Pvt Ltd	01 Year 02 months 05 days
	Total	06-March-2014 to 05-March-2024	-	-	10-years 00 month 00 days
<p><b>Evidence gathering activities:</b> Keeping in line with the requirements stated in ISO 14064-3: 2019 (E) section 6.1.3 &amp; program requirement, the assessment team has performed the desk-review and reviewed the last verification reports/12/ available at the <a href="#">Verra's webpage</a>, during the pre-engagement stage to confirm the duration of the current monitoring period, the last monitoring period &amp; the crediting period of this project activity. Apart from the desk-review the assessment team also confirmed the audit history while performing the personnel interview &amp; focussed grouped discussion with PP during the on-site audit.</p> <p><b>Evidence Checked:</b> 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 &amp; number of verification) thus initially itself VKU confirmed the audit history by cross-checking with the Project Description /3/, Validation Report /11/ &amp; Previous Verification Reports that was already approved by Verra and are accessible to the VVB on <a href="#">Verra's webpage</a></p> <p><b>VVB's Conclusion:</b> 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 &amp; program requirements which is deemed accurate and satisfactory to VKU's assessment team.</p>					
Double counting and participation under other GHG programs	<p><b>Evidence Gathering Activities: Project's GHG Program Status, Cross-Verification of GHG Benefits &amp; Rejection by other GHG programs:</b></p> <ul style="list-style-type: none"> <li>Project has not been applied under any other GHG program neither included in any emissions trading program or any other mechanism that includes GHG allowance trading.</li> </ul>				



	<ul style="list-style-type: none"> <li>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.</li> </ul> <p><b>Evidence Checked:</b> The Project is not rejected by other GHG programs. A declaration/28/ for the same is checked and found correct by the assessment team.</p> <p><b>VVB’s Conclusion:</b> The assessment team assessed the issuance records available on the Verra website and has also cross-checked by performing 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 aforementioned registries or any comparable mechanisms and thus confirmed &amp; ensured that the emission reduction generated from the project activity are not &amp; will not be double counted hence accepted by the assessment team.</p>
No double claiming with emissions trading programs or binding emission limits	<p><b>Evidence Gathering Activities:</b> The project is not included in an emissions trading program or any other mechanism that includes GHG allowance trading.</p> <p>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.</p> <p><b>Evidence Checked:</b> PP has provided a declaration/28/ as evidence to back the above statement included in the MR.</p> <p><b>VVB’s Conclusion:</b> 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.</p>
No double claiming with other forms of environmental credit	<p><b>Evidence Gathering Activities:</b> The project has not sought or received another form of GHG-related environmental credit.</p> <p><b>Issuance Records Confirmation:</b> 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 &amp; ensured that the emission reduction generated from the project activity are not &amp; will not be double counted hence accepted by the assessment team.</p>

	<p><b>Evidence Checked:</b> PP has provided a 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 current monitoring period”</p> <p><b>VVB's Conclusion:</b> The assessment team confirms that there is No double claiming with other forms of environmental credit by the project activity.</p>
Supply chain (scope 3) emissions double claiming	<p><b>Evidence Gathering Activities:</b> The project does not affect emissions associated with any good or service &amp; 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, distributors 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.</p> <p><b>Evidence Checked:</b> The PP has provided declaration/28/as evidence for “Non-inclusion of scope 3 emissions”.</p> <p><b>VVB's Conclusion:</b> 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.</p>
Sustainable development contributions	<p><b>Evidence Gathering Activities:</b> 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 9<sup>th</sup> Periodic Verification for the Monitoring Period from 01-January-2023 to 05-March-2024 (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:</p> <p>The Project activity has implemented activities that results in 3 SDG Contributions; 7.2, 8.5 and 13.0.</p> <p><b>7.2 i.e. (Renewable energy share in the total final energy consumption)</b></p> <p>About 69,078 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.</p> <p><b>Evidence Checked:</b> VVB has referred previous verification reports approved by VERRA /5/, JMRs/26/, Invoices/27/</p>

	<p><b>VB's Conclusion:</b> VKU found the above claimed renewable electricity supplied to Indian grid is correct and deemed satisfactory.</p> <p><b>2. 8.5.1 i.e. (Employment Generation from the project Activity)</b> A total of 10 people is employed during this reporting period</p> <p><b>Evidence Checked:</b> PP has not provided the evidences to confirm this SDG.</p> <p><b>VB's Conclusion:</b> By Interviewing the stakeholders and site personals 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 and evidences not provided.</p> <p><b>3. 13.0 i.e. (Tonnes of greenhouse gas emissions avoided or removed)</b> By generating 69,078 MWh of renewable electricity the project has avoided the emission of 67,468 tCO<sub>2e</sub> in the atmosphere.</p> <p>Thus, proving that the project generated eco-friendly, GHG free power which contributes to sustainable development of the region.</p> <p><b>Evidence Checked:</b> 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 <b>CL#01</b> raised addressing this issue is closed by assessment team.</p> <p><b>VB's Conclusion:</b> VKU found the above claimed <b>Tonnes of greenhouse gas emissions avoided or removed</b> to be correct.</p>
Additional information relevant to the project	<p>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 &amp; 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.</p>

## 4.2 Safeguards and Stakeholder Engagement

### 4.2.1 Stakeholder Identification

There has been no change in the stakeholder's make up since validation.

Item	Evidence gathering activities, evidence checked, and assessment conclusion
Stakeholder identification	<p><b>Evidence Gathering Activities:</b></p> <p>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:</p> <ul style="list-style-type: none"> <li>• Key stakeholders to be identified.</li> <li>• Identification of the interests, concerns, and potential risks surrounding the stakeholders, as well as conflicts of interests (if any).</li> <li>• 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.</li> <li>• Key groups/individuals to be pinpointed who need to be informed about the project.</li> <li>• Identification of the impact and influence of the project on the stakeholders and of the stakeholders on the project.</li> </ul> <p>The typical groups of the stakeholders identified are</p> <ul style="list-style-type: none"> <li>• Local villagers</li> <li>• Local Gram Panchayat Members</li> <li>• Employees of the Wind firm</li> <li>• Local vendors and other relevant stakeholders.</li> </ul> <p><b>Evidence Checked:</b></p> <p>The accuracy and comprehensiveness of the information gathered through the Stakeholder Analysis were verified by cross-checking through interview and focussed group discussions with relevant experts and stakeholder representatives available during the onsite visit conducted by the VVB.</p> <p><b>VVB's Conclusion:</b></p>

	<p>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 undertaken 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.</p> <p>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.</p> <p>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.</p>
Legal or customary tenure/access rights	<p><b>Evidence Gathering Activities:</b> Information on legal/customary tenure rights of stakeholders, IPs, LCs and rights holders was gathered during initial verification.</p> <p><b>Evidence Checked:</b> As it's now the 9<sup>th</sup> 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/5/, VVB could only confirm the above stated information by cross checking the same with the project proponent &amp; stakeholders during the interview process and discussions conducted with them.</p> <p><b>VVB's Conclusion:</b> Based on initial verification evidence and subsequent review, the VVB concludes:</p> <ul style="list-style-type: none"> <li>• No legal or customary tenure/access rights over territories and resources exist for stakeholders, IPs, LCs and rights holders for this VCS project.</li> <li>• The 30 MW Wind Power plant uses mainly private land (a plateau). No forest land involved.</li> </ul>

	<ul style="list-style-type: none"> <li>Specific evidence on land parcel sales may not be available in the 9<sup>th</sup> verification year, as land acquisition was completed earlier at the time of validation.</li> </ul> <p>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.</p>
Stakeholder diversity and changes over time	<p><b>Evidence Gathering Activities:</b></p> <p>As per desk review with registered VCS PD/3/, interview with stakeholders and assessment of monitoring report.</p> <p><b>Evidence Checked:</b></p> <p>Onsite visit, consultations with stakeholders, and review of relevant documents and data sources.</p> <p><b>VVB's Conclusion:</b></p> <p>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.</p> <p>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.</p> <p>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.</p> <p>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.</p>
Expected changes in well-being	<p><b>Evidence Gathering Activities:</b></p> <p>As per desk review with registered VCS PD/3/, interview with stakeholders and assessment of monitoring report. The assessment of changes in stakeholder well-being, characteristics, and ecosystem services was conducted during validation.</p>

	<p>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.</p> <p><b>Evidence Checked:</b></p> <p>The Validation and Verification Body (VVB) has reviewed and verified the evidence provided by the PP, including:</p> <p>Stakeholder engagement records: The VVB has assessed the PP's records of continuous stakeholder interactions and ongoing communication, including meeting minutes, attendance sheets, and feedback mechanisms.</p> <p><b>VVB's Conclusion:</b></p> <p>Based on the evidence gathered and verified, the VVB concludes the following:</p> <p>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.</p> <p>The operation and maintenance staff and other workers are housed within the project activity or in nearby villages, with an expected improvement in their quality of life.</p> <p>Local villagers who meet the qualification criteria are given preference for employment opportunities in the wind project.</p> <p>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.</p> <p>During the operational phase, positive impacts on the social environment are envisaged.</p> <p>The VVB's conclusion is based on 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.</p>
Location of stakeholders	<p><b>Evidence Gathering Activities:</b></p>

As per desk review with registered PD, 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 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/
- Local Stakeholder mapping and analysis reports
- 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.



	<p>Based on the definition and legal framework in India, the District Satara of State Maharashtra, 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.</p> <p>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.</p> <p>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.</p>
Location of resources	<p><b>Evidence Gathering Activities:</b></p> <p>The ownership of resources and territories associated with the project, as well as the land acquisition process, were assessed through the following:</p> <p>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's directly intersect with the project area</p> <p><b>Evidence Checked:</b> Focussed Group Discussion and Personnel interviews with PP &amp; local stakeholders/39/</p> <p><b>VVB's Conclusion:</b></p> <p>Based on the evidence gathered and verified, the VVB concludes the following:</p> <ul style="list-style-type: none"> <li>• All resources and territories associated with the project are owned by the Project Proponent.</li> <li>• The land acquired for the project was obtained through willing buyer-willing seller transactions, without any forced acquisition or displacement.</li> </ul>

	<ul style="list-style-type: none"> <li>The land acquisition process did not result in any rehabilitation or resettlement requirements, as there were no settlements or inhabitants on the acquired land.</li> </ul> <p>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.</p>
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#### 4.2.2 Stakeholder Consultation and Ongoing Communication

Item	Evidence gathering activities, evidence checked, and assessment conclusion
Ongoing consultation	<p><b>Evidence Gathering Activities:</b></p> <p>The project proponent has undertaken the following measures to effectively communicate and consult with stakeholders during the current monitoring period:</p> <p>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.</p> <p>Maintenance of Grievance Register: 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.</p> <p>Stakeholder consultation meetings: Regular stakeholder consultation meetings have been organized to provide project updates, address concerns, and receive feedback from stakeholders.</p> <p><b>Evidence Checked:</b></p> <p>The Validation and Verification Body (VVB) has reviewed and verified the evidence provided by the project proponent, including:</p>

	<ul style="list-style-type: none"> <li>• The validated communication plan and its implementation records in registered VCS PD/3/.</li> <li>• Physical inspection of the Input/Grievance Register/31/ and its accessibility with the local stakeholders.</li> <li>• Records of stakeholder consultation meetings, including attendance sheets, meeting minutes, and follow-up actions</li> </ul> <p><b>VVB's Conclusion:</b></p> <p>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.</p> <p>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.</p> <p>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.</p>
Date(s) of stakeholder consultation	<p><b>Evidence Gathering Activities:</b></p> <p>The date of stakeholder consultation was obtained through the following sources:</p> <ul style="list-style-type: none"> <li>• Review of the registered VCS Project Description (PD): The VVB cross-checked the date of stakeholder consultation mentioned in the registered VCS PD/3/.</li> <li>• Interview discussions with the project proponent (PP) and site in-charge: During the onsite visit, the VVB conducted interviews with the PP representatives and the site in-charge/39/ to verify the date of stakeholder consultation.</li> </ul> <p><b>Evidence Checked:</b></p> <p>The VVB has reviewed and verified the evidence from the following sources:</p> <ul style="list-style-type: none"> <li>• Registered Project Description (PD) document/3/</li> </ul>

	<ul style="list-style-type: none"> <li>• Interview records and notes from discussions with the PP and site in-charge during the onsite visit</li> </ul> <p><b>VVB's Conclusion:</b></p> <p>Based on the evidence gathered and verified, the VVB concludes that the date of stakeholder consultation for this project is 06-October-2012 and location was P.C Shah Memorial Hall, Hotel Pankaj Executive, Pune-Bangalore highway, Karad.</p> <p>The date was cross-checked against the information provided in the registered PD/3/, and further corroborated through interview discussions with the PP and site in-charge during the onsite visit. 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.</p>
Communication of monitored results	<p><b>Evidence Gathering Activities:</b></p> <p>Reviewed the grievance register/31/ to verify the documentation of grievances, investigations, and resolutions related to the communication of monitoring results.</p> <ul style="list-style-type: none"> <li>• Verified the maintenance of a grievance register for stakeholder feedback.</li> <li>• Confirmed the utilization of stakeholder engagement platforms for ongoing communication and ensuring transparency and accountability.</li> </ul> <p><b>Evidence Checked:</b></p> <ul style="list-style-type: none"> <li>• Grievance register/31/</li> <li>• Records of community meetings, informational materials, and interactive workshops</li> </ul> <p><b>VVB's Conclusion:</b> Based on the evidence gathered and reviewed, it is confirmed that:</p> <p>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.</p>

	<p>For ongoing communication, the project proponent (PP) maintains a grievance register for stakeholder feedback, and utilizes stakeholder engagement platforms to ensure transparency and accountability.</p> <p>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.</p>
Consultation records	<p><b>Evidence Gathering Activities:</b></p> <ul style="list-style-type: none"> <li>Reviewed the process for documenting and recording the outcomes of ongoing communication related to comments or grievances received.</li> <li>Verified the procedure for acknowledging and storing comments or grievances in the Grievance register/31/.</li> <li>Reviewed records of monthly management meetings to confirm the discussion and resolution of grievances and any required management input or approval.</li> </ul> <p><b>Evidence Checked:</b></p> <ul style="list-style-type: none"> <li>Grievance register</li> <li>Procedure for grievance acknowledgment and storage</li> <li>Minutes of monthly management meetings</li> </ul> <p><b>VB's Conclusion:</b> Based on the evidence gathered and reviewed, it is confirmed that:</p> <p>The outcomes of ongoing communication are documented and recorded as follows:</p> <ul style="list-style-type: none"> <li>"Grievance Register," located at the project site office and accessible to all stakeholders.</li> <li>Community members can visit the project site to share their complaints, feedback, or comments in this register.</li> <li>If the comments are deemed genuine, immediate action will be taken. However, no grievances have been received in the current monitoring period.</li> <li>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</li> </ul>

	<p>accordingly the redressal mechanism is planned and discussed with the site in-charge and then action is taken.</p> <ul style="list-style-type: none"> <li>• Comments or grievances received are presented to the management during the monthly meetings, along with the action taken to resolve them.</li> <li>• 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.</li> </ul> <p>The process for documenting and addressing comments or grievances received, was verified through the evidence provided.</p>
Stakeholder input	<p><b>Evidence Gathered:</b></p> <ul style="list-style-type: none"> <li>• Stakeholder consultation</li> <li>• Transparency and inclusivity measures (e.g., disclosure policies, engagement plans)</li> </ul> <p><b>Evidence Checked:</b></p> <p>No stakeholder inputs and grievances received during the current monitoring period</p> <p><b>VVB's Conclusion:</b></p> <ul style="list-style-type: none"> <li>• Procedures in place to carefully review and analyse stakeholder inputs, considering feasibility, impacts, and project alignment.</li> <li>• PP maintains transparency and inclusivity measures to ensure stakeholders are informed and engaged in decision-making, despite no inputs received.</li> <li>• Commitment to an inclusive and transparent consultation process demonstrated.</li> </ul>

### 4.2.3 Free, Prior, and Informed Consent

Item	Evidence gathering activities, evidence checked, and assessment conclusion
Consent	<p><b>Evidence Gathering Activities:</b> Reviewed the documentation process and agreements reached to assess transparency and stakeholder understanding.</p>

	<p>Checked for any ongoing or unresolved conflicts during the current monitoring period and the project's influence on such conflicts.</p> <p>Reviewed the process and documentation related to obtaining consent from concerned parties, including local communities (LCs).</p> <p>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.</p> <p><b>Evidence Checked:</b> Personal interviews and focussed group discussion with the PP representative and site in-charge/39/.</p> <p><b>VVB's Conclusion:</b></p> <p>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.</p> <p>During the current monitoring period there are no ongoing or unresolved conflicts and the project neither exacerbate nor influence the outcomes of unresolved conflicts.</p>
Outcome of FPIC discussion	<p><b>Evidence Gathering Activities:</b> Reviewed the Free, Prior, and Informed Consent (FPIC) process.</p> <p>Verified the transparency agreement between the project proponent and concerned parties, including local communities (LCs).</p> <p>Checked the disclosure of comprehensive project information, potential impacts, and mitigation measures to stakeholders during the Local Stakeholder Consultation.</p> <p>Confirmed the accessibility of information provided, including the use of local languages.</p> <p>Verified the project proponent's declaration regarding non-encroachment of land, non-relocation of people, and avoidance of forced physical or economic displacement.</p>



	<p><b>Evidence Checked:</b> Personal interviews and focussed group discussion with the PP/39/.</p> <p><b>VB's Conclusion:</b> Based on the evidence gathered and reviewed, it is confirmed that:</p> <ol style="list-style-type: none"> <li>1. The outcome of the FPIC process resulted in a transparent agreement between the project proponent and all concerned parties, including local communities (LCs).</li> <li>2. 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.</li> <li>3. 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.</li> <li>4. 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.</li> </ol> <p>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.</p>
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#### 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	<p><b>Evidence Gathering Activities:</b></p> <ul style="list-style-type: none"> <li>• Reviewed the grievance register or relevant records to verify if any grievances were received during the current monitoring period.</li> <li>• Checked the procedures for grievance resolution, including steps taken to address grievances and document the outcomes.</li> </ul>

	<p><b>Evidence Checked:</b></p> <ul style="list-style-type: none"> <li>Grievance register or relevant records/31/</li> <li>Grievance resolution procedures</li> </ul> <p><b>VB's Conclusion:</b> Based on the evidence gathered and reviewed, it is confirmed that:</p> <ul style="list-style-type: none"> <li>There were no grievances recorded or received during the current monitoring period.</li> <li>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.</li> </ul> <p>No grievances were recorded during current monitoring period. However, the existence of procedures and the maintenance of records were confirmed.</p>
Grievance redress procedure	<p>To resolve the issue/ comments; PP is maintaining a grievance register at project site for stakeholders to provide their feedback/ comments/ suggestions.</p> <p>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.</p>

#### 4.2.5 Public Comments

Comments received	Actions taken by the project proponent	Evidence gathering activities, evidence checked, and assessment conclusion
<p>No comments were received outside of the public comment period and also during the current monitoring period.</p> <p>During the Local Stakeholder Consultation</p>	<p>Since there were no comments received during the current monitoring period and outside of the public comment period, no actions were taken and</p>	<p><b>Evidence Gathering Activities:</b></p> <ul style="list-style-type: none"> <li>Reviewed grievance records to verify if any comments were received outside the public comment period and during the current monitoring period.</li> </ul>

<p>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.</p>	<p>there are no updates to project design.</p> <p>As a part of continuous feedback from stakeholders, PP is maintaining a grievance register for feedback collection, ensuring effective communication and resolution of concerns.</p> <p>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.</p>	<ul style="list-style-type: none"> <li>• Checked the grievance register for any feedback received from stakeholders.</li> <li>• Reviewed records of the Local Stakeholder Consultation during the validation phase to understand the comments and concerns raised by stakeholders.</li> </ul> <p><b>Evidence Checked:</b></p> <ul style="list-style-type: none"> <li>• Records of comments received (if any)</li> <li>• Grievance register</li> <li>• Complaint/suggestion records</li> <li>• Local Stakeholder Consultation records during validation</li> </ul> <p><b>WB's Conclusion:</b> Based on the evidence gathered and reviewed, it is confirmed that:</p> <p>No comments were received outside the public comment period and during the current monitoring period.</p> <p>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.</p> <p>Since no comments were received during the current monitoring period and outside the public comment period, no actions were taken, and</p>
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		<p>there were no updates to the project design.</p> <p>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.</p>
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#### 4.2.6 Risks to Local Stakeholders and the Environment

Item	Evidence gathering activities, evidence checked, and assessment conclusion
Risks to stakeholder participation	<p><b>Evidence Gathering Activities:</b></p> <ul style="list-style-type: none"> <li>Assessed the potential risks to stakeholder participation in the project activities.</li> <li>Verified the measures taken by the project proponent (PP) to ensure open and transparent dialogue with stakeholders.</li> <li>Confirmed the inclusion and participation of women in the consultation process.</li> <li>Reviewed the documentation of meaningful consultations with affected local communities, especially project-affected persons.</li> <li>Checked if all aspects of the project, including environmental and social impacts and mitigation measures, were discussed during the consultations.</li> <li>Verified the adherence to necessary steps and processes to ensure the local community's first-hand knowledge about the project, impacts, and mitigation measures.</li> </ul> <p><b>Evidence Checked:</b></p> <ul style="list-style-type: none"> <li>Records of stakeholder consultations and dialogues at validation</li> <li>Documentation of women's participation in consultation at validation</li> <li>Consultation records with affected local communities and project-affected persons</li> </ul>

	<ul style="list-style-type: none"> <li>• Information disclosure materials and records related to project aspects, impacts, and mitigation measures</li> <li>• Process documentation for ensuring local community knowledge and understanding</li> </ul> <p><b>Assessment Conclusion:</b> Based on the evidence gathered and reviewed, it is confirmed that:</p> <ul style="list-style-type: none"> <li>• No risks to stakeholder participation were identified in the project activities.</li> <li>• The PP ensured open and transparent dialogue with stakeholders.</li> <li>• Women's participation in the consultation process was ensured.</li> <li>• Meaningful consultations were conducted with affected local communities, including project-affected persons.</li> <li>• All aspects of the project, environmental and social impacts, and mitigation measures were discussed during these consultations.</li> <li>• 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.</li> <li>• All processes were diligently followed during the public consultations.</li> <li>• 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.</li> </ul>
Working conditions	<p><b>Evidence Gathering Activities:</b></p> <ul style="list-style-type: none"> <li>• Reviewed the working conditions, safety protocols, training programs, and provision of personal protective equipment (PPE) for employees.</li> <li>• Assessed the employment practices, including fair wages, job security, and skill development opportunities.</li> <li>• Verified compliance with internationally accepted human and labor rights standards and labor laws.</li> <li>• Evaluated the project's contribution to socio-economic development in the region.</li> </ul> <p><b>Evidence Checked:</b> During onsite visit, assessment team conducted focussed group discussion and Personnel interviews/39/ with the designated team heads to conclude the following:</p>

	<ul style="list-style-type: none"> <li>• Safety protocols and risk mitigation measures</li> <li>• Training records and materials</li> <li>• PPE records and inventories</li> <li>• Employment contracts and wage records</li> <li>• Skill development and training programs</li> <li>• Human and labour rights policies and compliance records</li> <li>• Socio-economic impact assessment reports</li> </ul> <p><b>Assessment Conclusion:</b> Based on the evidence gathered during the onsite visit and reviewed, it is confirmed that:</p> <p>The project proponent (PP) has diligently maintained exemplary working conditions, ensuring the safety, health, and well-being of all employees involved.</p> <p>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.</p> <p>The PP complies with fair employment practices and honours internationally accepted human and labour rights and labour standards.</p> <p>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.</p> <p>The working conditions on the project are exemplary, reflecting the PP's dedication to fostering a safe, prosperous, and sustainable working environment.</p> <p>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.</p>
Safety of women and girls	<p><b>Evidence Gathering Activities:</b></p> <ul style="list-style-type: none"> <li>• Reviewed the safety protocols, workplace safety regulations, and their implementation by the project proponent (PP).</li> <li>• Evaluated the training programs and initiatives to promote a culture of respect, equality, and safety for women and girls.</li> <li>• Verified the measures taken to mitigate potential risks related to the safety of women and girls in the workplace.</li> </ul>

- 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

**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 onsite visit.

The assessment team 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 onsite visit while conducting personnel interviews and focussed group discussion with PP & representatives/39/ following was cross-verified:

- 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
- Social responsibility and ethical conduct policies

**Assessment Conclusion:** Based on the evidence gathered during the onsite visit and desk-review, it is confirmed that:

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.

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

	<p>safe and supportive environment that promotes the participation and empowerment of minority and marginalized groups, including children.</p> <p>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.</p> <p>The assessment team 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.</p>
Pollutants (air, noise, discharges to water, generation of waste, release of hazardous materials)	<p><b>Evidence Gathering Activities:</b></p> <p>Reviewed the inherent characteristics and operational processes of the wind power project.</p> <p>Assessed the potential risks related to pollutants, including air emissions, noise pollution, water discharges, waste generation, and hazardous material releases.</p> <p>Evaluated the environmental footprint of the wind power project in comparison to traditional power plants.</p> <p>Verified the project's plans and procedures for end-of-life management, including decommissioning, component removal, and site restoration.</p> <p><b>Evidence Checked:</b></p> <ul style="list-style-type: none"> <li>• Technical specifications and operational data of the power project/30/</li> </ul> <p><b>Assessment Conclusion:</b> Based on the evidence gathered and reviewed, it is confirmed that:</p> <p>The non-polluting nature wind power project inherently presents minimal risks related to pollutants.</p> <p>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.</p>

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	<p><b>Evidence gathering activities:</b> Desk-review, Personnel interview &amp; focussed grouped discussion/39/.</p> <ul style="list-style-type: none"> <li>Reviewed NSL People Policy document named “Commitment to Gender sensitivity, non-discrimination, anti- harassment, employee &amp; stakeholders’ welfare and work life balance version 01 dated 15-Novemeber-2023” on non-discrimination and prohibition of harassment/34/</li> <li>Noted adherence to the Sexual Harassment of Women at Workplace Act, 2013</li> <li>Checked the policy review statements for three different months falling under current monitoring data/35/ for any reported instances during the period</li> <li>Confirmed during the onsite visit conducted by assessment team</li> </ul> <p><b>Evidence checked:</b> The Project Proponent (PP) has provided the policy/34/ &amp; policy review statements/35/which confirms that no incidents of discrimination or sexual harassment have occurred within the project.</p> <ul style="list-style-type: none"> <li>NSL People Policy statements on equal opportunity, non-discrimination, and prohibiting harassment</li> <li>Specific reference to Chapter IV, Article 19 (a) of the Sexual Harassment Act on employer's duty to provide a safe workplace</li> <li>Confirmation that no discrimination or harassment cases were identified or reported in the monitoring period</li> <li>Assessment team’s Onsite visit and interviews with personnels have confirmed the same</li> </ul>

	<p><b>Assessment Conclusion:</b> 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.</p> <p>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.</p> <p>The monitoring data showing zero instances reported, further confirmed through onsite visit and personnel interviews/39/, 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.</p>
Management experience	<p><b>Evidence gathering activities:</b> Desk-review, Personnel interview &amp; focussed grouped discussion/39/.</p> <p><b>Evidence checked:</b> The Project Proponent (PP) has provided the declaration and also cross checked with the details available on <a href="#">project webpage</a>.</p> <p>No new entity has been involved in project design or implementation, hence <b>not applicable</b>.</p> <p><b>Assessment Conclusion:</b> 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.</p>
Gender equity in labor and work	<p><b>Evidence gathering activities:</b> Desk-review, Personnel interview &amp; focussed grouped discussion/39/.</p> <ul style="list-style-type: none"> <li>Reviewed NSL People Policy document named “Commitment to Gender sensitivity, non-discrimination, anti- harassment, employee &amp; stakeholders’ welfare and work life balance version 01 dated 15-Novemeber-2023” on non-discrimination and prohibition of harassment/34/</li> <li>Noted compliance with Equal Remuneration Act, 1976</li> <li>Checked monitoring data for any reported instances of gender discrimination or pay disparity</li> </ul>

	<ul style="list-style-type: none"> <li>Confirmed details of ongoing training programs on gender inclusivity</li> </ul> <p><b>Evidence checked:</b></p> <ul style="list-style-type: none"> <li>The Project Proponent (PP) has provided the policy/34/ &amp; policy review statements/35/ on fair, transparent, competitive rewards based on laws/agreements</li> <li>Specific reference to Chapter II, Article 4(1) of Equal Remuneration Act prohibiting lower pay based on gender</li> <li>Confirmation of zero instances of gender discrimination or pay disparity reported in monitoring period</li> <li>Details of training programs promoting gender inclusivity and addressing unconscious biases</li> </ul> <p><b>Assessment Conclusion:</b> 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.</p> <p>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.</p>
Human trafficking, forced labor, and child labor	<p><b>Evidence gathering activities:</b> Desk-review, Personnel interview &amp; focussed grouped discussion/39/.</p> <p>Noted compliance with Bonded Labour System (Abolition) Act, 1976, Child Labour (Prohibition and Regulation) Act, 1986, and Factories Act, 1948</p> <p><b>Evidence checked:</b></p> <ul style="list-style-type: none"> <li>Adherence to relevant Indian laws prohibiting bonded/forced labor and child labor as mentioned above</li> <li>Processes for regular audits and inspections to verify compliance within workforce</li> <li>No instances of human trafficking, forced labor or child labor identified during the monitoring period</li> </ul> <p><b>Assessment Conclusion:</b> The project enforces comprehensive policies and procedures aligned with Indian laws to prevent and detect any instances of human trafficking, forced labor or child labor within its operations and supply</p>

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<sup>3</sup>, the UNDRIP<sup>4</sup> and ILO Convention 169.

Item	Evidence gathering activities, evidence checked, and assessment conclusion
Human rights	<p><b>Evidence gathering activities:</b> Desk-review, Personnel interview &amp; focussed grouped discussion/39/.</p> <p><b>Evidence checked:</b> Adherence to relevant laws and rights pertaining to Indigenous People (IPs), Local communities (LCs), and customary right holders.</p> <p><b>Assessment Conclusion:</b> 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.</p>

#### 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:

<sup>3</sup> <https://www.ohchr.org/sites/default/files/Documents/Publications/fs9Rev.2.pdf>

<sup>4</sup> [https://www.un.org/development/desa/indigenouspeoples/wp-content/uploads/sites/19/2018/11/UNDRIP\\_E\\_web.pdf](https://www.un.org/development/desa/indigenouspeoples/wp-content/uploads/sites/19/2018/11/UNDRIP_E_web.pdf)

Item	Evidence gathering activities, evidence checked, and assessment conclusion
Preservation and protection of cultural heritage	<p><b>Evidence Gathering Activities:</b></p> <p>Focussed Group discussion with local stakeholders that volunteered during the onsite visit/39/ &amp; potentially affected by the project were carried out, ensuring their free, prior, and informed consent.</p> <p>Engagement with stakeholders regarding knowledge holders to understand their cultural practices, traditional lands, and sacred sites.</p> <p>Assessment of the potential impacts on Indigenous Peoples' livelihoods, access to resources, traditional land use patterns and traditional knowledge systems.</p> <p><b>Evidence Checked:</b></p> <p>Verification of the accuracy and authenticity of the gathered information through cross-referencing and collaboration with independent experts and stakeholder representatives.</p> <p>Ensuring the comprehensiveness of the evidence, taking into account both tangible and intangible aspects of cultural heritage.</p> <p>Onsite visit and field assessments to corroborate the findings from desk-based research and consultations.</p>

1. **No Impact on Tangible<sup>5</sup> 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.

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<sup>5</sup> Tangible cultural heritage consists of non-physical intellectual wealth, such as folklore, customs, beliefs, traditions, knowledge, and language



#### 4.2.7.4 Property Rights

Item	Evidence gathering activities, evidence checked, and assessment conclusion
Disputes over rights to territories and resources	N/A
Respect for property rights	<p><b>Evidence gathering activities:</b> Desk-review, Personnel interview &amp; focussed grouped discussion/39/.</p> <p><b>Evidence checked:</b> It is confirmed through onsite interview with local stakeholders and site personnel/39/.</p> <p><b>Assessment Conclusion:</b> In conclusion, the project activity involves installation of 20 WTGs with a total capacity of 30 MW (AC) wind power project &amp; 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.</p>

#### 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	<p><b>Evidence gathering activities:</b> Desk-review of registered VCS PD, Personnel interview &amp; focussed grouped discussion/39/</p> <p><b>Evidence checked:</b> 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.</p> <p><b>Assessment Conclusion:</b> 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</p>
Soil degradation and soil erosion	No risk identified	<p><b>Evidence gathering activities:</b> Review of soil management plans, erosion control measures</p> <p><b>Evidence checked:</b> Approved soil management and erosion control plans.</p>

		<p><b>Assessment conclusion:</b> 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.</p>
Water consumption and stress	No risk identified	<p><b>Evidence gathering activities:</b> Review of water management plans.</p> <p><b>Evidence checked:</b> Approved water management plan.</p> <p><b>Assessment conclusion:</b> 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.</p>
Usage of fertilizers	No risk identified	<p><b>Evidence gathering activities:</b> Review of project documentation, including site maintenance records and interviews with project site personnel/39/.</p> <p><b>Evidence checked:</b> Site maintenance logs, interviews with personnel responsible for site maintenance, and site inspection reports.</p> <p><b>Assessment conclusion:</b> 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</p>

		has not employed any fertilizers, eliminating the potential for environmental contamination or ecosystem disruption.
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#### 4.2.8.1 Rare, Threatened, and Endangered species

Item	Evidence gathering activities, evidence checked, and assessment conclusion
Species or habitat	<p><b>Evidence gathering activities:</b> Not Applicable</p> <p><b>Evidence checked:</b> Not Applicable</p> <p><b>Assessment Conclusion:</b> Given that the project activity involves the installation of 20 WTGs of total 30 MW (AC) wind power project &amp; is located Mann village, in the district Satara, state of Maharashtra, Country: India, 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 30 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.</p>

#### 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.

The project activity involves installation of 20 WTGs of total 30 MW (AC) wind power project and no planting or species introduction is involved; hence this information is not applicable.

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
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N/A	N/A
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#### 4.2.8.3 Ecosystem conversion

Item	Evidence gathering activities and evidence checked
Ecosystem conversion	<p><b>Evidence gathering activities:</b> Not Applicable</p> <p><b>Evidence checked:</b> Not Applicable</p> <p><b>Assessment Conclusion:</b> 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.</p>

### 4.3 Accuracy of Reduction and Removal Calculations

The equations and choices provided in the methodology /10/ 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 16.0 /10/. 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 PD /03/ and the applied monitoring methodology /10/.

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

- 1) **EG<sub>facility, y</sub>** (Quantity of Net Electricity exported to the grid by the project WTGs to the grid during the year y.);
- 2) **EG<sub>JMR,NSL,export,y</sub>** (Quantity of Electricity exported by the Project WTGs connected to the feeder i to the grid during the year y.)
- 3) **EG<sub>JMR,NSL,import,y</sub>** (Quantity electricity imported by the Project WTGs connected to the feeder i from the grid during the year y)
- 4) **EG<sub>Controller,gen</sub>** (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 parameter **EG<sub>facility, y</sub>** value is sourced from Joint Meter Reading (JMRs)/26/, Proper calibrated meters of 0.2s accuracy class installed at each feeder and regularly monitor the Net electricity generated by WTGs, the parameter **EG<sub>JMR,NSL,export,y</sub>** value is sourced from Joint Meter Reading (JMRs)/26/and Invoices/27/, Proper calibrated meters of 0.2s accuracy class installed at

substation regularly monitor the export value which is aggregated on a monthly basis in JMRs & invoices, the parameter **EG<sub>JMR,NSL,import,y</sub>** value is sourced from Joint Meter Reading (JMRs)/26/and Invoices/27/, Proper calibrated meters of 0.2s accuracy class installed at substation regularly monitor the import value which is aggregated on a monthly basis in JMRs & invoices, the parameter **EG<sub>Controller,gen</sub>** value is sourced from LCS meter (Controller meter) available at the each WTGs generation points mentioned in ER sheet/2/ prepared by PP has been reviewed by assessment team thoroughly by cross checking the values of JMRs/26/ submitted by PP and found correct including all the formulae and conversions and aggregations.

The monitoring plan specified in the registered VCS Project Design (PD) version 03, dated 08-February-2016/3/, 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/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 4.5](#).

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

**Table No: 10 Data and Parameters Available at Validation or Ex-ante parameters:**

Parameter	Unit	Description	Value
<b>EF<sub>grid,CM,y</sub></b>	tCO <sub>2</sub> /MWh	Combined Margin CO <sub>2</sub> Emission Factor in year y	<b>0.9767 tCO<sub>2</sub>/MWh</b> is consistent with the registered VCS PD Version 03 dated 08-February-2016/3/
<b>EF<sub>grid,OMsimple,y</sub></b>	tCO <sub>2</sub> /MWh	Simple operating margin emission factor of Indian Grid	<b>0.9857 tCO<sub>2</sub>/MWh</b> is consistent with the registered VCS PD Version 03 dated 08-February-2016/3/ Calculated from <u>CEA database, Version 10, December-2014/21/</u>
<b>EF<sub>grid,BM,y</sub></b>	tCO <sub>2</sub> /MWh	Combined Margin CO <sub>2</sub> Emission Factor in year y	<b>0.9495 tCO<sub>2</sub>/MWh</b> is consistent with the registered VCS PD Version 03 dated 08-February-

			2016/3/ Calculated from CEA database, Version 10, December-2014/21/
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According to applied methodology ACM0002; Version 16.0 /10/ the emissions are calculated as below:

**According to applicable methodology ACM0002; Version 16.0<sup>6</sup>**

**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:  $LE_y = 0 \text{ tCO}_2$

Project Emissions:  $PE_y = 0 \text{ tCO}_2$

**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 16.0 /10/. 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)

<b><math>EG_{PJ,y} = EG_{facility,y}</math></b>		
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 CDM 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,

<sup>6</sup> [OX6IERWMG92J7V3B80TKFSL1QZH5PA \(unfccc.int\)](https://unfccc.int/ox6ierwm92j7v3b80tkfsl1qzh5pa)



<b><math>BE_y = EG_{pj,y} \times EF_{grid,CM,y}</math></b>	
$BE_y$	= Baseline Emissions (tCO <sub>2</sub> /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 CDM project activity in year y (MWh/yr)
$EF_{grid,CM,y}$	= Combined margin CO <sub>2</sub> 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 CO <sub>2</sub> /MWh)

As per calculation mentioned in section 3.4 of registered VCS PD Version 03 dated 08-February-2016/3/

<b>Estimated Emission Reduction as in VCS PD for the equivalent period of the current Monitoring period, 01-January-2023 to 05-March-2024 (Inclusive of both the days):</b>	
Monitoring Period Start Date	01-January-2023
Monitoring Period End Date	05-March-2024
Days in Current Monitoring period	430
Annual VCUs as per VCS PD	51,335 (tCO <sub>2</sub> e)
Estimated Emission Reduction as in VCS PD for the equivalent period of the current Monitoring period	= (Annual Estimated GHG emission reductions as per revised VCS PD/Total days in a year) * days in current monitoring period  = (51,335/365) * 430 = 60,477 (tCO <sub>2</sub> e)
Achieved Emission Reductions for current monitoring period	67,468 (tCO <sub>2</sub> e)

PP has submitted all the evidences like JMRs/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 16.0” /10/. 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.

## 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<sub>facility,y</sub>** (Quantity of Net Electricity exported to the grid by the project WTGs to the grid during the year y.);
- 2) **EG<sub>JMR,NSL,export,y</sub>** (Quantity of Electricity exported by the Project WTGs connected to the feeder i to the grid during the year y.)
- 3) **EG<sub>JMR,NSL,import,y</sub>** (Quantity electricity imported by the Project WTGs connected to the feeder i from the grid during the year y)
- 4) **EG<sub>Controller,gen</sub>** (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<sub>facility,y</sub>** (Quantity of Net Electricity exported to the grid by the project 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: 11 Assessment of Parameter EG<sub>facility,y</sub> (Quantity of Net Electricity exported to the grid by the project WTGs to the grid during the year y)**

Parameter	EG <sub>facility,y</sub> (Quantity of Net Electricity exported to the grid by the project 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. This value is achieved by subtracting EG <sub>JMR, NSL, import, y</sub> from EG <sub>JMR, NSL, export, y</sub> . and
	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 PD/3/ and monitoring methodology/10/. 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/39/ with site personnel.
	Monitoring equipment	No monitoring equipment is used as this parameter is calculated. However, the parameter $EG_{JMR, NSL, export, y}$ and $EG_{JMR, NSL, import, y}$ are continuously monitored, 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 in measuring values of $EG_{JMR, NSL, export, y}$ and $EG_{JMR, NSL, import, y}$ is 0.2s, which is as per the registered PD/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 the entire current monitoring period i.e., <b>01-January-2023 to 05-March-2024</b> (Inclusive of both the days)
	Calibration frequency /interval:	The calibration frequency is as per registered PD i.e., Once in three years.
	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 /10/. Outlined in the registered VCS PD dated 08-February-2016/3/ The calibration frequency is once in three years as per PPA/23/

	Is the calibration of measuring equipment carried out by an accredited person or institution?	<p>Yes, Calibration certificates /24/ of the measuring equipment's is <b>carried out by State DISCOM i.e., Maharashtra State Electricity Distribution Company Limited.</b></p> <p>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/39/ the site personnel at project site.</p>
	Is(are) calibration(s) valid for the whole reporting period?	<p><b>Yes, the calibration is valid throughout the reporting period. i.e., 01-January-2023 to 05-March-2024</b> (Inclusive of both the days). The calibration details are mentioned in Table 15 of this report.</p>
	Is the calibration carried out for a measuring range comparable with the range for which measurements have been carried out?	<p>Yes. The calibration is carried out appropriately for current monitoring as per the registered monitoring plan and VCS VVS manual version 3.2/8/&amp; as per PPA/23/</p> <p>The calibration is carried out for a measuring range i.e., CTR: 500/1A, PTR: 33kV/110V &amp; MF: 1500 with accuracy class 0.2s.</p>
	How were the values in the monitoring report verified?	<p>Cumulative value of <b>EG</b> <sup>facility,y</sup> for entire monitoring period <b>01-January-2023 to 05-March-2024</b> (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.</p> <p>Value of this parameter for the current monitoring period was verified as <b>69,078 MWh.</b></p>

	If applicable, has the reported data been cross-checked with other available data?	The monthly reported values of <b>EG<sub>facility,y</sub></b> 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/23/
	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/39/ 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.  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
<b>Findings</b>	CL#01 is raised and resolved	
<b>Conclusion</b>	<p>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.</p> <p>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.</p>	

The below table describe how the parameter **EG<sub>JMR,NSL,Import,y</sub>** (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: 12 Assessment of Parameter EG<sub>JMR,NSL,Import,y</sub> (Quantity electricity imported by the Project WTGs connected to the feeder i from the grid during the year y)**

<b>Parameter</b>	<b>EG<sub>JMR,NSL,Import,y</sub> (Quantity electricity imported by the Project WTGs connected to the feeder i from the grid during the year y)</b>
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Means of verification	Criteria/Requirements	Assessment/Observation
	Measuring /Reading /Recording frequency	<p>The parameter is calculated from measured parameter as Monthly Import value of Wind Farm (Credit Notes Reading) and Summation of Controller Reading of project WTGs and non-project WTGs. The parameter is reported monthly in the credit note, which is prepared for each project developer separately.</p> <p>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.</p>
	Is measuring and reporting frequency in accordance with the monitoring plan and monitoring methodology? (Yes / No)	<p>Yes. The reporting frequency is in line with the monitoring plan as outlined in the registered PD/3/ and monitoring methodology/10/. 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/39/ with site personnel.</p>
	Monitoring equipment	<p>Monitoring equipment is not utilized since this particular parameter is derived through calculation. Nonetheless, the input values essential for determining this parameter are continually monitored; they are gauged on an hourly basis and documented on a monthly basis.</p> <p>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.</p> <p>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</p>

		<p>each feeder is meticulously recorded. This documentation occurs during Joint Meter Reading (JMR) sessions, which involve representatives from MSEDCL and officials from the inhouse Operations and Maintenance (O&amp;M) ensuring transparency.</p> <p>Using the data amassed from the JMRs /26/ 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.</p>
	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 EGJMR, NSL, import, y is 0.2s, which is as per the registered PD/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., <b>01-January-2023 to 05-March-2024</b> (Inclusive of both the days)
	Calibration frequency /interval:	The calibration frequency is once in three years as per PPA/23/ and VCS PD dated 08-February-2016/3/.

	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?	The calibration interval in line with the monitoring plan and there is no delay in Calibration of meters during the current monitoring period.
	Is the calibration of measuring equipment carried out by an accredited person or institution?	<p>Yes, Calibration certificates /24/ of the measuring equipment's is <b>carried out by State DISCOM i.e., Maharashtra State Electricity Distribution Company Limited.</b></p> <p>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/37/ the site personnel at project site/PP/Consultant.</p>
	Is(are) calibration(s) valid for the whole reporting period?	<b>Yes, the calibration is valid throughout the reporting period. i.e., 01-January-2023 to 05-March-2024</b> (Inclusive of both the days). Please refer table no 15 below for calibration dates.
	Is the calibration carried out for a measuring range comparable with the range for which measurements have been carried out?	<p>Yes. The calibration is carried out appropriately for current monitoring as per the registered monitoring plan and VCS VVS manual version 3.2/8/&amp; as per PPA/23/</p> <p>The calibration is carried out for a measuring range i.e., CTR: 500/1A, PTR: 33kV/110V &amp; MF: 1500 with accuracy class 0.2s.</p>



	How were the values in the monitoring report verified?	<p>Cumulative value of <b>EG<sub>JMR,NSL,Import,y</sub></b> for entire monitoring period <b>01-January-2023 to 05-March-2024</b> (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.</p> <p>Value of this parameter for the current monitoring period was verified as <b>34.09 MWh</b>.</p>
	If applicable, has the reported data been cross-checked with other available data?	The monthly reported values of <b>EG<sub>JMR,NSL,Import,y</sub></b> 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/23/ 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?	<p>On site personnel interview/39/ 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.</p> <p>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/27/ or receipts of payments.</p>
<b>Findings</b>	CL#01 is raised and resolved	
<b>Conclusion</b>	<p>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.</p> <p>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.</p>	

The below table describe how the parameter **EG<sub>JMR,NSL,Export,y</sub>** (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: 13 Assessment of Parameter EG<sub>JMR,NSL,Export,y</sub> (Quantity electricity exported by the Project WTGs connected to the feeder i from the grid during the year y)**

Parameter	EG <sub>JMR,NSL,Export,y</sub> (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 using the Monthly Export value of the Wind Farm (from JMR Reading) and the sum of controller readings of project and non-project WTGs. It's reported monthly in credit notes for each project developer. Electricity imported by each WTG is recorded via energy meters on individual feeders to cross-check exported and net supplied electricity 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 PD/3/ and monitoring methodology/10/. 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/39/ with site personnel.
	Monitoring equipment	Monitoring equipment isn't used. Input values are continuously monitored, hourly measured, and monthly recorded. Project WTGs share feeders with non-project WTGs. All generated electricity is fed to the grid, with monthly readings taken. MSEDCL calculates project electricity supplied using JMR and WTG data, preparing credit notes for developers.
	Is accuracy of the monitoring equipment as stated in the monitoring plan? If the	The accuracy of the monitoring equipment used to measure the input values used to calculate (EG <sub>JMR, NSL, Export, y</sub> ) is 0.2s, which is as per 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?	registered PD/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., <b>01-January-2023 to 05-March-2024</b> (Inclusive of both the days)
	Calibration frequency /interval:	The calibration frequency is once in three years as per PPA/23/ and VCS PD dated 08-February-2016/3/.
	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?	<p>The calibration interval in line with the monitoring plan &amp; there is no delay in Calibration of meters during the current monitoring period</p> <p>The PP accounts for the delay in meter calibration through deviation taken in the previous monitoring period but there is no delay in current MP hence no error factor is applied, &amp; thus calibration is in line with VCS PD and Clause 18 of the Central Electricity Authority (Installation and Operation of Meters) 2018 /22/, showcasing compliance with mandatory regulatory and statutory requirements at the state and national level.</p>
	Is the calibration of measuring equipment carried out by an accredited person or institution?	<p>Yes, Calibration certificates /24/ of the measuring equipment's is <b>carried out by State DISCOM i.e., Maharashtra State Electricity Distribution Company Limited.</b></p> <p>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</p>

		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/39/ the site personnel at project site/PP/Consultant.
	Is(are) calibration(s) valid for the whole reporting period?	Yes, the calibration is valid throughout the reporting period. i.e., <b>01-January-2023 to 05-March-2024</b> (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 3.2/8/& as per PPA/23/  The calibration is carried out for a measuring range i.e., CTR: 500/1A, PTR: 33kV/110V & MF: 1500 with accuracy class 0.2s.
	How were the values in the monitoring report verified?	Cumulative value of <b>EG JMR,NSL,Export,y</b> for entire monitoring period <b>01-January-2023 to 05-March-2024</b> (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 <b>69,112.42 MWh</b> .
	If applicable, has the reported data been cross-checked with other available data?	The monthly reported values of <b>EG JMR,NSL,Export,y</b> 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/23/ and thus found to be consistent
	Does the data management ensure correct transfer of data and reporting of emission reductions and are	On site personnel interview/37/ with the project stakeholder of the project activity confirms that the necessary QA/QC procedures are in place

	necessary QA/QC processes 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.
<b>Findings</b>	CL#01 is raised and resolved	
<b>Conclusion</b>	<p>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.</p> <p>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.</p>	

The below table describe how the parameter **EG<sub>Controller, gen</sub>** (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: 14 Assessment of Parameter EG<sub>Controller, gen</sub> (Quantity electricity generated by the project activity WTGs recorded at respective controller meters)**

<b>Parameter</b>	EG <sub>Controller, gen</sub> (Quantity electricity generated by the project activity WTGs recorded at respective controller meters)	
<b>Means of verification</b>	<b>Criteria/Requirements</b>	<b>Assessment/Observation</b>
	Measuring /Reading /Recording frequency	<p>The parameter will be monitored continuously and recorded at least monthly by LCS meter (Controller meter).</p> <p>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.</p>

	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 PD/3/ and monitoring methodology/10/. 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/39/ 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?	<b>Not Applicable for this parameter.</b>
	Is the accuracy valid for the entire measuring range or do different accuracy levels apply to different measuring ranges?	<b>Not Applicable for this parameter.</b>
	Calibration frequency /interval:	<b>Not Applicable for this parameter.</b>
	Is the calibration interval in line with the monitoring plan and/or methodology? If the monitoring plan does not	<b>Not Applicable for this parameter.</b>

	specify the frequency of calibration, is the selected 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?	It is not possible to calibrate controller because it is integral part of WTG cannot be removed during operation. Same has been confirmed through personal interviews of site personnel during on site assessment/39/.
	Is(are) calibration(s) valid for the whole reporting period?	<b>Not Applicable for this parameter.</b>
	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 "Inhouse" O&M 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 <b>EG</b> controller, gen for entire monitoring period <b>01-January-2023 to 05-March-2024</b> (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 "Inhouse" O&M/25/ thus found to be consistent.  Value of this parameter for the current monitoring period was verified as <b>74,983.03 MWh</b> .

	If applicable, has the reported data been cross-checked with other available data?	The monthly reported values of <b>EG Controller, gen</b> in logged electronically on a monthly basis by the “Inhouse” O&M on its online portal. The value of this parameter shall be compared with the value of $EG_{PJ,y}$ .
	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 on its online portal. The value of this parameter is compared with the value of $EG_{PJ,y}$ , 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/39/ 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.
<b>Findings</b>	CL#01 is raised and resolved	
<b>Conclusion</b>	<p>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.</p> <p>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.</p>	

#### Calibration of meters/24/:

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 PD/3/, the meters are supposed to undergo testing/calibration **once in 3 years. All meters are tested only at the Metering Point.** The meter calibration is not under the purview of PP.

MSEDCL is the sole authority to conduct the meter calibration and in absence of annual practice of calibration, PP has considered CEA order dated 17-March-2006; which prescribes under the



para 18(b) that "all the meters shall be tested once in five years." Thus, validity of the calibration is considered for **once in three years** in registered PD. Details of meters are provided in below table:

**Table No: 15 Calibration details of Feeder meters:** The calibration details of meters installed by MSSEDCL for measurement of **EG<sub>facility,y</sub>**, **EG<sub>JMR,NSL,exporty</sub>**, **EG<sub>JMR,NSL,import,y</sub>** are as below.

WTG Ref No	Feeder No	Energy Meter - S.No	Previous Calibration	Due Date	Current Calibration Date	Due Date
NSL-1 NSL-2 NSL-3 NSL-6 NSL-7 NSL-10 NSL-11 NSL-12 NSL-13 NSL-14 NSL-15	F-02 (33KV Hiwarwadi Substation)	<u>Main Meter:</u> <u>Make: Elster.</u> <u>S. No: 13277651</u> <u>Class: 0.2s</u>	20-August-2020	19-August-2023	25-July-2023	24-July-2026
		<u>Check Meter:</u> <u>Make: Elster.</u> <u>S. No: 13277650</u> <u>Class: 0.2s</u>				
NSL-20 NSL-22 NSL-17 NSL-23 NSL-26 NSL-34 NSL-36 NSL-37	F-01 (33KV Hirawadi Substation)	<u>Main Meter:</u> <u>Make: Elster.</u> <u>S. No: 13277649</u> <u>Class: 0.2s</u>	20-August-2020	19-August-2023	25-July-2023	24-July-2026
		<u>Check Meter:</u> <u>Make: Elster.</u> <u>S. No: 02814525</u> <u>Class: 0.2s</u>				
NSL-28	F-05 (33KV Hirawadi Substation)	<u>Main Meter:</u> <u>Make: Elster.</u> <u>S. No: 13277639</u> <u>Class: 0.2s</u>	20-August-2020	19-August-2023	25-July-2023	24-July-2026

		<u>Check Meter:</u> <u>Make: Elster.</u> <u>S. No: 13277640</u> <u>Class: 0.2s</u>				
--	--	---	--	--	--	--

There are twenty WTGs and three feeders involved for the electricity import and export. This is verified by assessment team from the calibration certificates/24/ submitted by the PP. As per VCS PD/3/, 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 05-March-2024**, 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 Agreement with the electricity distribution utility, there are two meters: a main meter and a backup meter. Both function as two-way export-import meters, calculating both exported and imported electricity to the grid.

If the meters operate outside allowable limits, they will either be replaced or calibrated. When the main meter malfunctions, the consumption recorded by the backup 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.

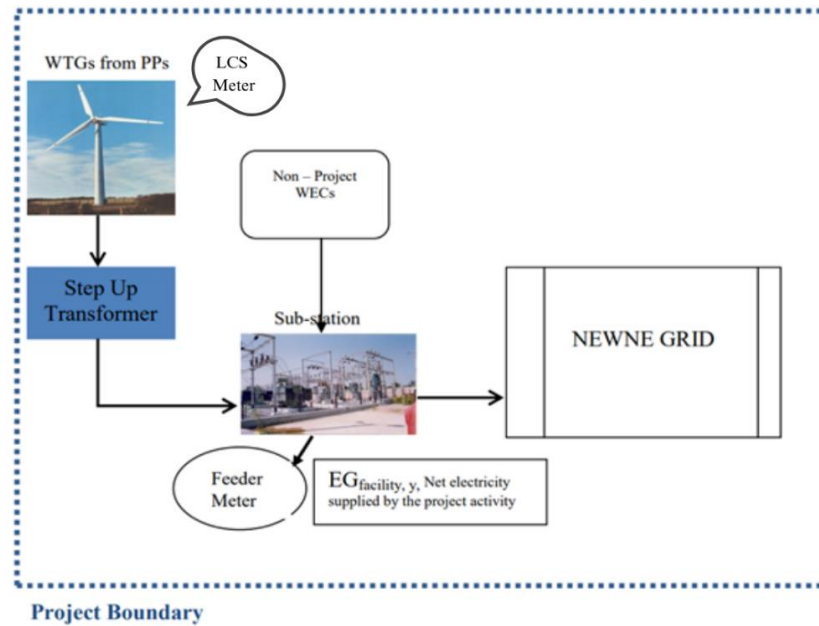


Figure No 03: Project Single Line Diagram

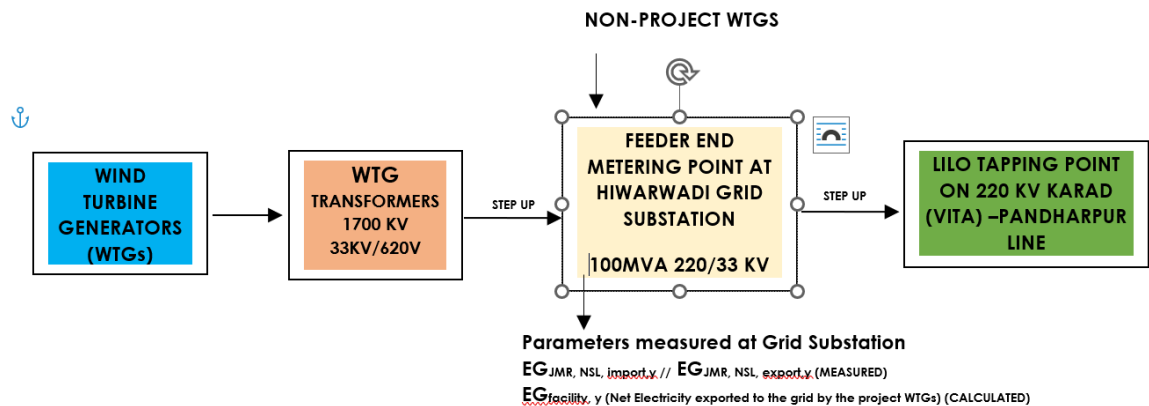


Figure No 04: Project Single Line Diagram

#### 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 as per registered PD.

#### 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.

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

$EG_{JMR, NSL, import}$  = 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-

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

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

$$EG_{JMR, NSL, export} = \text{Export Multiplication factor} \times \sum EG_{Controller, gen} \dots\dots\dots (2)$$

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-

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

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

$$EG_{JMR, NSL, import} = \text{Import Multiplication factor} \times \sum EG_{Controller, gen} \dots\dots\dots (4)$$

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

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

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

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

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 a contract with ReGen, starting from the commissioning date of each WTG. O&M team oversees daily monitoring of WTG 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 (PD) version 03 dated 08-February-2016/3/ & MR /1/ and site audit observations confirm that the metering equipment (At Grid Substation) are sealed and maintained by the Maharashtra State Electricity Distribution Company Limited (MSEDCL) and PP has not any control over it.

Each WTG have 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.

During onsite visit /38/ 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 /39/ and PPA /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 3.2/8/.

The assessment team has verified the JMRs /26/ issued by DISCOM to PP & Invoices/27/issued to DISCOM identified in the PPA /23/ by NSL Wind Power Company (Satara) Pvt. Ltd. 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 (tCO <sub>2</sub> e/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 CO <sub>2</sub> 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 CO <sub>2</sub> /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<sub>2</sub> Emission Factor in year y (tCO<sub>2</sub>e/MWh)

$EF_{GridCM,y}$  = Combined margin CO<sub>2</sub> Emission Factor of Indian Grid (tCO<sub>2</sub>e/MWh)

Parameter	Unit	Value
<b>For Vintage 2023 (01-January-2023 to 31-December-2023)</b>		
$EG_{PJ,y}$	MWh	63,681.91
$EF_{Co2}$	tCO <sub>2</sub> e	0.9767
$BE_y$	=	63,681.91 * 0.9767
	=	62,198 (Round down value)
PE <sub>y</sub> (tCO <sub>2</sub> e)	(tCO <sub>2</sub> e)	0
LE <sub>y</sub> (tCO <sub>2</sub> e)	(tCO <sub>2</sub> e)	0
Net GHG emission reductions or removals tCO <sub>2</sub> e	(tCO <sub>2</sub> e)	<b>62,198 (tCO<sub>2</sub>e)</b>
<b>For Vintage 2024 (01-January-2024 to 05-March-2024)</b>		
$EG_{PJ,y}$	MWh	5,396.42
$EF_{Co2}$	tCO <sub>2</sub> e	0.9767
$BE_y$	=	5,396.42 * 0.9767
	=	5,270 (Round down value)
PE <sub>y</sub> (tCO <sub>2</sub> e)	(tCO <sub>2</sub> e)	0
LE <sub>y</sub> (tCO <sub>2</sub> e)	(tCO <sub>2</sub> e)	0
Net GHG emission reductions or removals tCO <sub>2</sub> e	(tCO <sub>2</sub> e)	<b>5,270 (tCO<sub>2</sub>e)</b>
Net GHG emission reductions or removals		<b>62,198 + 5,270 = 67,468 (tCO<sub>2</sub>e)</b>

#### Emission Reduction Achievement:

Year	Baseline emissions or removals (tCO <sub>2</sub> e)	Project emissions or removals (tCO <sub>2</sub> e)	Leakage emissions (tCO <sub>2</sub> e)	Net GHG emission reductions or removals (tCO <sub>2</sub> e)

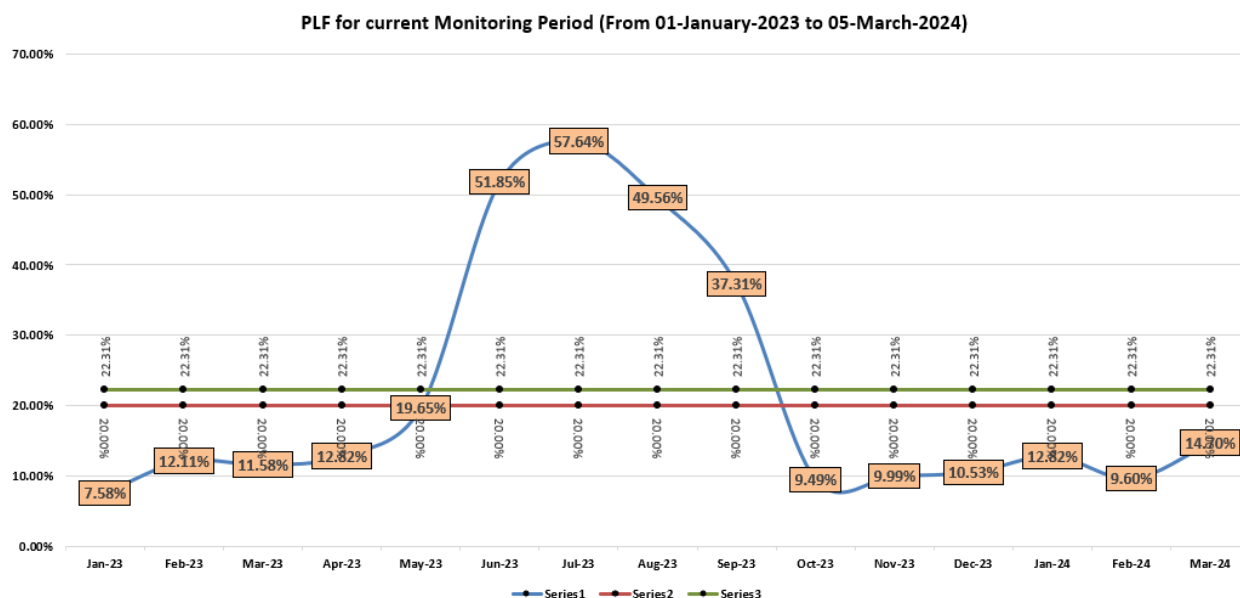
Vintage 2023 (01-January-2023 to 31-December-2023)	62,198	0	0	62,198
Vintage 2024 (01-January-2024 to 05-March-2024)	5,270	0	0	5,270
Total	67,468	0	0	67,468

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 +11.56% higher than the estimated ERs in the registered PD/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/33/ and also compared the data with previous monitoring periods for months of June to September. Hence AT could confirm PLF of 22.31% is justified. **Table No: 16 Variation of PLF from ex-ante estimation for current monitoring period 01-January-2023 to 05-March-2024 (Inclusive of both start and end dates)**

Monitoring Period	PLF achieved %	PLF ex ante	PLF achieved at Project level
Jan-23	7.58%	20.00%	22.31%
Feb-23	12.11%	20.00%	22.31%
March-23	11.58%	20.00%	22.31%
April-23	12.82%	20.00%	22.31%
May-23	19.65%	20.00%	22.31%
Jun-23	51.85%	20.00%	22.31%
Jul-23	57.64%	20.00%	22.31%
Aug-23	49.56%	20.00%	22.31%



Sep-23	37.31%	20.00%	22.31%
Oct-23	9.49%	20.00%	22.31%
Nov-23	9.99%	20.00%	22.31%
Dec-23	10.53%	20.00%	22.31%
Jan-24	12.82%	20.00%	22.31%
Feb-24	9.60%	20.00%	22.31%
March-24	14.70%	20.00%	22.31%
<b>Total</b>	<b>22.31%</b>	<b>20.00%</b>	<b>22.31%</b>



**Figure 05: Trends of PLF from 01-January-2023 to 05-March-2024**

Estimated PLF as per registered PD-MR	20%
Total generation	69,078 MWh
Total no. of days	430
Capacity	30 MW
Actual PLF (Achieved) (for current monitoring period)	22.31 %
Breaching value of PLF as per VCS PD	23.60%

Based upon the Figure 05, it is clear that the monthly trend of PLF, till September-2023 is higher than the estimated and after September-2023 the trend of PLF is lower than the estimated. This is reflected in higher emission reductions for the current monitoring period at +11.56%. It is to

note that PLF for current monitoring period is 22.31% whereas the Breaching value of PLF as per PD/3/ is 23.60% 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 as verified and traced through evidences and calculative computation by VKU assessment team during desk review, onsite visit and interview with site personnel confirmed the reasons of higher emissions reduction as compared with registered VCS PD Version 03 dated 08-February-2016/3/ & hence acceptable to VKU.

Hence the +11.56% actual 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 had been available to the assessment team by PP during on site visit/36/ and supporting evidences have been monitored. 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 accordance with ISO 14064-3; 2019.

## 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 05-March-2024** (Inclusive of both start and end dates) of the fixed crediting period of 10 years from (06-March-2014 to 05-March-2024 which is inclusive of both dates) for the project activity **“Satara Wind Power Project in Maharashtra, India”** in India, VCS Registry Project ID 1519, with regard to the relevant requirements for VCS activities. The project activity amounts to **67,468 tCO<sub>2</sub>e**. These reported reductions have been assessed in accordance with the relevant requirements outlined in the VCS Standard, version 4.6/7/.

The project proponents of **“Satara Wind Power Project in Maharashtra, India”** 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 PD version 3.0 dated 08-February-2016 /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 4.6/7/ 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 PD version 3.0 dated 08-February-2016 /3/
- The monitoring report and other supporting documents provided are complete and verifiable and in accordance with the applicable VCS standard version 4.6/7/ requirements;
- The monitoring is in place as per the applied baseline and monitoring methodology;
- The monitoring plan in the registered VCS PD /3/ is as per the applied baseline and monitoring methodology.

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 17-June-2024 and ER Sheet version 1.1 dated 17-June-2024 for the “**Satara Wind Power Project in Maharashtra, India**” in India for the period **01-January-2023 to 05-March-2024** (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 [05-March-2024]

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

Vintage period	Baseline emissions (tCO <sub>2</sub> e)	Project emissions (tCO <sub>2</sub> e)	Leakage emissions (tCO <sub>2</sub> e)	Reduction VCUs (tCO <sub>2</sub> e)	Removal VCUs (tCO <sub>2</sub> e)	Total VCUs (tCO <sub>2</sub> e)
Vintage 2023 (01-January-2023 to 31-December-2023)	62,198	0	0	62,198	0	62,198
Vintage 2024 (01-January-2024 to 05-March-2024)	5,270	0	0	5,270	0	5,270
Total	67,468	0	0	67,468	0	67,468

## 5.3 Ex-ante vs Ex-post ERR Comparison

Vintage period	Ex-ante estimated reductions/removals	Achieved reductions/removals	Percent difference	Explanation for the difference
Vintage 2023	51,335	62,198	+21.16% Higher than	The actual ER achieved is higher than the PD estimated ER for the Year

(01-January-2023 to 31-December-2023)			the estimated value	2023. This is mainly due to high PLF during the current monitoring period.
<b>Vintage 2024</b> (01-January-2024 to 05-March-2024)	9,142	5,270	-42.35% lower than the estimated value	The actual ER achieved is Lower than the PD estimated ER for the Year 2024. This is mainly due to low PLF during the current monitoring period.
<b>Total</b>	60,477	67,468	+11.56% Higher than the estimated value	The actual ER achieved is higher than the PD estimated ER for the comparable period. This is mainly due to high PLF during the current monitoring period. (PLF calculation and comparison is reported in ER Sheet)

# APPENDIX 1: COMMERCIALLY SENSITIVE INFORMATION

<i>Section</i>	<i>Information</i>	<i>Justification</i>	<i>Assessment method and conclusion</i>
NA	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 <sub>4</sub>	Methane
CL	Clarification Request
CO <sub>2</sub>	Carbon dioxide
CO <sub>2</sub> e	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)

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



# APPENDIX 3: AUDIT FINDINGS

CL: Clarification Request\_02

CAR: Corrective Action Request\_04

FAR: Forward Action Request\_00

Description of Clarification Requests (CLs) raised by VVB:

Finding No. <u>01</u>		Date: 22-April-2024
Finding Type- CAR <input type="checkbox"/> CL <input checked="" type="checkbox"/> FAR <input type="checkbox"/>		
<b>Stage of finding raised:</b>  Desk Review <input checked="" type="checkbox"/> On-site/remote/hybrid assessment <input type="checkbox"/> Technical Review <input type="checkbox"/> Project Review Report by Registry <input type="checkbox"/>		
<b>Requirement</b>		
Clause 3.5.4, 3.26.3 of the VCS Standard version 4.6		
<b>Non-Conformity</b>		
Sufficient Data and supporting evidence regarding the implementation of monitoring plan, SDG 8.5  ER Calculation is not provided to VVB.		
<b>Evidence</b>		
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		
<b>1st Response from PP</b>		Date: 27-May-2024
1. The evidences have been submitted to the VVB 2. The supporting documents have been submitted to the VVB 3. PP has now provided the evidences to the project contribution claimed in section 1.11 of MR.		
<b>Documents provided by PP for review</b>		

Power Purchase Agreement, Training records, JMRs, Invoices, Generation Records, commissioning certificates, calibration certificates are submitted.	
<b>1<sup>st</sup> Review by Assessment Team</b>	Date: 28-May-2024
<ol style="list-style-type: none"> <li>1. PP has submitted the Power Purchase Agreement, Training records, JMRs, Invoices, Generation Records, commissioning certificates, calibration certificates, as verified by the assessment team.</li> <li>2. PP has submitted the ER Calculation Sheet, JMRs, Invoices, Generation Records, as verified by the assessment team.</li> <li>3. PP has provided the evidence for the 2 SDG out of 3. However, 1 SDG is not claimed by PP, as verified by the assessment team.</li> </ol>	
<b>Hence Finding No.#01 is closed</b>	

<b>Finding No. __02__</b>	Date: 22-April-2024
<b>Finding Type-</b> CAR <input type="checkbox"/> CL <input checked="" type="checkbox"/> FAR <input type="checkbox"/>	
<b>Stage of finding raised:</b>	
Desk Review	<input checked="" type="checkbox"/>
On-site/remote/hybrid assessment	<input type="checkbox"/>
Technical Review	<input type="checkbox"/>
Project Review Report by Registry	<input type="checkbox"/>
<b>Requirement</b>	
Clause 3.23.2, 3.24.4, 3.26.3 of the VCS Standard version 4.6	
<b>Non-Conformity</b>	
<ol style="list-style-type: none"> <li>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.</li> <li>2 PP has not provided any evidence for “no double counting” and “non-inclusion of scope 3 emissions” in current monitoring period.</li> <li>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.</li> </ol>	
<b>Evidence</b>	
<ol style="list-style-type: none"> <li>1 In Section 1.9 of Monitoring Report version 01 dated 05-February-2024, PP has claimed that it has submitted the declaration for not participation under other GHG Programme.</li> <li>2 In Section 1.10 of Monitoring Report version 01 dated 05-February-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.</li> </ol>	

3 In Section 4.3 of Monitoring Report version 01 dated 05-February-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.	
<b>1<sup>st</sup> Response from PP</b>	Date: 27-May-2024
1. The declaration has now been provided to the VVB 2. No scope chain emissions are associated with the project activity. 3. Records for training has been submitted	
<b>Documents provided by PP for review</b>	
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	
<b>1<sup>st</sup> Review by Assessment Team</b>	Date: 28-May-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.	
<b>Hence Finding No.#02 is closed</b>	

#### Description of Corrective Action Requests (CARs) raised by VVB:

<b>Finding No. __03__</b>	Date: 22-April-2024
<b>Finding Type-</b> CAR <input checked="" type="checkbox"/> CL <input type="checkbox"/> FAR <input type="checkbox"/>	
<b>Stage of finding raised:</b>	
Desk Review	<input checked="" type="checkbox"/>
On-site/remote/hybrid assessment	<input type="checkbox"/>
Technical Review	<input type="checkbox"/>
Project Review Report by Registry	<input type="checkbox"/>
<b>Requirement</b>	
VCS Monitoring Report Template version 4.3	

<b>Non-Conformity</b>	
1 MR does not adhere to all instructional text with respect to the VCS Monitoring Report template.	
<b>Evidence</b>	
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.	
<b>1st Response from PP</b>	Date: 27-May-2024
1. The template version has been revised to include all corrections for editorial changes.	
<b>Documents provided by PP for review</b>	
PP will list out here the documents submitted to support the response	
<b>1st Review by Assessment Team</b>	Date: 28-May-2024
1. PP has updated the MR as per the guidelines of MR template version 4.3, as verified by the assessment team.	
<b>Hence Finding No.#03 is closed</b>	

<b>Finding No. __04__</b>	Date: 22-April-2024
<b>Finding Type-</b> CAR <input checked="" type="checkbox"/> CL <input type="checkbox"/> FAR <input type="checkbox"/>	
<b>Stage of finding raised:</b>	
Desk Review	<input checked="" type="checkbox"/>
On-site/remote/hybrid assessment	<input type="checkbox"/>
Technical Review	<input type="checkbox"/>
Project Review Report by Registry	<input type="checkbox"/>
<b>Requirement</b>	
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	

<b>Non-Conformity</b>	
<ol style="list-style-type: none"> <li>1 Inconsistency was found in end date of monitoring period in MR with signed contract with VVB.</li> <li>2 Calculations of emission reduction for current monitoring period are not correct throughout the MR.</li> <li>3 PLF for current monitoring period i.e., from 01-January-2023 to 05-March-2024 has not demonstrated in MR.</li> </ol>	
<b>Evidence</b>	
<ol style="list-style-type: none"> <li>1 As per section 5.1.6 of ISO 14064-3, during the desk review, it was found that the mentioned end 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 05-March-2024) in the contract signed with the VVB throughout the monitoring report.</li> <li>2 As per the desk review, assessment team traced the inconsistency in calculation and values of emission reductions mentioned in MR.</li> <li>3 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 05-March-2024</li> </ol>	
<b>1st Response from PP</b>	Date: 27-May-2024
<ol style="list-style-type: none"> <li>1. The Monitoring period date has been revised throughout the monitoring report.</li> <li>2. The ER sheet has been submitted and revised calculation has been provided by PP in the MR</li> <li>3. PLF calculations has been revised.</li> </ol>	
<b>Documents provided by PP for review</b>	
PP will list out here the documents submitted to support the response	
<b>1st Review by Assessment Team</b>	Date: 28-May-2024
<ol style="list-style-type: none"> <li>1. PP has revised the Monitoring period date throughout the monitoring report and now consistent throughout the report as verified by the assessment team.</li> <li>2. PP has submitted the ER sheet and revised calculation in the MR, as verified by the assessment team.</li> <li>3. PP has updated the PLF calculations in revised MR, as verified by the assessment team.</li> </ol>	
<b>Hence Finding No.#04 is closed</b>	

<b>Finding No. __05__</b>	Date: 22-April-2024
<b>Finding Type-</b> CAR <input checked="" type="checkbox"/> CL <input type="checkbox"/> FAR <input type="checkbox"/>	
<b>Stage of finding raised:</b>	
Desk Review	<input type="checkbox"/>
On-site/remote/hybrid assessment	<input checked="" type="checkbox"/>

Technical Review	<input type="checkbox"/>
Project Review Report by Registry	<input type="checkbox"/>
<b>Requirement</b>	
VCS Monitoring Report Template version 4.3, clause 3.16.3 of VCS Standard Version 4.6.	
<b>Non-Conformity</b>	
<ol style="list-style-type: none"> <li>1 PP has demonstrated a contradictory statement in section 3.1 for the breakdown and lull hrs of the project activity.</li> <li>2 PP has not accounted the breakdown and lull hrs from 01-January-2024 to 05-March-2024 as evident in Appendix C of MR.</li> </ol>	
<b>Evidence</b>	
<ol style="list-style-type: none"> <li>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.</li> <li>2 During onsite visit, PP has shown Breakdown sheet to assessment team which states that there are lull hrs and breakdown hrs during the month from January-2024 to March-2024 which is a period falling under current monitoring period that spans from 01-January-2023 to 05-March-2024 which is not included by PP in Appendix-C of MR.</li> </ol>	
<b>1st Response from PP</b>	Date: 27-May-2024
<ol style="list-style-type: none"> <li>1. PP has included the breakdowns occurred during the current monitoring period.</li> <li>2. Lull hours has been included in the breakdown calculations.</li> </ol>	
<b>Documents provided by PP for review</b>	
PP will list out here the documents submitted to support the response	
<b>1st Review by Assessment Team</b>	Date: 28-May-2024
<ol style="list-style-type: none"> <li>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.</li> <li>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.</li> </ol>	
<b>Hence Finding No.#05 is closed</b>	

<b>Finding No. __06__</b>	Date: 22-April-2024
<b>Finding Type-</b> CAR <input checked="" type="checkbox"/> CL <input type="checkbox"/> FAR <input type="checkbox"/>	
<b>Stage of finding raised:</b>	
Desk Review	<input type="checkbox"/>

On-site/remote/hybrid assessment	<input checked="" type="checkbox"/>
Technical Review	<input type="checkbox"/>
Project Review Report by Registry	<input type="checkbox"/>
<b>Requirement</b>	
VCS Monitoring Report Template version 4.3, clause 3.16.4 of VCS Standard Version 4.6.	
<b>Non-Conformity</b>	
1. Latest date of calibration.	
<b>Evidence</b>	
1. 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-A of MR.	
<b>1<sup>st</sup> Response from PP</b>	Date: 27-May-2024
1. The calibration details have been revised.	
<b>Documents provided by PP for review</b>	
Calibration Certificate	
<b>1<sup>st</sup> Review by Assessment Team</b>	Date: 28-May-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.	
<b>Hence Finding No.#06 is closed</b>	

<b>Finding No. __07__</b>	Date: 11-June-2024
<b>Finding Type-</b> CAR <input type="checkbox"/> CL <input checked="" type="checkbox"/> FAR <input type="checkbox"/>	
<b>Stage of finding raised:</b>	
Desk Review	<input type="checkbox"/>
On-site/remote/hybrid assessment	<input type="checkbox"/>
Technical Review	<input checked="" type="checkbox"/>

Project Review Report by Registry <input type="checkbox"/>	
<b>Requirement.</b>	
Clause 3.18.4, 3.19.11, 3.19.13, 3.19.14 & 3.19.16 of the VCS Standard version 4.6	
<b>Non-Conformity</b>	
<ol style="list-style-type: none"> <li>1. The responsibility to receive handle and take action on the grievance mechanism is not clear in the MR.</li> <li>2. Under gender equality section it is not clear if women are employed under the project activity.</li> </ol>	
<b>Evidence</b>	
<ol style="list-style-type: none"> <li>1. As per the assessment and review done by TR, it is identified that the comments received from local stakeholders as per the grievance redressal policy, how they will be addressed and who is responsible to take action on those is not clear.</li> <li>2. As per the review done by TR, it is not clear in section 2.3.1 of MR that women are part of the project activity or not and how gender equity and fair pay is maintained by PP.</li> </ol>	
<b>1<sup>st</sup> Response from PP</b>	Date: 16-June-2024
<ol style="list-style-type: none"> <li>1. The responsibility to receive handle and take action on the grievance mechanism is now clearly mentioned in the MR</li> <li>2. There are no women employed at the plant site due to the nature of work and location of the project site. However, women are employed at the plant Headquarters.</li> </ol>	
<b>Documents provided by PP for review</b>	
MR Version 1.2 dated 17-June-2024 & 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	
<b>1<sup>st</sup> Review by Assessment Team</b>	Date: 03-July-2024
<ol style="list-style-type: none"> <li>1. MR has been revised by PP and the details on the grievance mechanism is added which is found to be appropriate as per requirement hence accepted.</li> <li>2. PP has provided the details clearly in the response that there are no women employed at the site and same was found to be correct during site visit by assessment team and this was confirmed that some women are employed at the plant headquarter in Hyderabad. The NSL Policy document provided also confirms that the gender equity and fair pay is maintained by PP.</li> </ol>	
<b>Hence Finding No.#07 is closed</b>	

<b>Finding No. __08__</b>	Date: 11-June-2024
<b>Finding Type-</b> CAR <input checked="" type="checkbox"/> CL <input type="checkbox"/> FAR <input type="checkbox"/>	
<b>Stage of finding raised:</b>	



Desk Review	<input type="checkbox"/>
On-site/remote/hybrid assessment	<input type="checkbox"/>
Technical Review	<input checked="" type="checkbox"/>
Project Review Report by Registry	<input type="checkbox"/>
<b>Requirement</b>	
Clause 3.23.2 of VCS Standard version 4.6	
<b>Non-Conformity</b>	
<ol style="list-style-type: none"> <li>1. The statement under section 1.10.2 of MR does not transparently states the current situation of the project.</li> <li>2. PP states a contradictory statement about the breakdown hours in section 3.1 of MR.</li> <li>3. PP has denoted the higher emission reductions with a negative symbol in MR.</li> </ol>	
<b>Evidence</b>	
<ol style="list-style-type: none"> <li>1. As per the assessment by TR of section 1.10.2 of MR, it is clear that the project was also registered with CDM but its project ID is not stated by PP in MR which needs to be provided as per clause 3.23.3 of VCS Standard version 4.6.</li> <li>2. In section 3.1 of MR PP states that “there are no events of break down or non-operational phase during current MP” which is a contradictory statement with the statement in same section of MR “where breakdown of 9,759.50 hours &amp; Lull hours are 20401.9 has occurred in this monitoring period”.</li> <li>3. As per the assessment by TR it is identified in section 5.4 of MR that the higher emission reductions value achieved in current MP are denoted with negative symbol.</li> </ol>	
<b>1<sup>st</sup> Response from PP</b>	Date: 16-June-2024
<ol style="list-style-type: none"> <li>1. PP has stated the project status in CDM</li> <li>2. PP has stated that there is no major breakdown or the operational phase, however there were minor breakdown and scheduled maintenance which are covered in the Appendix of the MR</li> <li>3. It was purely a typo error which has been rectified.</li> </ol>	
<b>Documents provided by PP for review</b>	
MR Version 1.2 dated 17-June-2024	
<b>1<sup>st</sup> Review by Assessment Team</b>	Date: 03-July-2024
<ol style="list-style-type: none"> <li>1. MR has been revised by PP and CDM related project details are added which are found to be correct and hence accepted.</li> <li>2. The statement related to breakdown details have been revised and all related details are added in revised MR; hence accepted.</li> <li>3. The typo error has been corrected in the revised MR; hence accepted.</li> </ol>	
<b>Hence Finding No.#08 is closed</b>	

### Description of Forward Action Requests (FAR) raised by VVB:

Finding No. <u>00</u>		Date: DD-Month-YYYY
Finding Type: CAR <input type="checkbox"/> CL <input type="checkbox"/> FAR <input checked="" type="checkbox"/>		
<b>Stage of finding raised:</b> Desk Review <input type="checkbox"/> On-site/remote/hybrid assessment <input type="checkbox"/> Technical Review <input type="checkbox"/> Project Review Report by Registry <input type="checkbox"/>		
<b>Requirement</b>		
<b>Non-Conformity</b>		
<b>Evidence</b>		
<b>1<sup>st</sup> Response from PP</b>		Date: DD-Month-YYYY
<b>Documents provided by PP for review</b>		
<b>1<sup>st</sup> Review by Assessment Team</b>		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

<b>Reviewed by</b>	Apoorva Gupta (Quality Manager)	<b>Date</b>	25.10.2023
<b>Approved by</b>	Barun Kumar (Technical Manager)	<b>Date</b>	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

<b>Reviewed by</b>	Apoorva Gupta (Quality Manager)	Date	13/02/2024
<b>Approved by</b>	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

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

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