



**Verified Carbon  
Standard**

# BUNDLED WIND POWER PROJECT IN KOPPAL KARNATAKA



**Certification Pvt. Ltd.**

Document Prepared by **VKU Certification Pvt. Ltd.**

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## Summary:

VKU Certification Pvt. Ltd. (here after referred as VKU) has been commissioned by Infinite Environmental Solution LLP to verify greenhouse gas emission reductions reported for project activity **“Bundled Wind Power Project in Koppal Karnataka” (VCS ID 1993)**, covering third monitoring period from **01-January-2021 to 31-December-2022** (inclusive of both the dates), under first renewable crediting period from **02-March-2018 to 01-March-2028** (inclusive of both the dates) with regards to the relevant requirements for VCS activities.

**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) emissions. This verification aims to ensure that the monitoring methodology is implemented in accordance with the monitoring plan, and the monitoring data used to validate the reductions in anthropogenic emissions from sources is thorough, conclusive, and presented in a clear and transparent manner.

### The verification scope of the project is:

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

VKU conducted the verification process in accordance with its own established procedures, aligning with the requirements set forth in the VCS Program Guide version 4.4/6/, VCS Standard version 4.5/7/, VCS Validation and Verification Manual version 3.2/8/, and relevant decisions of the COP/MOP and applying standard auditing techniques.

These requirements encompass 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 provided by COP/MOP & CDM Executive Board, and other applicable rules, including the Host Country legislation.

The verification process encompassed a desk review, on-site assessment, resolution of any outstanding matters, and the issuance of the final verification report and certification. This comprehensive verification 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.

During this verification, **06 Corrective Action Requests (CARs)**, **03 Clarification Requests (CLs)** and **01 Forward Action Request (FAR)** were identified related to operation, monitoring and GHG emission reduction calculation of the VCS project activity in relation to all relevant VCS requirements for the

project activity and the applied baseline and monitoring methodology, and these CARs and CLs are successfully closed after necessary corrections/clarifications by the client. 01 FAR was raised during this verification. The same has been discussed in [Appendix B](#) of this verification report.

The verification team ensured that the reported emission reductions are complete and accurate in accordance with applicable VCS requirements to be certified therefore the verification team has detected no further uncertainties.

In conclusion, it is VKU's opinion that the project activity "**Bundled Wind Power Project in Koppal Karnataka**" (VCS ID 1993), meets all relevant requirements for VCS standard and guidelines and correctly applies the baseline and monitoring methodology ACM0002 "Grid Connected Renewable Electricity Generation from renewable sources" Version 19/11/. The monitoring system is in place and the emission reductions are calculated without material misstatement.

Hence, VKU is able to certify that the emission reductions from the project during the **third** monitoring period from **01-January-2021 to 31-December-2022** (inclusive of both the dates) under first renewable crediting period from **02-March-2018 to 01-March-2028** (inclusive of both the dates) amounts to **515,379 tCO<sub>2e</sub>**.

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# 1 INTRODUCTION

## 1.1 Objective

Infinite Environmental Solutions LLP (hereafter referred as Client) has commissioned VKU Certification Pvt Ltd. (hereafter as VKU) to carry out the third periodic verification of the project **“Bundled Wind Power Project in Koppal Karnataka” (VCS ID 1993)** for the monitoring period from **01-January-2021 to 31-December-2022** (inclusive of both the dates) under first renewable crediting period from **02-March-2018 to 01-March-2028** (inclusive of both the dates).

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

- To have an independent evaluation of project activity by an accredited validation and verification body against the requirements of the VCS Program Guide Version 4.4/6/, VCS standard version 4.5/7/ and UNFCCC criteria for CDM, as well as criteria given to provide for consistent project operations, monitoring and reporting, on the basis of the registered VCS Joint PD&MR /3/
- The project activity has been implemented and operating as per the registered VCS Joint PD&MR /3/ and that all physical features (technology, project equipment, and monitoring) of the project are in place;
- Monitoring report/1/ and other supporting documents (listed in Table No.-04 in section 2.2) submitted by PP are complete;
- The data is recorded and stored as per the monitoring methodology and approved monitoring plan.
- To confirm that the monitoring system is implemented and fully functional to generate Verified Carbon Units (VCUs) without any double counting/29/.
- To establish that the data reported are accurate, complete, consistent, transparent and free of material error or omission by checking the monitoring records and the emissions reduction calculation

The verification process is conducted with the goal of smooth execution and complete operational effectiveness of the monitoring system, assuring the precise generation of Verified Carbon Units (VCUs) without encountering any double counting/30/. Furthermore, a thorough examination of the monitoring records and emissions reduction calculations was performed to ensure the data’s comprehensiveness, coherence, transparency, and absence of significant errors or omissions, all in pursuit of establishing the trustworthiness and credibility of the data.

## 1.2 Scope and Criteria

The scope of this verification is the independent, objective review and ex-post determination of the monitored reductions in GHG emissions from the **“Bundled Wind Power Project in Koppal Karnataka” (VCS ID 1993)** in India for the period from **01-January-2021 to 31-December-2022** (Inclusive of both start and end dates). The verification of this project was based on the validated & registered VCS Joint PD&MR/3/ and monitoring report/1/ along with supporting documents submitted by the project proponent to the VKU Assessment team. The documents thus submitted to the VKU Assessment team were reviewed against the following guidance & protocols:

- I. VCS Programme Guide Version 4.4 /6/
- II. VCS Standard Version 4.5 /7/
- III. VCS Program Definitions Version 4.4 /9/
- IV. VCS Validation and Verification Manual version 3.2/8/
- V. CDM Approved methodology ACM0002”, “Grid-connected electricity generation from renewable sources” version 19 /11/
- VI. Tool for the demonstration and assessment of additionality – Version 07.0.0/13/
- VII. Tool to calculate emission factor for an electricity system – Version 07.0/12/

### The steps involved are as follows:

- To verify that the project is implemented as described in the registered VCS Joint PD & MR/3/
- To assess the project’s compliance with other relevant rules including the host country legislation.
- To confirm that the monitoring system is implemented and fully functional to generate VCU’s without any double counting/29/.
- To establish that the data reported are accurate, complete, consistent, transparent and free of material error or omission by checking the monitoring records and the emissions reduction calculation.
- 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;
- To verify that reported GHG emission data is sufficiently supported by evidences such as B-Forms/27/, Invoices/28/, Calibration Certificates/25/ and Grievance Register/32/.

The verification method and criteria encompassed several phases, including

- (i) Desk review of VCS Joint Project Description & Monitoring report, registered under version 02 on 17-December-2019/3/, MR/1/ & ER/2/ and other supporting documents listed in Table No.-04;
- (ii) Onsite interviews & Focussed Group Discussions, Stakeholders & PP representatives involved in project’s implementation.

- (iii) Resolution of outstanding issues and Completeness/Quality Check and the Final issuance of the verification report and applicable VCS Verification Deed of Representation.

It is important to note that the verification process does not involve providing consultancy to the project proponents. However, requests for clarifications and corrective actions may have contributed to improvements in the monitoring process.

### 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 and clause 4.1.10 (1) of the VCS Standard version 4.5/7/.

The threshold for quantitative materiality with respect to the aggregate of errors, omissions, and misrepresentations, relative to the total reported GHG emission reductions and/or removals was to 1% percent, as required by clause 4.1.10 (4) of the VCS Standard version 4.5/7/. As the project is large scale project, The materiality of the project activity based on actual emission reduction achieved is **1%** of **515,379 tCO<sub>2e</sub>** which is equal to **5,153.79 tCO<sub>2e</sub>**.

The verification report is based on the Monitoring report/1/, VCS Joint PD & MR version 02 dated 17-December-2019/3/ & supporting documents /23/, /24/, /25/, /26/, /27/, /28/, /29/, /30/, /31/, /32/, /35/, /36/ that were made available to the VKU's assessment team and information collected through performing interviews/33/ with PP Representatives/Local Stakeholders during on-site visit/33/.

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

The following individuals were part of the Verification Team as presented in **Table No.-1** below

| Role/Qualification of Assessment Team                 | Last Name | First Name |
|-------------------------------------------------------|-----------|------------|
| Team Leader, VCS Verifier & Technical Expert (TA 1.2) | Kathuria  | Sunil      |
| Validator/Verifier                                    | Chauhan   | Shivani    |
| Project Trainee                                       | Chauhan   | Nisha      |

The following individuals were part of the Technical Reviewer Team as presented in **Table No.-02** below:

| Role/Qualification of Technical Team | Last Name | First Name |
|--------------------------------------|-----------|------------|
|--------------------------------------|-----------|------------|

|                                                   |         |        |
|---------------------------------------------------|---------|--------|
| Technical Reviewer & Technical Expert<br>(TA 1.2) | Kumar K | Sanjay |
|---------------------------------------------------|---------|--------|

## 1.4 Summary Description of the Project

The project activity involves electricity generation by wind electric generators (renewable source) and supplying the generated electricity to the Indian electricity grid system. This is a greenfield project activity i.e., there was no renewable energy-based electricity generation facility in the 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 project activity Involves the installation of 51WTGs of 2.1 MW capacity each totalling 107.1MW total capacity of the plant. The total registered capacity of project is 134.7 MW but installed capacity is **107.1 MW**, comprising of 51WTG each of 2.1MW capacity. The project is located in Karnataka state, India. All the WTGs are manufactured by Suzlon and functioning well since commissioning. This can be further confirmed from documents uploaded on VERRA such as VCS Joint PD&MR/3/ previous Verification report/4/ and approved joint validation and verification report/5/. The project was commissioned on **02-March-2018** which is the earliest date of interconnection with the grid and is running satisfactorily since then and these dates are verified against registered VCS Joint PD & MR/3/ and commissioning certificate/30/, previous Verification report /4/ which were submitted by PP to the assessment team as a response to the feedback raised by the assessment team during verification assessment. This is in line with section 3.26 and clause 3.26.3 of the VCS Standard version 4.5/7/, where it is an obligation for the project proponent to make available to the validation/verification body the required supporting documents. The details of the WTGs for the project and their location of installation are mentioned in Table-03 below: -

**Table No.-03: Commissioning dates and Location of Project Activity**

| Project Participant                               | Proposed Project Capacity as per registered VCS Joint PD&MR/3/ MW <sub>AC</sub> | Commissioned Project Capacity MW <sub>AC</sub> | Date of Commissioning         | Project location                      |
|---------------------------------------------------|---------------------------------------------------------------------------------|------------------------------------------------|-------------------------------|---------------------------------------|
| Skeiron Renewable Energy Kushtagi Private Limited | 2.1 X 24 = 50.4 MW                                                              | 2.1 X 24 = 50.4 MW                             | 28-March-2018 & 31-March-2018 | Koppal & Bagalkot district, Karnataka |
| Saroja Renewables Limited                         | 2.1X25 = 52.5 MW                                                                | 2.1X17 = 35.7 MW                               | 28-March-2018 & 31-March-2018 | Bagalkot district, Karnataka          |
| Shanay Renewables Ltd.                            | 2.1X15=31.5 MW                                                                  | 2.1X10=21 MW                                   | 02-March-2018 & 31-March-2018 | Kushtagi, Koppal District, Karnataka  |

The location of all WTGs installed at the site is provided in Section 1.7 of MR/1/ which is verified by assessment team during desk review with the help of Google earth pro/20/ and some inconsistencies were observed which were updated by PP and it is confirmed through Google earth pro software/20/ and found to be correct, and it is further cross verified during site visit with the help of GPS map camera/19/. hence accepted by VKU assessment team.

As per MR/1/, the electricity generated from the project is supplied to the state grid system which is under the purview of the Unified Indian Grid. This is confirmed by mean of registered VCS Joint PD & MR version 02 dated 17-December-2019/3/ Joint Meter Readings, issued by Gulbarga Electricity Supply Company Limited (GESCOM) and Hubli Electricity Supply Company Limited (HESCOM), previous verification report/4/ and interview with PP/33/. This information was verified during on site assessment and found to be in line with the details provided in the registered VCS Joint PD&MR /03/.

The total emission reductions achieved in this monitoring period i.e., from **01-January-2021 to 31-December-2022** (inclusive of both dates) is **515,379 tCO<sub>2</sub>e**. The net electricity of **550,148.81 MWh** was generated by the bundled project activity and was evacuated to the grid.

This information was verified by document review and interview with PP representative's present onsite of the project activity, the verification team confirms that all the components of installed technology are fully functional and found to be in line with the details provided in the registered

VCS Joint PD&MR version 02 dated 17-December-2019/03/. The project activity follows approved large scale CDM methodology ACM0002 Version 19.0 /11/ for quantification of GHG emission reductions. The total emission reductions achieved by the project activity under the verification period from **01-January-2021 to 31-December-2022** (inclusive of both the dates) amount to **515,379 tCO<sub>2</sub>e**.

## 2 VERIFICATION PROCESS

### 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 version 4.5/7/. The GHG emission reductions are on the basis of the approved Baseline **and monitoring methodology ACM0002: "Grid Connected Renewable Electricity Generation from renewable sources" Version 19.0/11/**.

**Scope: 01 Energy Industries (renewable- and non-renewable sources)**

**Title: "Grid Connected Renewable Electricity Generation" (version 19.0) /11/.**

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

- Tool to calculate the emission factor for an electricity system, Version 07.0. /12/
- Tool for the demonstration and assessment of additionality — Version 07.0.0./13/

During onsite visit/34/ verification team **reviewed 100% data for all the WTGs** involved in this project **and hence no sampling is involved**.

Monitoring mechanisms used in the project were checked and as mentioned in MR/1/ and VCS Joint PD & MR /3/, meter readings are the only source for measuring energy generation so these readings are crosschecked with B-Forms/27/, invoices/28/. Meters installed at the project site were also verified for accuracy class, calibration dates, meter type, make and model via Calibration certificates /25/, desk review as well as on-site assessment/33/.

**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 of MR/1/ and ER calculation spreadsheet/2/. Assessment team also shared a NOVS Form 15 business days before the initial meeting with the project proponent.
2. **Strategic Analysis:** The assessment team conducted a strategic analysis to gain insights into the organization's, project's, or product's activities. This analysis was aimed at determining the scope and scale of the verification activities and will be utilized in the risk assessment process.
3. **Risk Assessment;** The assessment team carried out a risk assessment of the GHG statement to identify the likelihood of a substantial error or noncompliance with the established criteria.

4. **Evidence Gathering Activities;** Using a risk-based approach assessment team prepared the evidence gathering activities to collect sufficient and appropriate evidence upon which to base the conclusion & determine whether the GHG statement conforms to the criteria, taking into account the principles of the standards that apply to the GHG statement.
5. The requirement for a site visit is recognized, and subsequently, the planning for the site visit is undertaken Decision to take site visit was based on independent risk assessment, as defined in section 4.1.13 of VCS standard version 4.5/7/
6. **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.
7. **Evidence Gathering Plan:** The evidence-gathering plan is formulated in accordance with the risk assessment conducted by VKU Assessment Team. This plan is structured to reduce the verification risk to a level considered acceptable. As a result, the evidence-gathering plan outlines the specific nature and scope of the evidence collection activities.
8. **Client Confirmation and Approval:** The site visit audit plan is shared with the client for review and confirmation,
9. **Document Review:** Relevant documents, such as the verification report/4/, monitoring plan, methodology, VCS Joint PD&MR/3/, and QA/QC procedures, are thoroughly reviewed.
10. **On-Site Assessment:** This includes interviews and evaluation of the actual project scenario.
11. **Resolution of Discrepancies:** Any non-conformities identified during the assessment are addressed and resolved and documented in Appendix-B of this report.
12. **Independent Review:** A technical reviewer provides an independent assessment of the project.
13. **Final Verification:** After completeness checks, the verification report and certification are issued.

The following sections outline each step involved in verification in more detail.

## 2.2 Document Review

The verification was performed primarily based on the review of the monitoring report (MR) version 01 dated 20-April-2023 and **final MR version 05 dated 21-December-2023 /1/** the emission reduction calculations spreadsheet version 01 dated 20-April-2023 and **final ER spreadsheet version 2.3 dated 21-December-2023/2/** were assessed as part of the verification. In addition, the registered VCS Joint PD & MR/3/ in particular the baseline estimations and the monitoring plan for the project was reviewed. The following table lists the documentation that were reviewed during the verification.

As per section **3.26 and clause 3.26.3** of the VCS Standard version 4.5/7/ 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/1/. Thus, the assessment team reviewed the following documents during verification:

**Table No-04: Lists of the documentation that was reviewed during the verification:**

|      |                                                                                                                                                                                                                                                                                                                                                                         |
|------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| /1/  | Infinite Solutions: VCS monitoring report for “Bundled Wind Power Project in Koppal Karnataka” <ul style="list-style-type: none"> <li>• Version 01 dated 20-April-2023</li> <li>• Version 02 dated 25-August-2023</li> <li>• Version 03 dated 24-October-2023</li> <li>• Version 04 dated 25-October-2023</li> <li>• Final Version 05 dated 21-December-2023</li> </ul> |
| /2/  | Infinite Solutions: Emission Reduction Calculation Spreadsheet <ul style="list-style-type: none"> <li>• Version 01 dated 20-April-2023</li> <li>• Version 02 dated 25-August-2023</li> <li>• Version 2.1 dated 24-October-2023</li> <li>• Version 2.2 dated 25-October-2023</li> <li>• Final Version 2.3 dated 21-December-2023</li> </ul>                              |
| /3/  | Registered VCS Joint PD & MR- <u>“Bundled Wind Power Project in Koppal Karnataka” version 02 dated 17-December-2019</u>                                                                                                                                                                                                                                                 |
| /4/  | TÜV SÜD South Asia Pvt. Ltd.: <u>Verification report “Bundled Wind Power Project in Koppal Karnataka” version 3.0 dated 22-July-2021</u>                                                                                                                                                                                                                                |
| /5/  | LGAI Technological Center S.A- <u>VCS Joint Validation &amp; Verification Report version 02 dated 19-December-2019</u>                                                                                                                                                                                                                                                  |
| /6/  | <u>VCS: VCS Program Guide, version 4.4 dated 29-August-2023</u>                                                                                                                                                                                                                                                                                                         |
| /7/  | <u>VCS: VCS Standard, version 4.5 dated 29-August-2023</u><br>VCS: VCS Standard, version 4.4 dated 21-December-2023                                                                                                                                                                                                                                                     |
| /8/  | <u>Validation and verification manual version 3.2 dated 19-October-2016</u>                                                                                                                                                                                                                                                                                             |
| /9/  | <u>VCS Program Definitions version 4.3 dated 21-December-2022</u>                                                                                                                                                                                                                                                                                                       |
| /10/ | <u>VCS Registration &amp; Issuance Process (Version 4.3) of 17-January-2023</u>                                                                                                                                                                                                                                                                                         |
| /11/ | <u>CDM Executive Board: Baseline and Monitoring Methodology ACM0002 “Grid Connected Renewable Electricity Generation from renewable sources” Version 19</u>                                                                                                                                                                                                             |
| /12/ | <u>Tool to calculate the emission factor for an electricity system, Version 07.0</u>                                                                                                                                                                                                                                                                                    |
| /13/ | <u>Tool for the demonstration and assessment of additionality, Version 07.0</u>                                                                                                                                                                                                                                                                                         |
| /14/ | <u>CO<sub>2</sub> Baseline Database for the Indian Power Sector User Guide Version 14.0</u>                                                                                                                                                                                                                                                                             |
| /15/ | <u>VCS: Monitoring report Template VCS Version 4.2</u>                                                                                                                                                                                                                                                                                                                  |
| /16/ | VERRA: <a href="https://registry.verra.org/app/projectDetail/VCS/1993">https://registry.verra.org/app/projectDetail/VCS/1993</a>                                                                                                                                                                                                                                        |
| /17/ | REC website Renewable Energy Certificate Registry of INDIA<br><a href="https://www.recregistryindia.nic.in/index.php/publics/faqs">https://www.recregistryindia.nic.in/index.php/publics/faqs</a>                                                                                                                                                                       |
| /18/ | <u>I-REC Standard - The International REC Standard Foundation (irecstandard.org)</u>                                                                                                                                                                                                                                                                                    |
| /19/ | GPS map camera (GPS App)                                                                                                                                                                                                                                                                                                                                                |
| /20/ | GPS Google earth software used for Location                                                                                                                                                                                                                                                                                                                             |
| /21/ | EIA Report & EIA NOTIFICATION dated 14-September-2006; <a href="https://moef.gov.in/wp-content/uploads/2018/03/so1533.pdf">https://moef.gov.in/wp-content/uploads/2018/03/so1533.pdf</a>                                                                                                                                                                                |
| /22/ | Central Electricity Authority (Installation and Operation of Meters) Regulations                                                                                                                                                                                                                                                                                        |

|      |                                                                                                                                                                                                                                                                                                                                                                                             |
|------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|      | Notified on 17-March-2006 <a href="#">No. 502/70/CEA/DP&amp;D</a><br>Amendments Notified on 26-June-2010 <a href="#">No. 502/6/2009/DP&amp;D/D-I</a><br><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><br><a href="#">Metering Regulations Archives - Central Electricity Authority (cea.nic.in)</a> |
| /23/ | PPA: Power Purchase Agreements signed between Project Proponent and State Utility                                                                                                                                                                                                                                                                                                           |
| /24/ | O& M agreement between PP and Suzlon                                                                                                                                                                                                                                                                                                                                                        |
| /25/ | Certificates of Calibration for all the meters belongs to project activity                                                                                                                                                                                                                                                                                                                  |
| /26/ | Generation Log Book                                                                                                                                                                                                                                                                                                                                                                         |
| /27/ | B-Forms issued by State Utility to PP for the current verification period                                                                                                                                                                                                                                                                                                                   |
| /28/ | Invoice issued by PP to State Utility                                                                                                                                                                                                                                                                                                                                                       |
| /29/ | Letter of declaration from PP regarding not having created or sought any other form of environmental credit for the same period                                                                                                                                                                                                                                                             |
| /30/ | Commissioning certificate of all the WTGs of the project activity issued by state electricity authority                                                                                                                                                                                                                                                                                     |
| /31/ | Technical Specifications of WTGs.                                                                                                                                                                                                                                                                                                                                                           |
| /32/ | Grievance Register present on-site                                                                                                                                                                                                                                                                                                                                                          |
| /33/ | On site personnel interview dated 13-June-2023                                                                                                                                                                                                                                                                                                                                              |
| /34/ | Site Visit Photographs and attendance sheet dated 13-June-2023                                                                                                                                                                                                                                                                                                                              |
| /35/ | For breakdown Details-PP has submitted Breakdown Details in an Excel Sheet.                                                                                                                                                                                                                                                                                                                 |
| /36/ | Training records of Site Personnels                                                                                                                                                                                                                                                                                                                                                         |

## 2.3 Interviews

An on-site inspection has been performed by the assessment team. The representatives of the PP and O&M contractors were interviewed personally by assessment team on **13-June-2023 in Karnataka** i.e., Tables No.- 05 & Tables No.- 06 provide a comprehensive overview of the onsite interview process/33/ conducted during the verification. These tables outline the personnel involved in the interviews, along with their respective roles. 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.

The details of the people interviewed are mentioned in the tables below:

**The details of the people interviewed are mentioned in the Table No.-05 below**

**Location:** Bagalkot & Koppal, **State:** Karnataka, **Country:** India

| S No. | Name           | Gender | Organization and Designation | Topic                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
|-------|----------------|--------|------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1.    | Jeethendra K   | Male   | Greenko/ GM                  | <ul style="list-style-type: none"> <li>• Data archiving, breakdown details</li> <li>• Maintenance of generation records and Calibration of meters</li> <li>• Project Implementation and technical details of the Project like breakdown details</li> <li>• Training requirement of the personnels</li> <li>• O&amp;M of the plant site and personnel responsible for monitoring of required monitored parameters and implementation of QA/QC Procedure.</li> </ul> |
| 2.    | Thrimthy       | Male   | Greenko/ SM                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| 3.    | SudhaKav Reddy | Male   | Greenko/ DM                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| 4.    | Kumar S        | Male   | Suzlon/ OMS                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| 5     | Thrimutti      | Male   | Greenko/ SM                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |

The topics covered during interview ranged from general features and implementation of project to technical details of the project like calibration details, monitoring and measuring system, data collection, recording, emergency procedures, internal audit, Procedures for handling non-conformances with the validated monitoring plan, personal training and archiving procedures. The assessment was based on the feedback received during onsite interview coupled with the documentation in **VKU.F62W.Field Assessment Checklist for Onsite Visit**.

During Onsite Visit/34/, Assessment team also interviewed the local stakeholders involved in the projects to verify the implementation and process of grievance resolution as claimed and mentioned in the Monitoring report/1/ (refer section 2.2 of MR) by the PP. The assessment team confirmed the sustainable development claims and assessed the socio-economic impact of the project on the local community. Assessment Team also checked the records and observed that the PP provided opportunities for the locals to express their opinions and grievances, with efforts to resolve any issues through consultation with stakeholders. Assessment team thus verified all the above statements via focussed group discussions and personal interview/33/ with stakeholders and was hence acceptable to VKU that PP has a well-defined procedure for involving local stakeholders in the project implementation and that their grievances are resolved appropriately.

The Details of the Personnel Interview with Stakeholders are mentioned in the Table No.-06 below:

| S No. | Name           | Gender | Category          | Topic                                                                                                                                                                                                                                                                                                                                                                                           |
|-------|----------------|--------|-------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1.    | Aived          | Male   | Local Stakeholder | <ul style="list-style-type: none"> <li>Implementation of Project activity and its impact on the economic, social and environmental parameters around the located project activity and on the local people of the area.</li> <li>The employment generation due to project activity implementation.</li> <li>Salary and other facilities like safety equipment provided on site during</li> </ul> |
| 2.    | Nagaraj        | Male   |                   |                                                                                                                                                                                                                                                                                                                                                                                                 |
| 3.    | Basappa        | Male   |                   |                                                                                                                                                                                                                                                                                                                                                                                                 |
| 4.    | Kalakappa      | Male   |                   |                                                                                                                                                                                                                                                                                                                                                                                                 |
| 5.    | Chandrashekhar | Male   |                   |                                                                                                                                                                                                                                                                                                                                                                                                 |

VKU Assessment Team has documented the information obtained during the interview with site personnel/33/. This data was recorded using VKU's dedicated form, specifically VKU.F46W, known as the Attendance Sheet of Onsite Audit/34/. Similarly, the interviews conducted with local stakeholders. Through a comprehensive process involving documentation, desk review, document verification, and interviews with site personnel the VKU Assessment Team affirms that no negative comments were received during the on-site interviews conducted by the team. For further details, please refer to [section 4.2.2](#) below.

## 2.4 Site Visits

### Site Location Visited:

**Location:** District: Bagalkot & Koppal, State: Karnataka, Country: India. Further the location along with longitude and latitude is mentioned in section 4.1 of this report.

An Onsite visit was undertaken by the verification team to the project location identified in the MR at Bagalkot & Koppal District on **13-June-2023** in Karnataka state India to carry out the following:

- A review of the operation and implementation of the registered project activity in accordance with the VCS Joint PD & MR version 02 of 17-December-2019 /3/ and VCS MR/1/approved documents;

- An analysis of the information flows used to generate, aggregating and reporting the monitoring parameters;
- Interviews/33/ with relevant personnel to determine whether the operational and data collection procedures are implemented in accordance with the monitoring plan in the registered VCS Joint PD & MR version 02 dated 17-December-2019 /3/;
- A cross check between information provided in the monitoring report and data from Joint Monitoring Report (JMR) invoices and, Online monitoring system;
- A check of the monitoring equipment including their calibration, performance and records of monitoring practices against the requirements of registered VCS Joint PD &MR/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 the 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 (FAR) 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.

In summary, **03 CL and 06 CARs and 01 FAR** 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 registered VCS Joint PD & MR/3/ and Previous VCS Joint Validation & Verification Report/5/, no FAR was raised during previous verification/4/ which needs to be closed during this verification and 01 FAR has been raised during current verification.

## 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 parallely by other certification bodies, as the same was confirmed with focussed group discussions and interview with the PP /33/ during site visit.

Assessment team assessed the VERRA's website on 10-January-2024: <https://verra.org/validation-verification/vku-certification-pvt-ltd/#vcs> wherein the scope of services of VKU certification Pvt. Ltd. is mentioned as verification and not validation. Thus, ensuring that the accreditation details mentioned in FVR is consistent and correct.

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

### 3.1 Participation under Other GHG Programs

The project has not applied under any other GHG program except VCS for current monitoring period, **01-January-2021 to 31-December-2022** (inclusive of both the days). The project is registered under VCS only with project ID 1993<sup>1</sup>. This was confirmed by checking VERRA registry website and similar exercise was performed for CDM/GS/GCC/UCR/ICR registries with similar project title/capacity and Project Proponents but the assessment team could not find any such project registered on these registries thus it was confirmed that the project does not claim any emission reduction from other registries. This was supported from the declaration/27/ submitted by PP in which they have mentioned that they will not claim same GHG emission reductions of the project from any other GHG program except VCS thus ensuring emission reduction generated from the project activity for current monitoring period from 01-January-2021 to 31-December-2022 (Inclusive of both start and end dates) will not be double counted hence accepted by the assessment. Assessment team also did the exercise of independently searching for such project registration or claim for current monitoring period was performed for other GHG related benefits such as REC/17/ and I-REC/18/ benefits and based on both independent assessment and declaration submitted by PP/29/, the assessment team accepted the claim that there is no double counting from this project activity for current monitoring period from 01-January -2021 to 31-December-2022 (Inclusive of both days).

Assessment team has also verified the issuance of VCUs claimed in previous verification against the VCU issuance record registry. Thus, ensuring emission reduction generated from the project activity will not be double counted hence accepted by the assessment team.

**The details of the registries checked are as follows:**

- <https://www.recregistryindia.nic.in/>
- <http://cdm.unfccc.int/>
- <http://www.goldstandard.org/>
- <https://verra.org/verra-standards-and-programs/>
- <https://www.ucarbonregistry.io/>
- <https://projects.globalcarboncouncil.com/>
- [I-REC Standard – The International REC Standard Foundation \(irecstandard.org\)](http://www.irecstandard.org/)
- <https://cri.nccf.in/>
- [International Carbon Registry – International Carbon Registry](http://www.internationalcarbonregistry.org/)
- [VCU Issuance Records](http://www.verra.org/verra-standards-and-programs/)

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<sup>1</sup> <https://registry.verra.org/app/projectDetail/VCS/1993>

### Rejection by other GHG programs

The Project is not rejected by other GHG programs. A declaration/28/ for the same is checked and found correct by the assessment team. Also, assessment team independently verified with the following registries and checked projects from the PP matching the same project design and found that no such project either exists or were rejected by the registries. The details of the registries checked are as follows:

- <https://www.recregistryindia.nic.in/>
- <http://cdm.unfccc.int/>
- <http://www.goldstandard.org/>
- <https://verra.org/verra-standards-and-programs/>
- <https://www.ucarbonregistry.io/>
- <https://projects.globalcarboncouncil.com/>
- [I-REC Standard – The International REC Standard Foundation \(irecstandard.org\)](http://www.irecstandard.org/)
- <https://cri.nccf.in/>
- [International Carbon Registry – International Carbon Registry](http://www.internationalcarbonregistry.org/)

In conclusion, the project's exclusive registration under VCS for the current monitoring period, along with its absence from rejection lists of other GHG programs, has been comprehensively verified, ensuring the integrity and credibility of its GHG benefits claims.

## 3.2 Methodology Deviations

There is no methodology deviation identified during the current monitoring period 01-January - 2021 to 31-December-2022 (Inclusive of both days). Also, no methodology deviation was identified during Joint Validation & Verification/5/ previous verification/4/.

## 3.3 Project Description Deviations

**Following two deviations are requested by PP in current monitoring period.**

### Deviation 1:

PP has requested the deviation to add the formula used for the calculation of data adjustment of the net electricity supplied to the grid in case the dates of a particular monitoring period do not match with the dates of the billing period. This correction is considered as project description deviation in the current monitoring period.

The net electricity supplied to the grid would be reported as the difference between the net export and import from the wind plant. The electricity export and import data are monitored via main and check meters connected to the sub-station.

### **Data Adjustment in case of monitoring period different from billing period:**

This apportioning procedure is not applied for current monitoring period since start date & end date of monitoring period coincides with the start & end dates of billing period i.e 01-January-2021 to 31-December-2022(inclusive of both days).

In case the dates of a particular monitoring period do not match with the dates of the billing period, the net electricity exported to the grid would be calculated as follows:

$$D = (A/B) * C$$

Where:

A = Difference of number of days which are not matching of billing period and monitoring period.

B = Number of days of the billing period/ month which was not matched with the monitoring period.

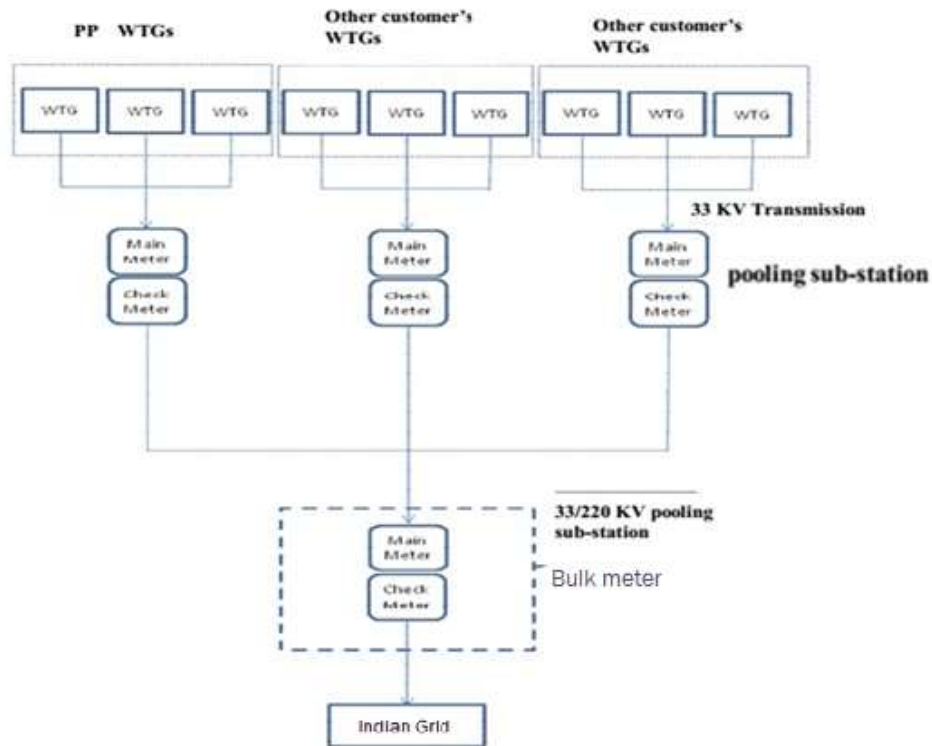
C = Net Electricity supplied to the grid for that given billing period/ month

The calculated value after apportioning would be used for calculation of emission reductions during that period.

This is in line with the actual monitoring procedure followed on the project activity. The Project deviation is in line with the guidance provided under Section 3.21.2 para no. 2 of the VCS standard, Version 4.5/7/ and it does not impact the existing applicability conditions of the methodology, additionality or the appropriateness of the baseline scenario. Hence accepted by VKU assessment team.

### **Deviation-2**

PP has requested the deviation to update the Line diagram with metering arrangement for the wind project activity as per the actual scenario and the same has been described in section 4.3 of MR/1/. Line diagram presented below with metering arrangement for the wind project activity is different from the registered VCS Joint PD&MR/3/ and now it has been corrected as per actual practice followed at site. In actual scenario other non-VCS WTGs are connected to this feeder and the same has been corrected and described below in detail in the monitoring section 4.3 This deviation is verified by assessment team through the site visit and interview with PP and found acceptable.



The verification team has acknowledged and accepted the deviation, affirming that the project remains fully compliant with the VCS rules. Furthermore, it is important to note that this deviation has no impact on the applicability of the methodology, the concept of additionality, or the appropriateness of the baseline scenario. The project continues to meet all relevant requirements and remains in adherence with VCS guidelines.

### 3.4 Grouped Project

As per VCS Joint PD & MR/3/, the project is not a grouped project. This can further be confirmed as per para 3.6.20 of VCS Standard V 4.5/7/. Therefore, this section is not applicable.

## 4 VERIFICATION FINDINGS

### 4.1 Project Implementation Status

Based on the onsite audit conducted with the project proponent (PP) representative, it was determined that the project has been implemented in accordance with the requirements outlined in the registered VCS Joint Project Description & Monitoring Report version 02 dated 17-December-2019/3/ and the approved monitoring plan. This project activity involves the installation of 51 WTGs of 2.1 MW capacity each. Thus, installed capacity of the project is 107.1 MW (Total capacity as per registered VCS Joint PD & MR is 134MW). Project is located at Bagalkot & Koppal district in Karnataka state, India. The project is promoted by Skeiron Renewable Energy Kushtagi Private Limited, Saroja Renewables Limited and Shanay Renewables Ltd. which is part of Greenko Group and O&M is also done by Suzlon (Refer Table No.-03). The generated voltage of 690V is initially stepped up to 33 kV, then further increased to 220 kV before being connected to the Power Substation (PSS) and metered also. From the PSS, this voltage is transmitted to the Grid Substation (GSS) and synchronized with the grid. All details are mentioned below

**Table No. 7- The details of the WTGs number with commissioning dates are as follows:**

| Shanay Renewables Ltd.                                |                                  |                                   | Total Capacity                                    | Electricity Supply to                                |
|-------------------------------------------------------|----------------------------------|-----------------------------------|---------------------------------------------------|------------------------------------------------------|
| <b>Metering Loc.</b>                                  | <b>WTG Loc. No.</b>              | <b>Commissioning Dates</b>        | 21 MW<br>(10 WTG)                                 | Gulbarga Electricity Supply Company Limited (GESCOM) |
| KST -131                                              | 90, 131                          | 28-March-2018 & 31-March-2018     |                                                   |                                                      |
| KST-130                                               | 95, 97, 42, 75, 96, 128, 130, 72 | 28- March -2018 & 31- March -2018 |                                                   |                                                      |
| Saroja Renewables Limited                             |                                  |                                   | Total Capacity                                    | Electricity Supply to                                |
| <b>Metering Loc.</b>                                  | <b>WTG Loc. No.</b>              | <b>Commissioning Dates</b>        | 35.7<br>(17 WTG)                                  | Hubli Electricity Supply Company Limited (HESCOM)    |
| KST - 51                                              | 51                               | 28- March -2018                   |                                                   |                                                      |
| KST - 71                                              | 47, 48, 70, 71, 124, 46, 49, 68  |                                   |                                                   | 31- March -2018                                      |
| KST - 67                                              | 65, 67, 105, 106, 122            |                                   |                                                   |                                                      |
| KST - 67                                              | 66, 103, 121                     |                                   | Hubli Electricity Supply Company Limited (HESCOM) |                                                      |
| Skeiron Renewable Energy and Kushtagi Private Limited |                                  |                                   | Total Capacity                                    | Electricity Supply to                                |
| <b>Metering Loc.no.</b>                               | <b>WTG Loc. No.</b>              | <b>Commissioning Dates</b>        | 50.4 MW                                           | Gulbarga Electricity Supply Company                  |

|           |                                        |                 |          |                                                   |
|-----------|----------------------------------------|-----------------|----------|---------------------------------------------------|
| KST - 147 | 100, 126, 152, 153, 154, 155           | 02- March -2018 | (24 WTG) | Limited (GESCOM)                                  |
| KST - 147 | 99, 147, 98, 123, 125                  | 02- March -2018 |          |                                                   |
| KST - 177 | 177, 148, 149, 188, 189, 233, 234, 235 | 02- March -2018 |          |                                                   |
| KST - 177 | 191, 236                               | 31- March -2018 |          |                                                   |
| KST - 230 | 230                                    | 31- March -2018 |          |                                                   |
| KST - 101 | 101, 102                               | 31- March -2018 |          | Hubli Electricity Supply Company Limited (HESCOM) |

**Breakdown in Current monitoring period: -**
**Table No.-08: Breakdown and operational hours site wise of the project activity and its impact**

| S.No.        | Plant Site                                        | Total Hours                                                                               | Net operational Hours                        | Breakdown Hours                            |
|--------------|---------------------------------------------------|-------------------------------------------------------------------------------------------|----------------------------------------------|--------------------------------------------|
| 1            | Skeiron Renewable Energy Kushtagi Private Limited | 893,520 hours<br>Total hours = 17520 hours (i.e., 730*24)<br>17520*51WTGs = 893,520 hours | 883,609 hours/<br>98.89% of total hours      | 9,911 hours/1.10% of total hours           |
| 2            | Saroja Renewables Limited                         |                                                                                           | 878,611 hours/<br>98.33% of total hours      | 14,909 hours/1.66% of total hours          |
| 3            | Shanay Renewables Ltd                             |                                                                                           | 889,768 hours/<br>99.58% of total hours      | 3,752 hours/0.41% of total hours           |
| <b>Total</b> |                                                   |                                                                                           | <b>864,948 hours (96.80% of total hours)</b> | <b>28,572 hours (3.19% of total hours)</b> |

The WTGs are under operation including scheduled shutdowns during the current monitoring period. The breakdown occurred is for a total of 3.19% of total hours of all WTGs. Therefore, due to this percentage variations of breakdown identified in the current monitoring period also it has no major impact in the GHG emissions reductions. The summary of breakdown details in the current monitoring period has been described in the detailed analysis of the same has been provided in Appendix 02 of MR/1/. Throughout the monitoring period, no unforeseen incidents or events that could significantly impact the operation of the project activity were identified, with the exception of scheduled maintenance and service breakdowns/35/. The total duration of

these breakdowns was calculated to be **28,572.63 hours** /35/. It is important to note that these breakdowns did not have any substantial repercussions on the project activity's reduction of greenhouse gas (GHG) emissions or the monitoring methodology employed.

**The breakdowns were attributed to various minor reasons for different WTGs, which include;**

- Pitch FC3 FC Not Ready, HT Yard Maintenance
- UPS Battery Change Fault, WTG Half Yearly Maintenance
- INTL\_WTG Shut Down By OMS, DFIG Inverter Fault Shutdown
- DFIG Inverter Fault Shutdown, Lub Sys MBR Lubricant Level LS
- Pitch FC1 Error, DFIG Generator Contactor Mal Function
- Temp Closed Yaw Motor Brake, INTL\_WTG Shut Down By OMS
- Preventive Check, Lub Sys BBR Flow Control HS
- Elec Oil Pressure LowIn Prod State, Pitch EmergencyRun
- SE Reboot PLC, Elec 24V Supply Bottom Fail
- Hyd System Pressure Detected, Tower Torquing
- Pitch FC3 Back Up Voltage LS, SE Reboot PLC
- Wire Break Gear Box Oil Pressure, HT Yard Maintenance
- RC Reboot PLC, VCB Tripped
- Pitch FC3 CAN Com Fail, Elec ACB Off Stop
- Mech Wind Vane1 2 Def Stop, Rep Elec Yaw Monitoring
- Turbine Optimization, Mech Gear Box Oil Filter Clogged Stop
- DFIG Inverter Fault Shutdown, Temp Closed Yaw Motor Brake
- Rpm Observer nA Speed Stop, Wire Break Wind Vane 2
- Temp Closed Yaw Motor Brake, UPS Bypass Mode Active
- Lub Sys GBR Lubricant Level LS, RC Manual Soft Stop
- Elec FB Yaw CW Error, Gearbox Problem
- Blade Maintenance, VCB Tripped
- Pitch Angle2 Exp Difference Stop, Mech WindVane2 Defect
- Preventive Check, Elec FB Generator Err Stop

The project activity was operational for a total of **893,520 hours**, representing **730 days**. However, during the monitoring period **from 01-January-2021 to 30-December-2022 (inclusive of both dates)**, the project experienced breakdowns for a duration of **28,572.63 hours**, as detailed in section 3.1 of the monitoring report/1/. It is important to note that the plant was not entirely shut down during these breakdown hours/35/; only the affected parts were temporarily taken out of operation.

The verification process involved review of B-form/27/, invoices/28/ and breakdown excel sheet/35/ provided by the project proponent (PP). Additionally, an onsite visit to the project site/33/ was conducted, where it was confirmed that only the affected WTG were shut down while the rest of the WTGs remained operational. This information is consistent with the details mentioned in Section 3.1 of the MR/1/. The assessment team also conducted interviews with

key personnel from the PP, including site in-charge, manager, deputy manager, and an assistant manager/33/. These interviews took place on **13-June-2023** during the onsite visit conducted by the verification team/34/.

During the current monitoring period, all the WTGs were operational and the project activity has supplied **550,148.81 MWh** of electricity, and thus contributing to **515,379 tCO<sub>2e</sub>** GHG emission reductions. The assessment team has concluded that the breakdowns and the resulting partial shutdown of the 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.

The ex-ante emission reduction for this monitoring period as per registered VCS Joint PD & MR/3/ for the current monitoring period is **670,170 tCO<sub>2e</sub>**, whereas actual emission reductions achieved are **515,379 tCO<sub>2e</sub>**, which is (-23.10%) lower than the estimated emission reductions for the current verification period, this variation is as per the proposed capacity of 134.4MW. For the installed capacity of 107.1 MW the estimated emission reductions for the current monitoring are **534,041.72 tCO<sub>2e</sub>** whereas actual emission reductions achieved are **515,379 tCO<sub>2e</sub>**, which is (-3.49%) lower than the estimated emission reductions. Further explanation is provided section 4.5 of this report. The ERs achieved in this monitoring period is less due to non-installation of 27.3MW of WTGs as per proposed capacity in VCS Joint PD&MR/3/. When we compare with the installed capacity estimated emission reductions the achieved ERs are 3.49% low due to low PLF and minor breakdowns during this monitoring period.

The assessment team also conducted a verification of the project location. This was accomplished through a desk review using google earth pro software/20/ and the screenshots are attached below as Figure No.-01 Figure No.-02 and Figure No.-03 and during the onsite visit the location was confirmed using GPS map camera software/19/. The latitude and longitude coordinates specified in the registered VCS Joint PD&MR/3/, VCS Verification Report/4/, and VCS MR/1/ were confirmed to be accurate.

**Table No.-09 shows the WTG wise latitudes and longitudes for Skerion are confirmed below:**

| WTG ID | Degrees | Minutes | Seconds |   | Degrees | Minutes | Seconds |   |
|--------|---------|---------|---------|---|---------|---------|---------|---|
| KST098 | 15.00   | 55.00   | 1.18    | N | 76.00   | 10.00   | 56.69   | E |
| KST099 | 15.00   | 55.00   | 18.07   | N | 76.00   | 10.00   | 55.78   | E |
| KST100 | 15.00   | 55.00   | 36.86   | N | 76.00   | 10.00   | 53.80   | E |
| KST101 | 15.00   | 54.00   | 40.72   | N | 76.00   | 15.00   | 42.32   | E |

|        |       |       |       |   |       |       |       |   |
|--------|-------|-------|-------|---|-------|-------|-------|---|
| KST123 | 15.00 | 55.00 | 51.57 | N | 76.00 | 11.00 | 40.67 | E |
| KST125 | 15.00 | 54.00 | 45.33 | N | 76.00 | 12.00 | 36.97 | E |
| KST126 | 15.00 | 54.00 | 27.38 | N | 76.00 | 12.00 | 46.92 | E |
| KST147 | 15.00 | 53.00 | 42.58 | N | 76.00 | 13.00 | 36.41 | E |
| KST148 | 15.00 | 54.00 | 19.33 | N | 76.00 | 13.00 | 51.50 | E |
| KST149 | 15.00 | 54.00 | 23.17 | N | 76.00 | 13.00 | 18.10 | E |
| KST152 | 15.00 | 55.00 | 28.71 | N | 76.00 | 13.00 | 11.26 | E |
| KST153 | 15.00 | 55.00 | 38.44 | N | 76.00 | 12.00 | 48.45 | E |
| KST154 | 15.00 | 55.00 | 53.58 | N | 76.00 | 12.00 | 35.26 | E |
| KST155 | 15.00 | 56.00 | 14.49 | N | 76.00 | 12.00 | 18.97 | E |
| KST177 | 15.00 | 53.00 | 50.92 | N | 76.00 | 14.00 | 26.29 | E |
| KST188 | 15.00 | 53.00 | 15.44 | N | 76.00 | 15.00 | 19.90 | E |
| KST189 | 15.00 | 53.00 | 42.34 | N | 76.00 | 15.00 | 21.52 | E |
| KST191 | 15.00 | 52.00 | 55.13 | N | 76.00 | 15.00 | 43.78 | E |
| KST230 | 15.00 | 54.00 | 22.74 | N | 76.00 | 16.00 | 2.65  | E |
| KST233 | 15.00 | 54.00 | 2.66  | N | 76.00 | 17.00 | 4.56  | E |

|        |       |       |       |   |       |       |       |   |
|--------|-------|-------|-------|---|-------|-------|-------|---|
| KST234 | 15.00 | 53.00 | 49.30 | N | 76.00 | 17.00 | 1.96  | E |
| KST235 | 15.00 | 53.00 | 31.31 | N | 76.00 | 17.00 | 6.69  | E |
| KST236 | 15.00 | 52.00 | 55.12 | N | 76.00 | 16.00 | 50.86 | E |
| KST102 | 15.00 | 55.00 | 2.48  | N | 76.00 | 15.00 | 50.43 | E |

Figure No.- 01 below from google earth pro software shows the entire location of WTGs installed at Skeiron site.

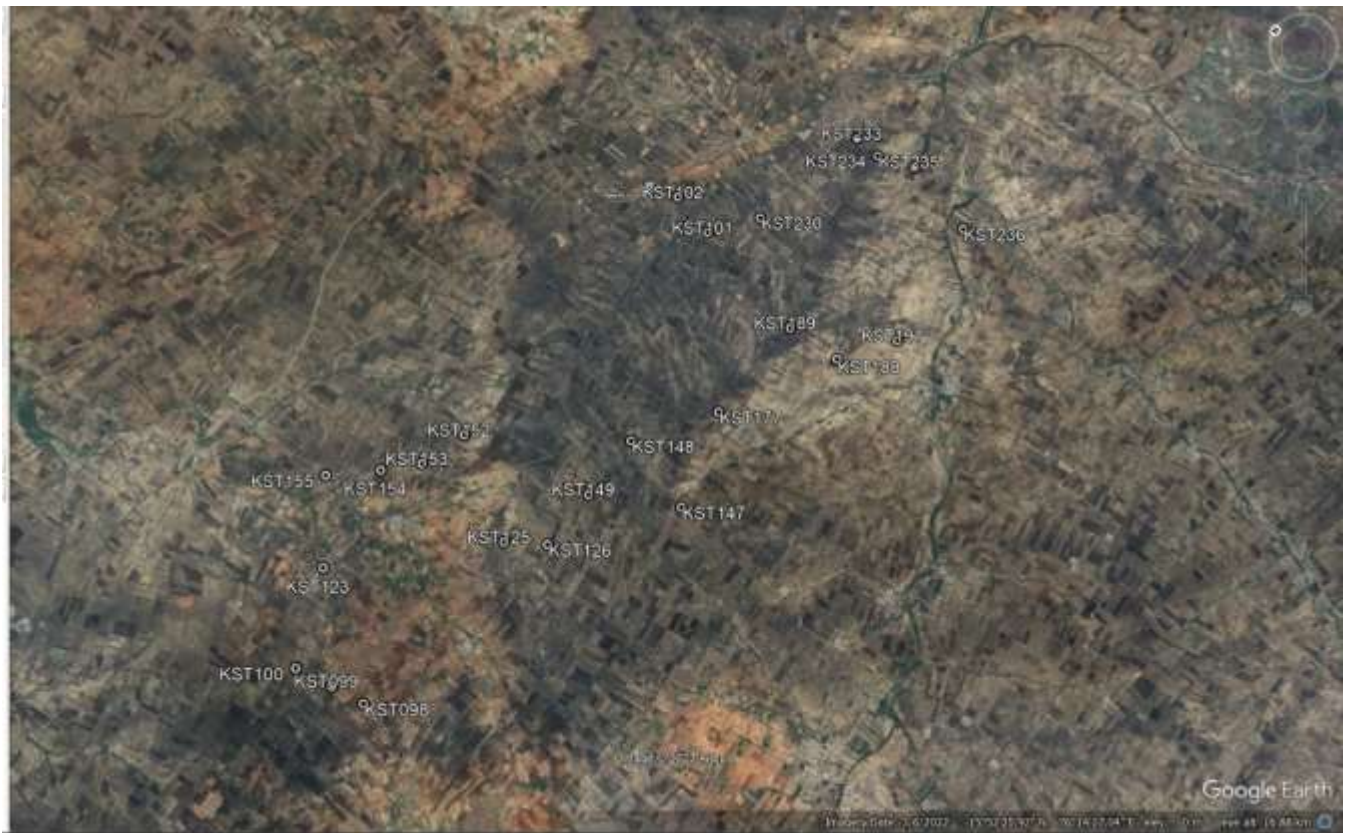


Table No.-10 shows the WTG wise latitudes and longitudes for Saroja site are confirmed below:

| WTG ID | Degrees | Minutes | Seconds |   | Degrees | Minutes | Seconds |   |
|--------|---------|---------|---------|---|---------|---------|---------|---|
| KST071 | 15.00   | 54.00   | 47.93   | N | 76.00   | 10.00   | 33.47   | E |
| KST046 | 15.00   | 53.00   | 41.36   | N | 76.00   | 9.00    | 25.87   | E |
| KST047 | 15.00   | 52.00   | 56.68   | N | 76.00   | 9.00    | 33.35   | E |
| KST048 | 15.00   | 52.00   | 36.25   | N | 76.00   | 9.00    | 32.90   | E |
| KST049 | 15.00   | 52.00   | 9.93    | N | 76.00   | 8.00    | 59.73   | E |
| KST051 | 15.00   | 55.00   | 14.79   | N | 76.00   | 9.00    | 31.75   | E |
| KST065 | 15.00   | 56.00   | 27.83   | N | 76.00   | 9.00    | 45.29   | E |
| KST066 | 15.00   | 56.00   | 2.42    | N | 76.00   | 9.00    | 25.91   | E |
| KST067 | 15.00   | 55.00   | 27.17   | N | 76.00   | 10.00   | 5.39    | E |
| KST068 | 15.00   | 55.00   | 41.20   | N | 76.00   | 10.00   | 21.71   | E |
| KST070 | 15.00   | 55.00   | 1.33    | N | 76.00   | 10.00   | 5.98    | E |
| KST103 | 15.00   | 56.00   | 15.59   | N | 76.00   | 10.00   | 51.91   | E |
| KST105 | 15.00   | 57.00   | 28.11   | N | 76.00   | 11.00   | 24.32   | E |
| KST106 | 15.00   | 56.00   | 37.51   | N | 76.00   | 10.00   | 48.88   | E |
| KST121 | 15.00   | 56.00   | 0.96    | N | 76.00   | 10.00   | 50.24   | E |

|        |       |       |       |   |       |      |      |   |
|--------|-------|-------|-------|---|-------|------|------|---|
| KST122 | 15.00 | 56.00 | 23.88 | N | 76.00 | 9.00 | 5.98 | E |
|--------|-------|-------|-------|---|-------|------|------|---|

Figure 02 below from google earth pro software shows the entire location of WTGs installed at Saroja site.



Table No.-11 shows the WTG wise latitudes and longitudes for Shanay Site are confirmed below:

| WTG ID | Degrees | Minutes | Seconds |   | Degrees | Minutes | Seconds |   |
|--------|---------|---------|---------|---|---------|---------|---------|---|
| KST072 | 15.00   | 54.00   | 29.32   | N | 76.00   | 10.00   | 40.06   | E |
| KST075 | 15.00   | 52.00   | 6.47    | N | 76.00   | 11.00   | 21.12   | E |
| KST090 | 15.00   | 52.00   | 50.70   | N | 76.00   | 11.00   | 1.47    | E |
| KST095 | 15.00   | 54.00   | 7.41    | N | 76.00   | 11.00   | 22.30   | E |

|        |       |       |       |   |       |       |       |   |
|--------|-------|-------|-------|---|-------|-------|-------|---|
| KST096 | 15.00 | 51.00 | 44.55 | N | 76.00 | 11.00 | 24.55 | E |
| KST097 | 15.00 | 54.00 | 34.51 | N | 76.00 | 11.00 | 18.52 | E |
| KST128 | 15.00 | 51.00 | 24.03 | N | 76.00 | 10.00 | 40.66 | E |
| KST130 | 15.00 | 53.00 | 44.67 | N | 76.00 | 11.00 | 16.62 | E |
| KST131 | 15.00 | 53.00 | 22.60 | N | 76.00 | 13.00 | 8.18  | E |
| KST042 | 15.00 | 51.00 | 25.02 | N | 76.00 | 11.00 | 32.37 | E |

Figure No.-03 below from google earth pro software shows the entire location of WTGs installed at Shanay site.



During the onsite audit/34/, the assessment team confirmed that there were no changes in the project design. The capacity of the project remained the same, and the project was implemented in accordance with the details provided in the registered VCS Joint PD&MR version 02 dated 17-

December-2019/3/ except for the Deviation 01 & 02 taken during current monitoring period, which was verified by the assessment team during onsite visit/34/. Thus, this confirmation was further supported by reviewing the registered VCS Joint Validation & Verification report/5/ and previous verification report/4/.

The verification team conducted a thorough assessment of the implementation status of the project activity and the installed instrumentation. This evaluation included an onsite visit/34/ to verify the technical specifications/31/. The team examined the nameplates and confirmed that the installed WTGs matched the provided specifications. Additionally, the project proponent (PP) submitted supporting documents detailing the salient features of the wind technology. The relevant information from these documents has been compiled and presented in the Table No.-12 below:

### Wind Project Technology Details

The adopted technology for the project activity involves the conversion of Mechanical (Wind) energy into electrical energy. It is important to note that this technology is environmentally friendly, as it does not generate any greenhouse gas (GHG) emissions during the electricity generation process. Furthermore, there is no transfer of technology associated with the implementation of the project activity.

**The technical specification for installed 51 WTGs is provided below:**

**Table No.- 12 The major technical specifications of the project activity**

| Wind Turbine                | Technical Specifications        |
|-----------------------------|---------------------------------|
| Rotor                       | 2.1 MW -Suzlon                  |
| Installed electrical output | 2100 kW                         |
| Diameter                    | 111.8 m                         |
| Cut-in wind speed           | 3 m/s                           |
| Rated wind speed            | 12.5 m/s                        |
| Cut-out wind speed          | 30 m/s                          |
| Rotor swept area            | 9852 m <sup>2</sup>             |
| Regulation                  | Pitch                           |
| Type                        | Asynchronous, 3 Phase Induction |
| Rated output                | 2100 kW                         |
| Operating voltage           | 690 V                           |
| Frequency                   | 50 Hz / 60 Hz                   |
| Generator                   |                                 |
| Frequency                   | 50Hz                            |

|                     |             |
|---------------------|-------------|
| Asynchronous        | Slip ring   |
| Rated voltage       | 690 / 600V  |
| Cooling system      | Air cooled  |
| <b>Transformers</b> |             |
| Make                | Prime Medin |
| Voltage             | 220KV/33KV  |
| Rated Power         | 80/100 MVA  |
| Frequency           | 50 Hz       |

Based on the interviews conducted with site personnel and the verification team's onsite visit, it has been confirmed that all quality assurance and quality control (QA/QC) procedures specified in the registered VCS Joint PD&MR/3/ have been followed during the operation of the project activity. The monitoring plan outlined in the registered VCS Joint PD&MR/3/ and the applied methodology have been effectively implemented, mentioning all the specified parameters in the current monitoring report.

During the onsite visit and discussions with the project proponent (PP) representative. It was observed that the monitoring plan has been implemented as per the registered VCS Joint PD&MR /3/and applied methodology ACM0002, Version 19.0/11/. The organizational role and responsibility as mentioned in the registered VCS Joint PD&MR /3/ is followed onsite. Meters are calibrated as per calibration frequency mentioned in registered VCS Joint PD&MR/3/.

The baseline emission parameters specified in the registered VCS Joint PD&MR/3/ have been verified, ensuring their accuracy and compliance. PP has provided a declaration/29/ as an evidence requirement defined under **section 3.24 clause 3.24.3** of VCS Standard version 4.5/7/ stating that they will not claim credits under any other GHG emission reduction scheme, including the Clean Development Mechanism (CDM), for the present monitoring period under VCS. This declaration ensures that there is no possibility of double counting.

Overall, based on the interviews, onsite visit, and verification of documents listed in Table No.- 04, it can be concluded that the project activity has adhered to the necessary procedures, monitoring parameters, emergency preparedness, and baseline emission parameters outlined in the registered VCS joint PD&MR /3/.

**Assessment team concludes the following:**

- a) Deviation 02 is requested by PP in the current monitoring period assessed by the assessment team in section 3.3 of this report as per the request made in section 3.2.2 of MR/1/. Under this deviation the metering arrangement is changed as per the current site practice which is found acceptable. Other than that, no material discrepancies between project implementation and the project description provided in the registered VCS Joint PD&MR /3/.
- b) The monitoring plan is implemented completely and monitoring system (i.e., process and schedule for obtaining, recording, compiling and analysing the monitored data and

- parameters) is appropriate as per the registered monitoring plan in VCS Joint PD&MR /3/ and MR/1/. However, Deviation 01 relates to the addition of apportioning in case of mismatch in date which is found acceptable to VKU assessment team, hence accepted. However, no apportioning procedure is applicable in the current monitoring period since start date & end date of monitoring period coincides with the start & end dates of billing period i.e. 01-January -2021 to 31-December-2022 (inclusive of both days).
- c) There are no material discrepancies between the actual monitoring system, and the monitoring plan set out in the Joint project description & Monitoring Report/3/ and the applied methodology/11/.
  - d) 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/29/.
  - e) The project has not received or sought any other form of environmental credit, or has become eligible to do so since Joint validation & verification /5/ and previous verification/4/.
  - f) The project is registered under VCS only; however, PP has submitted the declaration/29/stating, they will not claim same GHG emission reductions of the project from CDM or any other GHG programme for the current monitoring period when project is seeking to get GHG emission reduction from VCS. Assessment team also checked the REC/17/ Mechanism database of India and I-REC/18/ 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 /17/REC/)/(International-Renewable Energy Certificate Standard Standard) I-REC/18/ website and same was verified by checking in other GHG programs including GS Registry, CDM, GCC, UCR,ICR & CR-I, however PP has submitted the declaration/29/ for the same which is in line with set guidelines of section 3.24 clause 3.24.4 of VCS Standard version 4.5/7/.
  - g) 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 1.11 of MR/1/. Assessment team has verified the same during on site visit/34/ and found all the indicators to be effective and applicable for the project activity.
  - h) As per the VCS Standard Version 4.5/7/, specific guidelines are applicable when the producer(s) or retailer(s) of the impacted good or service are identified but not involved in the project or do not possess a website. The project Activity is a wind 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.
  - i) The project activity complies with 2 indicators for sustainable development in the interim approval guidelines for Clean Development Mechanism (CDM) projects from India as discussed under section 1.11 of MR. In which SDG indicator taken by PP are.

The Project activity has implemented activities that results in **2 SDG Contributions; 7.2 and 13.0.**

**1. 7.2 i.e. (Renewable energy share in the total final energy consumption)**

As a part of this project activity lifetime, a total of 1,376,542.81 MWh (492,136 MWh in 1<sup>st</sup> Joint validation and verification + 334,258 MWh in 2<sup>nd</sup> verification+ 550,148.81 MWh

current verification) of renewable electricity, has been supplied to the Indian grid by the project activity till the end of the current monitoring period.

VVB has referred previous [verification reports/4//5/](#) to verify the claims and found that the above claimed renewable electricity supplied to Indian grid to be correct.

**2. 13.0 i.e. (Tonnes of greenhouse gas emissions avoided or removed)**

Due to installation of this project activity PP has prevented the release of the emission of 1,289,542 tCO<sub>2e</sub> (461,033 tCO<sub>2e</sub> in 1<sup>st</sup> Joint validation and verification + 313,130 tCO<sub>2e</sub> in 2<sup>nd</sup> verification + 515,379 tCO<sub>2e</sub> during current MP) in the atmosphere till the end of the current monitoring period. Thus, proving that the project generates eco-friendly, GHG free power which contributes to sustainable development of the region. VVB has referred previous [verification reports /4//5/](#) to verify the claims and found that the above claimed renewable electricity supplied to Indian grid to be correct.

**Table No.-13: Audit History Table**

| Audit Type                | Monitoring Period Dates (Inclusive of both start and end dates)                          | Program | Numbers of Years                | VVB Name                                                | VCUs Issued               | Conclusion                                                                                                                                                                                                                                                                                                    |
|---------------------------|------------------------------------------------------------------------------------------|---------|---------------------------------|---------------------------------------------------------|---------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Validation + Verification | First Monitoring Period from 02-March-2018 to 30-September-2019 (Inclusive of both days) | VCS     | 01 Year<br>06 months<br>29 days | LGAI Technological Center S.A. (Applus + Certification) | 461,033 tCO <sub>2e</sub> | VKU's assessment team has conducted a cross-verification of the emission reductions reported in the monitoring report for MP 1 with the Joint Validation and Verification Report for MP 1. Additionally, the issuance of VCUs was cross-verified with the VCU's issuance record on the project's web page/16/ |
| Verification              | Second Monitoring Period from                                                            | VCS     | 01 Year<br>03 months<br>00 days | TÜV SÜD South Asia Pvt Ltd.                             | 313,130 tCO <sub>2e</sub> | VKU's assessment team has cross verified the emission reductions reported in the                                                                                                                                                                                                                              |

|                     |                                                                                             |     |                            |                             |                                   |                                                                                                                                                                                                                               |
|---------------------|---------------------------------------------------------------------------------------------|-----|----------------------------|-----------------------------|-----------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                     | 01-October-2019 to 31-December-2020 (Inclusive of both days)                                |     |                            |                             |                                   | monitoring report for MP 2 with the verification report for MP 2 and VCU's issued were cross verified from the VCU's issuance record on the project webpage/16/                                                               |
| <b>Verification</b> | Current Monitoring Period from 01-January-2021 to 31-December-2022 (Inclusive of both days) | VCS | 02 Year 00 months 00 days  | VKU Certification Pvt. Ltd. | 515,379 tCO <sub>2e</sub>         | VKU assessment team conducted the verification for current monitoring period (3 <sup>rd</sup> MP) and verified the emission reductions reported in the ER Sheet and MR via supporting documents.                              |
| <b>Total</b>        | <b>02-March-2018 to 31-December-2022 (Inclusive of both days)</b>                           | VCS | 04 Years 09 months 29 days | -                           | <b>1,289,542 tCO<sub>2e</sub></b> | The Total emission Reduction prevented by the project activity since commissioning was verified by VKU's Assessment team via previous verification reports and other supporting documents and VCU issuance record of project. |

The project has demonstrated a positive impact on various aspects of sustainable development, aligning with the criteria set by the Ministry of Environment and Forests. These impacts include economic, social, environmental, and technological benefits.

In terms of social well-being, they contribute to local economic development and improves the livelihoods of individuals in the surrounding communities. Additionally, the project may have facilitated the improvement of local infrastructure, such as government schools and hospitals in the nearby villages further enhancing the social well-being of the area.

In terms of environmental impact, the project's utilization of wind energy as a renewable source of power has significant advantages. By eliminating reliance on fossil fuels, the project reduces

greenhouse gas (GHG) emissions, helping to mitigate climate change. It also contributes to the reduction of specific pollutants such as sulphur oxides (SO<sub>x</sub>), nitrogen oxides (NO<sub>x</sub>), and suspended particulate matter (SPM), which are commonly associated with traditional thermal power generation facilities. The use of wind energy conserves limited resources and promotes sustainable energy practices.

In summary, the project's positive impact on economic development, social well-being, environmental preservation, and technological advancement aligns with the key components of sustainable development as identified by the Ministry of Environment and Forests.

The project has implemented comprehensive training programs to ensure that staff members are equipped with the necessary skills and knowledge to carry out their roles effectively and ensure the proper monitoring of emission reductions. The training activities have been conducted in accordance with the monitoring plan and have been organized for the current monitoring period. The training programs cover a range of topics to address various aspects of the project's operations. Plant helpers have received training in equipment operation, data recording, report writing, operation and maintenance, and emergency procedures, aligning with the requirements outlined in the monitoring plan.

In view of the information as verified above the assessment team is able to conclude that the project has been implemented as described in the project description/03/, All the above stated information was verified by VVB during onsite visit and site personnel interviews/33/.

## 4.2 Safeguards

### 4.2.1 No Net Harm

The renewable wind energy project has demonstrated numerous positive impacts on environmental aspects. By utilizing wind energy, the project contributes to sustainable development by providing clean and environmentally friendly power. According to Indian regulations, wind power generation through wind turbine falls under the White category of industries, which are considered practically non-polluting. As a result, the project does not require an Environmental Impact Assessment (EIA) or the consent to operate. Exemptions granted to wind power projects from environmental clearance requirements further support this fact, as per the relevant EIA notifications and Ministry of Environment & Forests OM.

As per section 04 page 31 of the report published by Ministry of New and Renewable Energy (MNRE) on September 2013 (Developmental Impacts and Sustainable Governance Aspects of Renewable Energy), "As established by life-cycle assessment, RE projects have comparatively low environmental externalities that too are limited to project development phase. The RE projects don't generate solid or liquid effluents during operations and thereby pollution of land, surface water or ground water resources is not anticipated from such projects. During the operations phase the impacts on the surrounding environment are negligible and are reversible in nature and can be mitigated by proper Environmental Management plan."

Thus, there is no harm identified from the project and hence no mitigations measures are applicable.

VKU conclude that the project has contributed in adherence to the section 3.19, clause 3.19.1 of VCS Standard version 4.5/7/. Overall, the project has demonstrated a net positive impact on environmental aspects of the project region.

#### 4.2.2 Local Stakeholder Consultation

The Project is already registered with VCS and registered VCS Joint PD & MR section 5.3 describe the Local Stakeholder Consultation Process as in-line with VCS requirement and the Stakeholder Meetings took place on **25-January-2018** at the project site in Karnataka. The following are the stakeholders for the project activity:

- Local community
- Local village administration
- Technology suppliers
- Local vendors

All the stakeholders had been invited through invitation letters and/or public notice to attend the stakeholders meeting on 25-January-2018. The meeting was organized by the project proponent with the help of the developer Suzlon Energy Ltd. All participants were informed in their local language about the salient features and environmental benefits of the project activity. In the introductory speech, the representatives of PP welcomed the gathering and gave a brief about the VCS project activity. Suzlon presented the project idea, discussed issues regarding general energy production with a focus on wind power. Afterwards, the presentation by officials was conducted, who explained in detail the aim of the meeting and the process of stakeholder evaluation. Subsequent to the introductory speech, stakeholders were explained about the electricity generation from wind power project/unit as an environmentally friendly power generation technology contributing to a reduction in GHG emissions.

The Project Proponent maintains an open line of communication with stakeholders throughout the project's crediting period. A stakeholder feedback register and a suggestion box are available at the project site, allowing stakeholders to submit comments, complaints, or suggestions thus complying to the set guidelines stated in to section 3.18, clause 3.18.4 of VCS Standard version 4.5/7/. These will be promptly addressed if found to be legitimate. However, no feedback or grievances were reported during the current monitoring period, as the renewable wind power generated by the project does not result in negative impacts.

The verification team, during the on-site assessment, interacted with local stakeholders and recorded no negative comments or feedback from them. The ongoing stakeholder inclusivity and communication mechanism were verified by the VKU assessment team during the on-site visit, and the presence of the grievance register placed by the Project Proponent at the project site was also confirmed/32/.

Overall, the project has demonstrated a commitment to continuous interaction with stakeholders and maintaining transparency throughout the project's implementation. Hereby VKU conforms that PP has placed grievance register at the entrance gate of plant site to ensure a seamless

process of recording grievances & stakeholder feedback. Process ensures that local stakeholders' concerns are considered and addressed appropriately through the grievance cell and if genuine grievance are observed they are addressed by the site person as soon as possible. Records & respective actions are recorded in the same grievance register and this procedure is found acceptable to assessment team through the interview with site person. Few grievances were found recorded for previous monitoring periods during on site visit/33/. However, in current monitoring period no grievances have been received. This procedure is found in compliance with section 3.18, clause 3.18.5 VCS Standard version 4.5/7/.

### 4.3 AFOLU-Specific Safeguards

As the project comes under the category of NON-AFOLU projects therefore this section does not apply for this verification. Hence Not Applicable.

### 4.4 Accuracy of GHG Emission Reduction and Removal Calculations

The project monitoring has been carried in accordance with the registered VCS Joint PD & MR/3/ and the monitoring report/1/. The monitoring plan laid in the registered VCS Joint PD & MR/3/ is being followed at the site/33/ and involves just one parameter to be monitored **EG<sub>y</sub>** (Electricity supplied to Grid) according to the registered monitoring plan mentioned in the monitoring report/1/ and VCS Joint PD & MR /3/. The parameter value is sourced from B-Forms/27/. The import, transmission loss and export value, which is recorded monthly in B-Forms, is properly monitored by installed, calibrated metres of 0.2s accuracy class. The verification team has carefully analysed ER sheet /2/ that was provided by PP by cross-checking the values from the B-Forms/27/, Invoices/28/ and logbooks/26/ that PP submitted and it has determined that all of the equations, conversions, and aggregations are correct.

Actual power generated by WTGs of project activity is measured using energy meters (Main & Check) located at 33/220KV pooling substation. The main meter and check meter are installed are of 0.2s accuracy class and regularly calibrated. Bulk meter is installed at 220kV at GSS end and it is used to calculate transmission loss only which is recorded in B-form directly. The details of calibration along with respective energy meter are provided in Appendix-1 of MR/1/ and Table No.-18 of this report.

Net electricity exported to grid by the wind farm is measured using KPTCL meters installed at HT end of the 33/220 KV pooling substation. Both of these are joint meter readings and are taken on monthly basis (FORM -B) by authorized officer of (GESCOM & HESCOM-KPTCL in the presence of PP or representative of PP.

The monitoring plan specified in the registered VCS Joint PD&MR/3/, is diligently being followed at the site except deviation 1 & 2 taken by PP in current monitoring period. 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.

PP has provided all the necessary data for the current monitoring period, ensuring a comprehensive and accurate assessment. The values of the parameter "**Electricity supplied to Grid (MWh)**", which were used in deriving the greenhouse gas (GHG) emission reduction, have been found to be well correlated between the data sets and the ER calculation spreadsheet/2/ provided by PP.

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

**Table No.-14 Data and Parameters Available at Validation or Ex-ante parameters**

| Parameter               | Unit                  | Description                                                     | Value                                                                                                                                                                                                                | MOV                                                                                                                                 |
|-------------------------|-----------------------|-----------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------|
| EF <sub>grid,OM,y</sub> | tCO <sub>2</sub> /MWh | Operating margin CO <sub>2</sub> emission factor of INDIAN Grid | 0.9610 is consistent with the registered VCS Joint PD & MR version 02 dated 17-December-2019/3/<br><u>Calculated from CEA database, Version 14, June 2018/14/</u>                                                    | The values are verified through desk review of the MR submitted /01/ and registered VCS Joint PD&MR /03/ which is found acceptable. |
| EF <sub>grid,BM,y</sub> | tCO <sub>2</sub> /MWh | Build margin CO <sub>2</sub> emission factor of INDIAN grid     | 0.8644 is consistent with the registered VCS Joint PD & MR version 02 dated 17-December-2019/3/ <u>Calculated from CEA database, Version 14, June 2018/14/</u>                                                       | The values are verified through desk review of the MR submitted /01/ and registered VCS Joint PD&MR /03/ which is found acceptable. |
| EF <sub>grid,CM,y</sub> | tCO <sub>2</sub> /MWh | Combined margin CO <sub>2</sub> emission factor of INDIAN grid  | 0.9368 is consistent with the registered VCS Joint PD & MR version 02 dated 17-December-2019/3/.<br>The value has been considered in accordance to the "Tool to calculate emission factor of an electricity system". | The values are verified through desk review of the MR submitted /01/ and registered VCS Joint PD&MR /03/ which is found acceptable. |

According to applicable methodology ACM0002; version 19/11/- Since project activity is a wind power project, no other kind of fossil fuel is used hence according to para 36 of the methodology zero project emissions are considered for this project activity. For leakage emissions; zero emissions are considered according to section 5.6 of the applied methodology/11/, Hence, LE<sub>y</sub>= 0 & PE<sub>y</sub>= 0.

**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 19/11/. The equation used for calculation of baseline emission as per para 42 of the applied methodology given below:

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

**Where:**

**BE<sub>y</sub>:** Baseline emissions in year y (tCO<sub>2</sub>e/yr)

**EG<sub>PJ,y</sub>:** Quantity of net electricity generation that is produced and fed into the grid as a result of the implementation of the project activity in year y (MWh/yr)

**EF<sub>grid,CM,y</sub>:** Combined margin CO<sub>2</sub> emission factor for grid connected power generation in year y calculated using the latest version of the “Tool 07: Tool to calculate the emission factor for an electricity system” (tCO<sub>2</sub>/MWh)

**Calculation of EG<sub>PJ,y</sub>**

If the project activity is the installation of a Greenfield power plant, then:

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

**Where:**

**EG<sub>PJ,y</sub>** = Quantity of net electricity generation that is produced and fed into the grid as a result of the implementation of the project activity in year y (MWh/yr)

**EG<sub>facility,y</sub>** = Quantity of net electricity generation supplied by the project plant/unit to the grid in year y (MWh/yr)

**Table No.-15; Methods and formulae set out in the project description for calculating estimated emissions for current monitoring period.<sup>2</sup>**

|                                                                                                                                                                                                       |                  |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------|
| <b>Estimated Emission Reduction as in VCS Joint PD &amp; MR/3/ for the equivalent period of the current Monitoring period from, 01-January-2021 to 31-December-2022 (Inclusive of both the days):</b> |                  |
| Monitoring Period Start Date                                                                                                                                                                          | 01-January-2021  |
| Monitoring Period End Date                                                                                                                                                                            | 31-December-2022 |

<sup>2</sup> Refer ER spreadsheet for calculation references

|                                                                                                                                                                 |                                                                                                                                                                                                |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Days in Current Monitoring period                                                                                                                               | 730 days                                                                                                                                                                                       |
| Annual VCUs as per VCS Joint PD & MR for the proposed plant capacity <b>134.4MW-</b>                                                                            | 335,085 tCO <sub>2</sub> e                                                                                                                                                                     |
| Estimated Emission Reduction as in VCS Joint PD&MR- for the equivalent period of the current Monitoring period for the proposed plant capacity <b>134.4MW-</b>  | $= (\text{Annual Estimated GHG emission reductions} / \text{Total days in a year}) * \text{days in current monitoring period}$ $= (335,085 / 365) * 730 = 670,170 \text{ tCO}_2\text{e}$       |
| Estimated Emission Reduction as in VCS Joint PD&MR- for the equivalent period of the current Monitoring period for the installed plant capacity <b>107.1MW-</b> | $= (\text{Annual Estimated GHG emission reductions} / \text{Total days in a year}) * \text{days in current monitoring period}$ $= (267,020.85 / 365) * 730 = 534,041.72 \text{ tCO}_2\text{e}$ |
| Actual Emission Reduction as per MR and ER during current Monitoring period                                                                                     | <b>515,379 tCO<sub>2</sub>e</b>                                                                                                                                                                |
| Percent difference for the proposed plant capacity <b>134.4MW-</b>                                                                                              | <b>-23.10% lower than the estimated</b>                                                                                                                                                        |
| Percent difference for the installed plant capacity <b>107.1MW-</b>                                                                                             | <b>-3.49% lower than the estimated</b>                                                                                                                                                         |

PP has submitted all the evidences like B-forms /27/and Invoices /28/ 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 19.0 /11/. 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.

## 4.5 Quality of Evidence to Determine GHG Emission Reductions and Removals

During the verification, all relevant documents were checked to assess the correctness and quality of data submitted by the project participants, which are used to determine emission reductions.

The verification team reviewed the records required for monitoring, ensuring that they were archived in accordance with the registered monitoring plan. The purpose of this review was to confirm that the project had followed the prescribed procedures for data collection, storage, and reporting. No significant issues, lack of evidence, or missing data were identified during the verification process. This indicates that the project's monitoring system is effective in ensuring the quality of the monitored data. The verification team also confirmed that the project had implemented appropriate quality assurance and quality control measures for its internal data.

By conducting a comprehensive review of the relevant documents and data, the verification team ensures the integrity and accuracy of the project's monitoring system, providing confidence in the reported emission reductions.

The only monitoring parameter in the project activity is “**Electricity supplied to Grid, EG<sub>y</sub>** (MWh). This parameter is monitored through controlled reading of meters installed at Substation and the reading of bulk energy meters installed at substation.

**Table No.- 16: Metering Voltage and Evacuation**

| S.No. | Plant Site                                       | Metering Voltage at Plant Site | Evacuation at Substation |
|-------|--------------------------------------------------|--------------------------------|--------------------------|
| 1.    | District: Bagalkot & Koppal;<br>State: Karnataka | 33 kV                          | Bagalkot & Gangavathi    |

The below tables describe how the parameter EG<sub>y</sub>, is to be measured according to the monitoring plan, has been verified to confirm that the actual monitoring complies with the monitoring plan, monitoring data has been thoroughly assessed and that the calibration requirements are met: -

**Table No.- 17: Assessment of Parameter EG<sub>y</sub> (Electricity supplied to Grid)**

| Parameter             | EG <sub>y</sub> (Electricity supplied to Grid) (MWh) |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
|-----------------------|------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Means of verification | Criteria/Requirements                                | Assessment/Observation                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
|                       | Measuring /Reading /Recording frequency              | <p>Continuous monitoring and at least monthly recording for net electricity generation.</p> <p>The quantity of net electricity generation supplied by the wind power plant to the grid is measured in megawatt-hours (MWh). The calculation of net electricity supplied to the grid is based on the measured values of "export", “Transmission Loss” and "import" of electricity, which are obtained through the dedicated energy meter installed at the pooling substation</p> <p>To determine the net electricity supplied, Monthly meter readings are taken from the main and</p> |

|  |                                                                                                                           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
|--|---------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|  |                                                                                                                           | <p>check meter installed at the substation and certified by the representatives of SEB (HESCOM &amp; GESCOM) Officials and the representatives of the project proponent.</p> <p>Net electricity supplied to the grid by each Wind project is estimated as below</p> <p>Net electricity = Export- 115%Import- Transmission loss</p>                                                                                                                                                                                                                                                                                                                                                                                                                                          |
|  | <p>Is measuring and reporting frequency in accordance with the monitoring plan and monitoring methodology? (Yes / No)</p> | <p>Yes. The reporting frequency is in line with the monitoring plan as outlined in the registered VCS Joint PD &amp; MR /3/ and monitoring methodology/11/. This was verified by assessment team during desk review and by Assessment Team during onsite visit and interviews with site personnel /33/.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
|  | <p>Monitoring equipment</p>                                                                                               | <p>Energy Meters of 0.2s accuracy class are used to monitor the electricity to the grid specifically the values of “export”, “Transmission Loss” and “import” of electricity through the dedicated HESCOM &amp; GESCOM energy meter installed at 33 KV pooling Substation &amp; 220/33kV GSS (Grid Substation).</p> <p>Yes, Energy meters are used as monitoring equipment to measure the net electricity supplied to the grid. The export, transmission Loss and import values are calculated using measured values, which are continuously measured, and recorded monthly by two sets of meters (main and check) used for measuring the electricity exported to the grid, electricity imported from the grid, transmission loss and electricity exported to the grid.</p> |

|  |                                                                                                                                                                                                                                                                                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
|--|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|  |                                                                                                                                                                                                                                                                                             | The details of meters and calibration details are provided in APPENDIX 1 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? | <p>Yes, the accuracy of the monitoring equipment (Energy Meters (EMs)) used to measure the input values such as import export and transmission loss to calculate net electricity generation value is of <b>0.2s accuracy class</b> as stated in section 4.2 of the registered VCS PD&amp;MR version 02 dated 17-December-2019/03/ and now, the energy meters used to measure the input values such as import, export and transmission loss to calculate net electricity generation value which is stated in section 4.2 of MR /1/ and it is consistent as per the Power Purchase Agreement/23/. Also, the same was verified from the energy meters installed at the site during onsite visit/34/ to the Grid Sub Station. The assessment team also checked the calibration records under the Description of equipment that confirms the accuracy class as 0.2s.</p> <p>The range i.e.- 0.2s. The range for Voltage is: 3*63.5 Volts and Current is Ib: 1A, Imax: 2A.</p> <p>These details are assessed from the calibration certificates submitted by the PP. Hence Accepted.</p> |
|  | Is the accuracy valid for the entire measuring range or do different accuracy levels apply to different measuring ranges?                                                                                                                                                                   | Yes. The accuracy of monitoring equipment's is valid for the entire range which is as per registered VCS Joint PD & MR /3/. This was assessed by checking the                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |

|  |                                                                                                                                                                                                                                                                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
|--|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|  |                                                                                                                                                                                                                                                                                | <p>calibration certificates of the energy meters /25/. Thus, the assessment team based on the calibration certificates/25/ states that the accuracy is valid for the entire measuring range.</p> <p>The calibration was carried out by Hubli Electricity Supply Company Limited. moreover, it is beyond the control of PP. this is a state electricity board. Hence, assessment team accepted the calibration certificates/25/ submitted by the PP issued by Hubli Electricity Supply Company Limited which mentioned the accuracy is within the entire measuring range.</p> |
|  | Calibration frequency /interval:                                                                                                                                                                                                                                               | <p>The calibration frequency of the meters used for the monitoring of export, import and Transmission Loss <b>shall be once in every five years</b> as per section 4.2 &amp; 4.3 of registered VCS PD&amp;MR/03/</p> <p>The assessment team confirmed the frequency while interviewing /33/ the site personnel during onsite visit/33/.</p>                                                                                                                                                                                                                                  |
|  | 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>Yes. The calibration frequency of the meters used in the project activity is in accordance with the requirements specified in section 4.2 &amp; 4.3 of the registered VCS PD&amp;MR version 02 dated 17-December-2019/3/ is in accordance with the national standards/17/ i.e. para 1 (b), Clause 18 of <u>Central Electricity Authority</u> (Installation and</p>                                                                                                                                                                                                        |

|  |                                                                                                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
|--|------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|  |                                                                                                      | <p>Operation of Meters <sup>3</sup> ) Regulations, 2006, all interface meters, including those used in the project activity, are required to be tested at least once every five years. This was also confirmed during interview with onsite personnel /33/, which is in line with VCS Standard version 4.5/7/ calibrations requirements as well as the registered monitoring plan.</p>                                                                                                                                                                                                                                                                                                                                                                                  |
|  | <p>Is the calibration of measuring equipment carried out by an accredited person or institution?</p> | <p>Yes. Calibration of the measuring equipment's is carried out by state electricity board (HESCOM and GESCOM) in presence of authorise personnel/33/ and same has been verified through calibration records and Interview with site personnel.</p> <p>The periodic calibration of both the main meters and check meters ensures the accuracy of the measurements is in compliance with the clause 3.16.5 of VCS Standard version 4.5/7/</p> <p>In accordance with the emergency procedure outlined in the registered VCS PD&amp;MR version 02/03/ and MR/01/, In case Main meter or Check meter is found to be outside the acceptable limits of accuracy or faulty or not functioning properly, it will be repaired, recalibrated or replaced as soon as possible.</p> |
|  | <p>Is(are) calibration(s) valid for the whole reporting period?</p>                                  | <p>Yes, the calibration frequency mentioned in VCS Joint PD&amp;MR version 02 dated 17-December-2019/03/ once in five years is valid for the whole reporting period i.e., 01-January -2021 to</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |

<sup>3</sup> Regulations Notified on 17-March-2006 No. 502/70/CEA/DP&D Amendments Notified on 26-June-2010 No. In presence 502/6/2009/DP&D/D-I

|                                                                                    |                                                                                                                                                                                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
|------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                                                                    |                                                                                                                                                                                  | 31-December-2022 (Inclusive of both the dates) and as per the selected frequency there are no delays in the calibration. Hence deemed satisfactory to the VVB.                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
|                                                                                    | Is the calibration carried out for a measuring range comparable with the range for which measurements have been carried out?                                                     | <p>Yes. As per the calibration certificates, error variation observed is lesser than the error variation specified. Hence, it is within the measurable range. The calibration is carried out appropriately as per the registered monitoring plan and VCS standard version 4.5/7/.</p> <p>The Project Proponent (PP) adheres to the national standards for meter calibration, as per the Central Electricity Authority (CEA) order dated 17-March-2006, which requires testing of meters every five years.</p> <p>The calibration is carried out appropriately by HESCOM &amp; GESCOM which is a state electricity board.</p> |
|                                                                                    | How were the values in the monitoring report verified?                                                                                                                           | <p>Cumulative value of electricity supplied to Grid (Wind) <b>EG<sub>y</sub></b> for entire monitoring period is reported in the monitoring report/1/, and monthly values in the ER calculation sheet/2/. The monthly values were verified by VKU's assessment team from the B-Forms/27/ issued by state utility and found to be consistent.</p> <p>Value of this parameter for the current monitoring period was verified as <b>550,148.81 MWh</b>.</p>                                                                                                                                                                     |
| If applicable, has the reported data been cross-checked with other available data? | The monthly reported values of electricity supplied to Grid (Wind) <b>EG<sub>y</sub></b> is recorded in an ER Sheet and were further checked from the B-Forms and cross verified |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |

|                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
|-------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | with the monthly invoices raised by the PP/28/ to state utility and was found to be consistent.                                                                                                                                                                                                                                                                                                                                                                               |
|                   | Does the data management ensure correct transfer of data and reporting of emission reductions and are necessary QA/QC processes in place?                                                                                                                                                                                                                                                                                                                                                                                                                                       | On site personnel interview/33/ 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 for the net electricity supplied by the project plant/unit to the grid in year y. The desk review of O&M agreement and register monitoring plan and its implementation in the current monitoring period is done to satisfactorily verify that the system is in place. |
|                   | In case project participants have temporarily not monitored the parameter, has either i) a deviation been approved by the CDM EB or ii) has the parameter been estimated as stipulated by Appendix 1 to the CDM Project Standard?                                                                                                                                                                                                                                                                                                                                               | No such issues were observed during current monitoring period.                                                                                                                                                                                                                                                                                                                                                                                                                |
| <b>Findings</b>   | CAR#03, CAR#04 were raised and resolved                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| <b>Conclusion</b> | The parameter has been monitored appropriately, in accordance with the registered monitoring plan (as per measurement methods and procedures to be applied) and applied methodology. The monitoring results were recorded consistently as per the approved frequency in the monitoring plan. The emission reduction calculation for the project activity is estimated based on the electricity supplied by the Project activity. Since 100% data was verified, the team can ascertain that the values adopted for emission reduction calculation are free from material errors. |                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |

**Calibration of meters /25/:** During the verification assessment of the project activity, accuracy of all the metering equipment have been checked and found appropriate. The installation and working conditions of the meters were checked during the site inspection and were found to be satisfactory. Details of meters are provided in below table:

Meter and Calibration details for Bundled Wind Power Project in Koppal Karnataka, are as follows-

**Table No.-18: Calibration details of meters:**

| Skeiron Renewable Energy Kushtagi Private Limited |          |          |                  |                          |                |               |
|---------------------------------------------------|----------|----------|------------------|--------------------------|----------------|---------------|
| Location                                          | Main     | Check    | Calibration Date | Due Date of calibration* | Accuracy Class | Make and Type |
| KST147                                            | 16112943 | 16112944 | 20-July-2018     | 19-July-2023             | 0.2s           | L&T ER 300P   |
| KST177                                            | 16112934 | 16112937 | 20-July-2018     | 19-July-2023             | 0.2s           | L&T ER 300P   |
| KST101                                            | 18015394 | 18015396 | 20-July-2018     | 19-July-2023             | 0.2s           | L&T ER 300P   |
| KST230                                            | 18015386 | 18015387 | 20-July-2018     | 19-July-2023             | 0.2s           | L&T ER 300P   |

| Saroja Renewables Limited |          |          |                  |                          |                |               |
|---------------------------|----------|----------|------------------|--------------------------|----------------|---------------|
| Location                  | Main     | Check    | Calibration Date | Due Date of calibration* | Accuracy Class | Make and Type |
| KST51                     | 18015411 | 18015426 | 20-July-2018     | 19-July-2023             | 0.2s           | L&T ER 300P   |
| KST67                     | 18015412 | 18015416 | 20-July-2018     | 19-July-2023             | 0.2s           | L&T ER 300P   |
| KST71                     | 18015440 | 18015441 | 20-July-2018     | 19-July-2023             | 0.2s           | L&T ER 300P   |

| Shanay Renewables Ltd. |          |          |                  |                          |                |               |
|------------------------|----------|----------|------------------|--------------------------|----------------|---------------|
| Location               | Main     | Check    | Calibration Date | Due Date of calibration* | Accuracy Class | Make and Type |
| KST130                 | 18015383 | 18015384 | 20-July-2018     | 19-July-2023             | 0.2s           | L&T ER 300P   |

|        |          |          |              |              |      |             |    |
|--------|----------|----------|--------------|--------------|------|-------------|----|
| KST131 | 18015438 | 18015379 | 20-July-2018 | 19-July-2023 | 0.2s | L&T<br>300P | ER |
|--------|----------|----------|--------------|--------------|------|-------------|----|

**Assessment on calibration:**

The energy meter calibration certificates/25/ are checked and found that the calibration details provided in the MR /1/ are correct. From the verification of above table, verification team also confirms that the energy meter calibrations are valid for the complete monitoring period i.e., from 01-January -2021 to 31-December-2022(inclusive of both the dates).

The verification team has checked all the meters and confirmed that the meters were working satisfactorily. Also, the calibration of meters is completely under purview of state utility and PP has no control over the same as confirmed through interviews of site personnel and Power Purchase agreement signed by the PP with state utility/23/.

The registered VCS Joint PD & MR/3/, MR /1/ and site audit observations confirm that the metering equipment are sealed and maintained by the state utility.

The assessment team has verified the monthly B-Forms issued by the state utility HESCOM & GESCOM (Hubli Electricity Supply Company Limited & Gulbarga Electricity Supply Company Limited) 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 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<sub>y</sub>:** Baseline emissions in year y (tCO<sub>2</sub>e/yr)

**EG<sub>PJ,y</sub>:** Quantity of net electricity generation supplied by the project plant/unit to the grid in year y (MWh)

**EF<sub>grid,CM,y</sub>:** Combined Margin CO<sub>2</sub> emission factor in year y in tons CO<sub>2</sub>/MWh

**Calculation of EG<sub>PJ,y</sub>**

If the project activity is the installation of a Greenfield power plant, then:

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

**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 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)

**Table No.-19: shows the calculation ER generation during current monitoring period vintage wise out of net electricity supplied to grid.**

| Parameter        | Unit                    | Value for year 2021               | Value for year 2022               |
|------------------|-------------------------|-----------------------------------|-----------------------------------|
| $EG_{PJ,y}$      | MWh                     | 293,385.16                        | 256,763.66                        |
| $EF_{grid,CM,y}$ | tCO <sub>2e</sub>       | 0.9368                            | 0.9368                            |
| $BE_y$           | tCO <sub>2e</sub> /year | 293,385.16*0.9368                 | 256,763.66*0.9368                 |
|                  | =                       | <b>274,843</b> (Round down value) | <b>240,536</b> (Round down value) |
| <b>Total</b>     |                         |                                   | <b>515,379 tCO<sub>2e</sub></b>   |

**Table No.-20; The site and Vintage wise generation of ERs for the current monitoring period is presented below**

| Vintage-wise calculation                          | Skeiron (Generation, MWh) | Saroja (Generation, MWh) | Shanay Site (Generation, MWh) | Total generation (MWh) |
|---------------------------------------------------|---------------------------|--------------------------|-------------------------------|------------------------|
| <b>Year</b>                                       |                           |                          |                               |                        |
| <b>2021 (01-January-2021 to 31-December-2021)</b> | 139,216.989               | 96,085.808               | 580,82.360                    | 293,385.157            |
| <b>2022 (01-January-2022 to 31-December-2022)</b> | 124,902.976               | 79,719.295               | 52,141.386                    | 256,763.657            |
| <b>Total</b>                                      |                           |                          |                               | <b>550,148.81 MWh</b>  |

The ex-ante emission reduction for this monitoring period as per registered VCS Joint PD & MR for the current monitoring period period i.e., 01-January-2021 to 31-December-2022 (Inclusive of both dates) is **670,170 tCO<sub>2e</sub>**, whereas actual emission reductions achieved are **515,379 tCO<sub>2e</sub>**, which is (-23.10%) lower than the estimated emission reductions for the current verification period, this variation is due to **non commissioning of 27.3MW** plant and low PLF and some minor breakdown of 3.19% in the current monitoring period. PP has proposed the installation of 134.4MW plant whereas the installed capacity is 107.1 MW till the current third

monitoring period, **FAR#01** is raised to confirm the further installation of plant in next verification as PP still wants to commission the rest of the plant site proposed during joint validation and verification of plant.

While comparing the achieved emission reductions value of **515,379 tCO<sub>2</sub>e** with the estimated emission reductions of **534,041.72 tCO<sub>2</sub>e** for the current monitoring as per installed capacity the emission reductions achieved (-3.49%) lower than the estimated emission reductions. These variations are mentioned in **Table No.-15** of this report.

The PLF variation as per the installed capacity and as per the proposed capacity is also presented in the tables below and their variation (refer ER sheet for more calculation reference, Individual plant wise PLF variation is also shown in the ER sheet).

**Table No.-21 presents the PLF variation as per installed capacity of 107.1 MW**

| PLF variation as per installed capacity of 107.1 MW           |                |                         |
|---------------------------------------------------------------|----------------|-------------------------|
| Estimated Generation as per registered VCS Joint PD&MR        |                | 2,84,623.00             |
| Estimated PLF as per registered VCS Joint PD&MR               |                | 30.34%                  |
| Current monitoring period                                     |                | Actual Generation (MWh) |
| 01-January-21                                                 | 31-December-22 | 5,50,149                |
| Total generation                                              |                | 5,50,149                |
| Total no. of days                                             |                | 730                     |
| Capacity                                                      |                | 107.1                   |
| Actual PLF                                                    |                | 29.32%                  |
| Percentage variation in PLF w.r.t. registered VCS Joint PD&MR |                | -3.35%                  |

**Table No.-22 presents the PLF variation as per proposed capacity of 134.4 MW**

| PLF variation as per proposed capacity of 134.4 MW        |                |                         |
|-----------------------------------------------------------|----------------|-------------------------|
| Estimated Generation as per registered VCS Joint PD&MR    |                | 3,57,692.00             |
| Estimated PLF as per registered VCS Joint PD&MR           |                | 30.38%                  |
| Current monitoring period                                 |                | Actual Generation (MWh) |
| 01-January-21                                             | 31-December-22 | 5,50,148.81             |
| Total generation                                          |                | 5,50,148.81             |
| Total no. of days                                         |                | 730                     |
| Capacity                                                  |                | 134.5                   |
| Actual PLF                                                |                | 23.35%                  |
| Percentage variation in PLF w.r.t. registered Joint PD&MR |                | -23.15%                 |

Assessment team verified the same via PLF analysis mentioned in ER sheet/2/ and an independent assessment of the PLF as stated in table above, this is evident from the calculation that the achieved PLF is lower than the estimated PLF but it is within the benchmark value hence it is accepted by VKU assessment team.

The assessment team has verified the information flow (from data generation, aggregation, to recording, calculation and reporting for these parameters including the values) in the MR/1/. The emission reductions are purely based on the net electricity generated and exported from the WTGs.

PP has provided all the sufficient data for current monitoring period. The values of the parameter net electricity generation supplied to the grid by each phase used in deriving the GHG emission reduction could be very well correlated between the data sets and ER spreadsheet/2/ provided by PP. The verification of each monitoring parameter has been discussed later in section 4.5.

In section 4.5 of this report and section 5.4 of MR /1/ calculations have been stated which can be further compiled in ER/2/ that has been verified by the assessment team from B-Forms issued to PP by State utility/27/ and further cross verified from the invoices/28/ and daily generation report available on the site/26/submitted to assessment team by PP.

The verification team attests to the correctness of the formulas and methodologies used to compute baseline emissions as per Para 42-page no. 33 of the Baseline and Monitoring Methodology ACM0002 “Grid Connected Renewable Electricity Generation from renewable sources” Version 19/11/. The applied default values, emission factors, and assumptions in the calculations are all reasonable.

Hence VKU states that the calculation method and formulae used in calculating baseline emission is in compliance to the methodology used /11/. The calculation method and formulae used in calculating baseline emission is in compliance to the Methodology used i.e., ACM0002 Version 19.0/11/ furthermore in conformance with section 3.15, clause 3.15.1//3.15.2//3.15.3//3.15.4 of VCS Standard version 4.5/7/.

Since project activity is a wind power project, leakage emission and project emission have been considered as zero. The assumptions, emission factors and default values that were applied in the calculations are justified.

All the data were made available and have been monitored as per required monitoring frequency. The means of verification for the values of parameters, used for baseline emission calculation, is described above.

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 4.5/7/ and that the verification of the GHG statement was conducted in accordance with ISO 14064-3; 2019.

## 4.6 Non-Permanence Risk Analysis

This project is not an AFOLU project, hence not applicable.

## 5 VERIFICATION OPINION

VKU Certification Pvt. Ltd. has performed the third verification of the first renewable crediting period (02-March-2018 to 01-March-2028 which is inclusive of both dates) reported for the project activity “**Bundled Wind Power Project in Koppal Karnataka**”, VCS Registry Project ID 1993, for the monitoring period 01-January -2021 to 31-December-2022 (Inclusive of both days), with regard to the relevant requirements for VCS activities. As described in the report from section 1 to 4, VKU has performed the entire verification according to the verification criteria for projects and their GHG emission reductions or removals set out in VCS standard Version 4.5/7/.

The project participants of the “Bundled Wind Power Project in Koppal Karnataka” is responsible for:

- Preparation of greenhouses gas emissions data and the reporting of greenhouse gas emission reductions from the project on the basis set out in the monitoring, contained in the registered VCS Joint PD & MR version 2.0 dated 17-December-2019/3/
- Development and maintenance of records and reporting procedures in accordance with that plan, including calculation and determination of greenhouse gas emission reductions of the project.

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

- The project has been implemented and operated as per the registered VCS Joint PD & MR /3/.
- The monitoring report and other supporting documents provided are complete and verifiable and in accordance with the applicable VCS Standard version 4.5/7/ requirements;
- The monitoring is in place as per the applied baseline and monitoring methodology
- The monitoring plan in the registered VCS Joint PD & MR version 02 dated 17-December-2019/3/ is as per the applied baseline and monitoring methodology/11/.

It is the responsibility of VKU to express an independent verification opinion about the project’s conformity with requirements of VCS Standard version 4.5/7/ and GHG program applied, on the reported greenhouse gas emission reductions from the project.

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 level of assurance** that reported GHG emission reductions are fairly stated.

The GHG emission reductions are calculated on the basis of approved methodology ACM0002 version 19.0/11/ and the monitoring plan included in the registered VCS Joint PD & MR version 2.0 dated 17-December-2019/3/.

It is VKU's opinion, the GHG emission reduction stated in the monitoring report version 5.0 dated 21-December-2023 of for the **"Bundled Wind Power Project in Koppal Karnataka"** for the period **01-January -2021 to 31-December-2022** (Inclusive of both dates) are fairly stated in Table No.- 23 below:

**Table No.- 23: The verification opinion is stated below**

| Opinion                                                                                                                                         | Final Documents                                                                                                         | Monitoring Period                                                  | Emission Reductions achieved    | Remarks                                                                                                                                                                                                                                          |
|-------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------|---------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Positive opinion <input checked="" type="checkbox"/><br>Negative Opinion <input type="checkbox"/>                                               | Monitoring Report Version 5.0 dated 21-December-2023<br><br>Emission Reduction Sheet Version 2.3 dated 21-December-2023 | 01-January -2021 to 31-December-2022 (Inclusive of both the dates) | <b>515,379 tCO<sub>2e</sub></b> | The GHG emission reductions are calculated on the basis of approved methodology ACM0002: Grid-connected electricity generation from renewable sources -- Version 19/11/ and the monitoring plan included in the registered VCS Joint PD & MR /3/ |
| Adverse Opinion <input type="checkbox"/><br>Unmodified Opinion <input checked="" type="checkbox"/><br>Modified Opinion <input type="checkbox"/> |                                                                                                                         |                                                                    |                                 |                                                                                                                                                                                                                                                  |

Hence VKU is able to certify that the emission reduction from the project during the current monitoring period 01-January -2021 to 31-December-2022 (Inclusive of both dates) amounts to **515,379 tCO<sub>2e</sub>** assessed in line with the applicable VCS requirements set out in section 3.15 of VCS Standard version 4.5/7/ and that the verification of the GHG statement was conducted in accordance with ISO 14064-3; 2019.

Hence the VVB hereby issue a positive and unmodified opinion in accordance with ISO 14064-3:2019, and ISO 14065:2020 Section 09- Clause 9.7.1.6 & 9.7.2. This opinion also meets the requirement stipulated under ISO/IEC 17029:2019 section 9.7 with a reasonable level of assurance for the reported GHG emission reduction data which is free from any material misstatement and is sufficiently supported by evidences provided to VVB by PP tabulated in Table No.-04 of this report.

The following table shows the Net Emission Reduction from 01-January -2021 to 31-December-2022 (Inclusive of both dates) of first crediting period. Verified GHG emission reductions and removals in the above verification period:

**Table No.-24: Verified GHG emission reductions and removals in the above verification period: broken down by calendar year:**

| 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) |
|------------------------------------------------------------|-----------------------------------------------------|----------------------------------------------------|----------------------------------------|--------------------------------------------------------------|
| <b>Year 2021</b><br>(01-January -2021 to 31-December-2021) | 274,843                                             | 0                                                  | 0                                      | 274,843                                                      |
| <b>Year 2022</b><br>(01-January -2022 to 31-December-2022) | 240,536                                             | 0                                                  | 0                                      | 240,536                                                      |
| <b>Total</b>                                               | <b>515,379</b>                                      | <b>0</b>                                           | <b>0</b>                               | <b>515,379</b>                                               |

**Table No.-25: Difference in Ex-ante and achieved emissions**

| Year                                                      | Ex-ante emissions reductions /removals                                                                                                       | Achieved emissions reductions /removals | Percent difference    | Justification for the difference                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
|-----------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------|-----------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Year 2021</b><br>(01-January-2021 to 31-December-2021) | 335,085 tCO <sub>2</sub> e (as per proposed capacity of 134.4MW)<br><br>267,020.85 tCO <sub>2</sub> e (as per installed capacity of 107.1MW) | 274,843 tCO <sub>2</sub> e              | -17.97%<br><br>+2.92% | During assessment of MR/1/ and ER/2/ it was observed that estimated emission reduction to be achieved from the project activity for the current monitoring period is 670,170 tCO <sub>2</sub> e, whereas actual emission reductions achieved are 515,379 tCO <sub>2</sub> e, which is 23.10% lower than the estimated emission reductions. Similarly, as per the installed capacity of 107.1 MW the estimated emission reduction estimated from the project activity for the current monitoring period is 534,041.72 tCO <sub>2</sub> e, whereas actual emission reductions |

|                                                                           |                                                                                               |                                     |         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
|---------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------|-------------------------------------|---------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Year 2022<br/>(01-January-<br/>2022 to 31-<br/>December-<br/>2022)</b> | 335,085<br>tCO <sub>2e</sub> (as<br>per<br>proposed<br>capacity of<br>134.4MW)                | 240,536<br>tCO <sub>2e</sub>        | -28.21% | <p>achieved are 515,379 tCO<sub>2e</sub>, which is approximately 3.49 % lower than the estimated emission reductions.</p> <p>The reductions in actual emission reduction is majorly due to non-commissioning of 27.3 MW and during the current monitoring period, the plant underwent some maintenance and some minor breakdowns of 28,572 hours/3.19%. The generation of electricity depends upon many other climatic conditions, and not within the control of the project participant. The generation is also less due to variation in climate conditions such as wind pattern and flow rate throughout the year which are beyond the control of the Project Proponent.</p> |
|                                                                           | 267,020.<br>85 tCO <sub>2e</sub><br>(as per<br>proposed<br>capacity of<br>107.1MW)            |                                     | -9.91%  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| <b>Total</b>                                                              | <b>670,170<br/>tCO<sub>2e</sub> (as<br/>per<br/>proposed<br/>capacity of<br/>134.4MW)</b>     | <b>515,379<br/>tCO<sub>2e</sub></b> | -23.10% | <p>Hence the actual emission reductions are 23.10% lower as compared to the estimated emission reductions. However, it does not breach the breaching value and the project IRR remain within the benchmark with the said decrease. Therefore, the decrease in GHG accounting is acceptable. Assessment team verified the same via PLF analysis mentioned in ER sheet/2/. Hence Accepted.</p>                                                                                                                                                                                                                                                                                   |
|                                                                           | <b>534,041.<br/>72 tCO<sub>2e</sub><br/>(as per<br/>proposed<br/>capacity of<br/>107.1MW)</b> |                                     | -3.49%  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |

# APPENDIX A: ABBREVIATIONS

| Abbreviations     | Full texts                                            |
|-------------------|-------------------------------------------------------|
| BE                | Baseline Emissions                                    |
| CAR               | Corrective Action Request                             |
| CDM               | Clean Development Mechanism                           |
| CER(s)            | Certified Emission Reduction(s)                       |
| CL                | Clarification Request                                 |
| CO <sub>2</sub>   | Carbon dioxide                                        |
| CO <sub>2</sub> e | Carbon dioxide equivalent                             |
| DISCOM            | Distribution Company                                  |
| EB                | Executive Board                                       |
| EF                | Emission Factor                                       |
| ER                | Emission Reductions                                   |
| FAR               | Forward Action Request                                |
| GHG(s)            | Greenhouse gas(es)                                    |
| GWP               | Global Warming Potential                              |
| IPCC              | Intergovernmental Panel on Climate Change             |
| KPTCL             | Andhra Pradesh Power Transmission Corporation Limited |
| MoV               | Means of Verification                                 |
| MR                | Monitoring Report                                     |
| NGO               | Non-governmental Organization                         |
| ODA               | Official Development Assistance                       |
| PD                | Project Description                                   |
| PE                | Project Emission                                      |
| PP(s)             | Project Participant(s)                                |
| Ref.              | Document Reference                                    |
| SS(s)             | Sectoral Scope(s)                                     |
| TA(s)             | Technical Area(s)                                     |
| UNFCCC            | United Nations Framework Convention on Climate Change |
| VCU               | Verified Carbon Unit                                  |
| VKU               | VKU Certification Ltd.                                |
| VCS               | Verified Carbon Standard                              |
| VVS               | Validation and Verification Standard                  |
| VB                | Validation and verification body                      |

# APPENDIX B: AUDIT FINDINGS

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                  |                                                                             |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------|-----------------------------------------------------------------------------|
| <b>Type</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | <b>Date</b>      | 28-June-2023                                                                |
| CAR#01                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | <b>Reference</b> | Section 1.1, 1.3, 1.6, 1.7, 1.11 of Ver protocol:<br>Cover MR and Section 1 |
| <b>Description of the Non-Conformance</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                  |                                                                             |
| <p><b>1. Content Page;</b></p> <p>1.1 Verification Team finds that “page numbers” are not mentioned in footer of entire MR as per requirements of VCS MR template version 4.2.</p> <p>1.2 Verification team finds during desk review that the font size and font style is inconsistent with the requirements of VCS MR template version 4.2.</p> <p><b>2. Section 1.1 of MR;</b></p> <p>2.1 Verification Team finds that estimated Emission Reduction and estimated displacement amount of energy, under subsection 1.1 of the MR, version 01 is inconsistent with the registered VCS Joint PD&amp;MR, version 2 dated: 17/12/2019.</p> <p>2.2 Verification team identified during desk review that the format of providing the year is not in accordance with the VCS MR template version 4.2.</p> <p><b>3. Section 1.3 of MR;</b></p> <p>3.1 PP is requested to update the columns of Telephone and Email information in table of section 1.3 of MR version 01.</p> <p><b>4. Section 1.6 of MR;</b></p> <p>4.1 Which number of crediting period is valid for the current monitoring period?</p> <p><b>5. Section 1.7 of MR;</b></p> <p>5.1 As per the requirements of VCS MR template and para (1) of section 3.11.1 of VCS standard version 4.4; the overall Geocoordinate for the project activity are required which is inconsistent with the MR and VCS Joint PD &amp; MR version 3.</p> <p><b>6. Section 1.11 of MR;</b></p> <p>6.1 Verification Team finds that the emission reduction and net electricity generation values mentioned under section 1.11 of MR for current monitoring period are inconsistent with the ER sheet “ER_1993_version 1” submitted by the PP</p> <p>6.2 PP to provide the reference for the values mention in the column of Contribution over Project lifetime</p> |                  |                                                                             |

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |  |               |                |             |                   |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|---------------|----------------|-------------|-------------------|
| 6.3 Verification Team finds the SDG target number is not mentioned correctly. Also, there is inconsistency between the definition of mentioned SDG indicator in MR version 01 under the table 01 and SDG link provided in MR template version 4.2 under section 1.11.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  |               |                |             |                   |
| <b>1st Response from PP</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |  | <b>Date</b>   | 25-August-2023 |             |                   |
| <p><b>1. Content Page;</b></p> <p>1.1 The page number is updated in Revised MR Version 2.0</p> <p>1.2 The font size and font style are made consistent with the requirements of VCS MR template version 4.2</p> <p><b>2. Section 1.1 of MR;</b></p> <p>2.1 As per registered PDMR, “the project replaced anthropogenic emissions of greenhouse gases (GHG’s) estimated to be approximately 335,085 tCO2e per annum, thereon displacing 357,692 MWh/year amount of electricity from the generation-mix of power plants connected to the Indian electricity grid, which is mainly dominated by thermal/ fossil fuel-based power plant”. The details are revised in MR Version 2.0.</p> <p>2.2 The format for date is corrected in MR Version 2.0 as per VCS MR template version 4.2.</p> <p><b>3. Section 1.3 of MR;</b></p> <p>3.1 The columns of Telephone and Email information in table of section 1.3 is updated in MR Version 2.0.</p> <p><b>4. Section 1.6 of MR;</b></p> <p>4.1 The current monitoring period lies in first crediting period. The details are added in MR Version 2.0.</p> <p><b>5. Section 1.7 of MR;</b></p> <p>5.1 The geo-coordinates are added in section 1.7 of revised MR Version 2.0</p> <p><b>6. Section 1.11 of MR;</b></p> <p>6.1 The emission reduction and net electricity generation values mentioned under section 1.11 of MR are made consistent with ER 1993 version 2.0 in revised MR version 2.0.</p> <p>6.2 reference for the values mention in the column of Contribution over Project lifetime is incorporated in MR version 2.0.</p> <p>6.3 The inconsistencies are corrected in MR Version 2.0</p> |  |               |                |             |                   |
| <b>1st Assessment by Audit Team</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |  | <b>Status</b> | Closed         | <b>Date</b> | 10-September-2023 |
| <p><b>1. Content Page;</b></p> <p>1.1 PP has updated page number throughout the MR. #CLOSED</p> <p>1.2 PP has updated font size and font style as per VCS MR template version 4.2 #CLOSED</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |  |               |                |             |                   |

**2. Section 1.1 of MR;**

2.1 Assessment team found that PP has updated estimated Emission Reduction and estimated displacement amount of energy as mentioned in registered VCS Joint PD&MR, version 2 dated: 17/12/2019 #CLOSED

2.2 PP has updated format of date throughout the MR. CLOSED

**3. Section 1.3 of MR;**

3.1 PP has updated the columns of Telephone and Email information in table of section 1.3 of MR version 01. #CLOSED

**4. Section 1.6 of MR;**

4.1 PP has updated, crediting period no. for current monitoring period. #CLOSED

**5. Section 1.7 of MR;**

5.1 Assessment Team found that PP has updated geocoordinate of the project activity as per MR and VCS Joint PD & MR version 02. #CLOSED

**6. Section 1.11 of MR;**

6.1 PP has mentioned the correct value of emission reduction in MR according to ER Sheet provided by PP. #CLOSED

6.2 PP has provided weblink. #CLOSED

6.3 Assessment team found that PP has mentioned correct SDG no. as per mentioned in MR version 4.2 and under section 1.11. #CLOSED

**Hence CAR#01 is Closed**

| Type                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | Date      | 28-June-2023                                                    |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------|-----------------------------------------------------------------|
| CAR#02                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | Reference | Section 2.2, 3.2, 3.2.1, 3.2.2 of Ver protocol: Section 2 and 3 |
| <b>Description of the Non-Conformance</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |           |                                                                 |
| <p><b>1. Section 2.2 of MR;</b></p> <p>1.1 During site visit, team has identified some Stake holder comments in the grievance register kept at site applicable for current monitoring period, how this section is not describing those comments.</p> <p><b>2. Section 3.1 of MR;</b></p> <p>2.1 What is the approximate time of such breakdowns and does this have any impact on the GHG emission reduction and removals of the project. Also substantiate the same with the breakdown records for the plant sites.</p> |           |                                                                 |

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |  |               |        |                |                   |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|---------------|--------|----------------|-------------------|
| <b>3. Section 3.2.1 &amp; 3.2.2 of MR;</b><br><br>3.1 Is there any methodology deviation/project description deviation applicable in current monitoring period or previous monitoring periods as per the VCS MR template guidelines.                                                                                                                                                                                                                                                                                                                                                                          |  |               |        |                |                   |
| <b>1<sup>st</sup> Response from PP</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |  | <b>Date</b>   |        | 25-August-2023 |                   |
| <b>1. Section 2.2 of MR;</b><br><br>1.1 No issues and grievance for the project activity has been identified during the current monitoring period the copy of grievance register is submitted with the responses to cross check the same.<br><br><b>2. Section 3.1 of MR;</b><br><br>2.1 The breakdown details are added as Annexure-2 in MR Version 2.0<br><br><b>3. Section 3.2.1 &amp; 3.2.2 of MR;</b><br><br>3.1 There is no methodology deviation/project description deviation applicable in current monitoring period or previous monitoring periods.                                                 |  |               |        |                |                   |
| <b>1<sup>st</sup> Assessment by Audit Team</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |  | <b>Status</b> | Closed | <b>Date</b>    | 10-September-2023 |
| <b>1. Section 2.2 of MR;</b><br><br>1.1 Assessment team found during verification PP has described reason behind that some comment was raised during current monitoring period but that comment does not related grievances and evidence provided also. #CLOSED<br><br><b>2. Section 3.1 of MR;</b><br><br>2.1 PP has updated breakdown details in MR Appendix-2. #CLOSED<br><br><b>3. Section 3.2.1 &amp; 3.2.2 of MR;</b><br><br>3.1 PP has mentioned regarding no methodology deviation/project description deviation with reference for previous monitoring period. #CLOSED<br><br>Hence CAR#02 is Closed |  |               |        |                |                   |

|                                           |  |                  |                                             |
|-------------------------------------------|--|------------------|---------------------------------------------|
| <b>Type</b>                               |  | <b>Date</b>      | 28-June-2023                                |
| CAR#03                                    |  | <b>Reference</b> | Section 4.1, 4.2 of Ver protocol: Section 4 |
| <b>Description of the Non-Conformance</b> |  |                  |                                             |

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |               |             |                |                   |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------|-------------|----------------|-------------------|
| <p><b>1. Section 4.1 of MR;</b></p> <p>1.1 Verification team finds inconsistency between the registered Joint PDMR, version 2, dated: 17/12/2019 and current MR version 01, in the column “Purpose of Data” for parameter EF<sub>grid,OM,y</sub>.</p> <p><b>2. Section 4.2 of MR;</b></p> <p>2.1 Assessment team finds during site visit that the frequency of calibration to be once in six months as per the circular released by KPTCL dated 07/08/2018 and same is practised at the site, how the frequency of 5 years is stated in MR?</p>                                                                                    |               |             |                |                   |
| <b>1<sup>st</sup> Response from PP</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |               | <b>Date</b> | 25-August-2023 |                   |
| <p><b>1. Section 4.1 of MR;</b></p> <p>1.1 In MR version 02, the column “Purpose of Data” for parameter EF<sub>grid,OM,y</sub>. is made consistent with registered Joint PDMR, version 2, dated: 17/12/2019.</p> <p><b>2. Section 4.2 of MR;</b></p> <p>2.1 As per registered VCS Joint PD Version 2.0, calibration frequency is once in 5 years, and it is valid throughout the crediting period hence the frequency of 5 years is applied. However, the calibration is carried out by HESCOM in every six months which is a conservative approach, but it is to be noted that calibration of meters is not in control of PP.</p> |               |             |                |                   |
| <b>1<sup>st</sup> Assessment by Audit Team</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | <b>Status</b> | Closed      | <b>Date</b>    | 10-September-2023 |
| <p><b>1. Section 4.1 of MR;</b></p> <p>1.1 PP has updated “Purpose of Data” for parameter EF<sub>grid,OM,y</sub> as per mentioned Joint PDMR, version 2, dated: 17/12/2019. #CLOSED</p> <p><b>2. Section 4.2 of MR;</b></p> <p>2.1 PP has given justified reason which is accepted by AT as mentioned calibration frequency of once in 5 years in VCS Joint PD&amp;MR Version 2.0. #CLOSED</p> <p>Hence CAR#03 is Closed</p>                                                                                                                                                                                                       |               |             |                |                   |

|                                           |                  |                                                             |
|-------------------------------------------|------------------|-------------------------------------------------------------|
| <b>Type</b>                               | <b>Date</b>      | 28-June-2023                                                |
| CAR#04                                    | <b>Reference</b> | Section 5.1, 5.4, Appendix 01 of Ver protocol:<br>Section 5 |
| <b>Description of the Non-Conformance</b> |                  |                                                             |

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |  |               |                |             |                   |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|---------------|----------------|-------------|-------------------|
| <p><b>1. Section 5.1 of MR;</b></p> <p>1.1 What is the reference of this formula used in this section.</p> <p><b>2. Section 5.4 of MR;</b></p> <p>2.1 As the variation is more than 10% in current monitoring period as specified in registered VCS Joint PD &amp; MR version 02 dated 17/12/2019, how much is the impact of breakdown on emission reductions?<br/>Also, provide the wind pattern and flow rate applicable for current monitoring period to verify the claim.</p> <p><b>3. Appendix 01 of MR;</b></p> <p>3.1 During site visit, assessment team observed that the calibration of meters is being done every six months, and complete trail of the same is available at the site, kindly provide the complete trail of calibration with supporting documents.</p> |  |               |                |             |                   |
| <b>1st Response from PP</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |  | <b>Date</b>   | 25-August-2023 |             |                   |
| <p><b>1. Section 5.1 of MR;</b></p> <p>1.1 The reference for the formula is ACM0002 Version 19.9 and same is incorporated in MR version 2.0.</p> <p><b>2. Section 5.4 of MR;</b></p> <p>2.1 Breakdown details and wind pattern and flow rate details is provided in the responses to demonstrate the more variations.</p> <p><b>3. Appendix 01 of MR;</b></p> <p>3.1 As per registered VCS Joint PD Version 2.0, calibration frequency is once in 5 years, and it is valid throughout the crediting period hence the frequency of 5 years is applied. However, the calibration is carried out by HESCOM in every six months which is a conservative approach, but it is to be noted that calibration of meters is not in control of PP.</p>                                      |  |               |                |             |                   |
| <b>1st Assessment by Audit Team</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |  | <b>Status</b> | Closed         | <b>Date</b> | 10-September-2023 |
| <p><b>1. Section 5.1 of MR;</b></p> <p>1.1 PP has mentioned the reference of the formula used. #CLOSED</p> <p><b>2. Section 5.4 of MR;</b></p> <p>2.1 Assessment team found that PP has provided and mentioned wind pattern and flow rate for current monitoring period. #CLOSED</p> <p><b>3. Appendix 01 of MR;</b></p>                                                                                                                                                                                                                                                                                                                                                                                                                                                         |  |               |                |             |                   |

2.1 PP has given justified reason which is accepted by AT as mentioned calibration frequency of once in 5 years in VCS Joint PD&MR Version 2.0. #CLOSED

Hence CAR#04 is Closed

| Type                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | Date      | 10-October-2023                                 |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------|-------------------------------------------------|
| CAR#05                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | Reference | Section of Ver protocol:<br>Section 1,3,4 and 5 |
| Description of the Non-Conformance                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |           |                                                 |
| <p><b>1. Section 1.1 of MR;</b></p> <p>1.1 Inconsistency found in the capacity mentioned in MR.</p> <p><b>2. Section 1.8 of MR;</b></p> <p>2.1 Please provide the basis for choosing the scale.<br/>2.2 Reference to ICR or iREC is not provided.</p> <p><b>3. Section 2.2 of MR;</b></p> <p>3.1 As per MR template PP needs to provide dates of announcements or meetings, periods during which input was sought prior to verification.</p> <p><b>4. Section 3.1 of MR;</b></p> <p>6.1 PP is requested to state the voltage generated at the generator end of WTG.<br/>6.2 Technical specification of the generator step-up transformer located at the WTG end<br/>6.3 PP is requested to provide summary of the breakdown or maintenance hours as percentage of the operating hours.</p> <p><b>5. Section 4.1 of MR;</b></p> <p>7.1 Sentence is incomplete in the column “Justification of choice of data or description of measurement methods and procedures applied”.</p> <p><b>6. Section 4.2 of MR;</b></p> <p>6.1 Please use consistent terms to describe the wind turbine generators<br/>6.2 In order to proportionally divide the metered energy among the customers, one more meter reading is required. How is this performed at site.<br/>6.3 Please provide the complete technical specifications of the monitoring equipment or meter</p> <p><b>7. Section 4.3 of MR;</b></p> <p>7.1 As per the SLD, the energy generated by the PP is measured at the pooling substation, however as per the description for the monitoring parameter, it is done</p> |           |                                                 |

by the meters at the substation. Besides PP to clarify how energy measured by the meters at feeder (shared with other WTGs) are proportionally divided)

7.2 If the measuring meters is damaged or destroyed due to manmade or natural calamities how is the energy measured during this situation as such situations are clearly emergency situations.

**8. Section 5.4 of MR;**

8.1 PP to compare the equivalent ER for comparison purposes as comparing emissions from planned commissioned capacity against the actual installed capacity is not conservative. Besides the comparison is disingenuous.

8.2 PP to provide the breakup of the breakdown hours in percentage and the reduction of PLF from the one mentioned in the registered VCS Joint PD&MR.

| 1 <sup>st</sup> Response from PP                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | Date | 23-October-2023 |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|-----------------|
| <p><b>1. In section 1.1 of MR;</b></p> <p><b>1.1</b> 107.1 MW is the capacity of the commissioned plant out of total capacity 134.4 MW and the remaining is yet to be commissioned.</p> <p><b>2. In section 1.8 of MR;</b></p> <p><b>2.1</b> As per CDM glossary SSC CDM project activity means Renewable energy project activities which have an output capacity up to 15 megawatts (or an appropriate equivalent), in accordance with the CDM rules and requirements. The project activity of more than 15 MW are considered as large-scale CDM project activity and the same has been provided in the weblink.</p> <p><b>2.2</b> The weblink has been already been provided in the given section of the monitoring report version 3.0.</p> <p><b>3. In section 2.2 of MR;</b></p> <p><b>3.1</b> The dates of announcements or meetings, periods during which input was sought prior to verification all the details have been provided in the monitoring report version 3.0.</p> <p><b>4. In section 3.1 of MR;</b></p> <p><b>4.1</b> The voltage generated at the generator end of WTG has been stated.</p> <p><b>4.2</b> The technical description of the generator has been provided.</p> <p><b>4.3</b> The summary of the breakdown or maintenance hours as percentage of the operating hours has been described in the table of the given section 3.1 of the monitoring report version 3.0.</p> <p><b>5. In section 4.1 of MR;</b></p> <p><b>5.1</b> The sentence has been reframed.</p> <p><b>6. In section 4.2 of MR;</b></p> <p><b>6.1</b> It has been made consistent throughout the monitoring report version 3.0.</p> <p><b>6.2</b> In order to proportionally divide the metered energy among the customers controller meter is used and the same information of another reading (controller meter) is added.</p> <p><b>6.3</b> The complete technical specifications of the meter have been provided.</p> |      |                 |

**7. In section 4.3 of MR;**

**7.1** The billing meter is located at PSS and it has been in this section as well as in monitoring table. In order to proportionally divide the metered energy among the customers a control meter is used.

**7.2** If the measuring meters is damaged or destroyed due to manmade or natural calamities than it will be repaired, recalibrated or replaced as soon as possible.

**8. In section 5.4 of MR;**

**8.1** The comparison of ER of the registered and the installed capacity of the plant has been demonstrated separately and has been revised in the given table.

**8.2** The breakdown details have been described in annexure of the monitoring report version 3.0 and the PLF calculation has been done in the ER sheet and it is not exceeding the breaching value.

|                                                |               |      |             |                 |
|------------------------------------------------|---------------|------|-------------|-----------------|
| <b>1<sup>st</sup> Assessment by Audit Team</b> | <b>Status</b> | Open | <b>Date</b> | 24-October-2023 |
|------------------------------------------------|---------------|------|-------------|-----------------|

**1. In section 1.1 of MR;**

**1.1** Assessment team confirms that the installed capacity of plant is 107.1 MW and this is same since project registration, rest 27.3 MW is yet to be commissioned and this needs to be confirmed in the next subsequent verifications. This has been converted into FAR#01.

**2. In section 1.8 of MR;**

**2.1** Assessment team confirms that PP has provided the basis for choosing the scale of project as per CDM glossary SSC CDM project activity, which is found acceptable, hence accepted.

**2.2** Assessment team confirms that PP has provided the weblink in the revised MR in the given section of the revised MR, hence accepted.

**3. In section 2.2 of MR;**

**3.1** Assessment team confirms that PP has already provided these dates in the text of this section and it is found consistent with the registered VCS Joint PD&MR, hence accepted.

**4. In section 3.1 of MR;**

**4.1** Assessment team confirms that PP has provided the voltage generated at the generator end of WTG, hence accepted.

**4.2** Assessment team confirms that PP has provided the technical description of the generator in revised MR, hence accepted.

**4.3** Assessment team confirms that PP has updated the MR and provided the details in more elaborative manner, hence accepted.

**5. In section 3.2.2 of MR;**

**5.1** The statement seems incomplete to the assessment team as per the requirements of MR template version 4.2.

**6. In section 4.1 of MR;**

**6.1** Assessment team confirms that PP has updated the MR and sentence has been reframed, hence accepted.

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |  |               |                                 |             |
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| <p><b>7. In section 4.2 of MR;</b></p> <p>7.1 Assessment team confirms that PP has updated the MR and used consistent term throughout, hence accepted.</p> <p>7.2 The statement mentioned in the text does not align with the response, and no other reading was found in the revised MR version 3.0. (OPEN)</p> <p>7.3 Assessment team confirms that PP has provided the complete technical specifications of the meter in Appendix-01, hence accepted.</p> <p><b>8. In section 4.3 of MR;</b></p> <p>8.1 Assessment team confirms that PP has updated the MR and provided the billing meter details clearly, hence accepted.</p> <p>8.2 Assessment team confirms that PP has updated the MR and provided the plan is case of manmade or natural calamities, hence accepted.</p> <p><b>9. In section 5.4 of MR;</b></p> <p>9.1 Assessment team confirms that PP has provided the comparison of ERs of the registered and the installed capacity of the plant separately and has been revised in the given table and in support the ER sheet is also updated to verify the details and it is found consistent with the ER sheet and registered VCS Joint PD&amp;MR, hence accepted.</p> <p>9.2 Assessment team confirms that PP has updated the breakdown details in annexure of the monitoring report version 3.0 and it is found consistent with the breakdown sheet submitted by PP earlier and with this response, hence accepted.</p> <p>Hence CAR#05 is OPEN</p> |  |               |                                 |             |
| <b>2<sup>nd</sup> Response from PP</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |  | <b>Date</b>   | <a href="#">25-October-2023</a> |             |
| <p><b>5. In section 3.2.2 of MR:</b></p> <p>5.1 In the registered VCS joint PD &amp; MR, there was no formula used for the calculation of data adjustment of the net electricity supplied to the grid in case the dates of a particular monitoring period do not match with the dates of the billing period. This correction is considered as project description deviation in the current monitoring period.</p> <p><b>7. In section 4.2 of MR:</b></p> <p>7.2 The information and statement has been made in line with the actual scenario. The electricity metered at the main meter is proportionally divided based on the control meter reading among the customers connected to the meter on the basis of the pro-rata readings taken at the individual WTGs</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |  |               |                                 |             |
| <b>2<sup>nd</sup> Assessment by Audit Team</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |  | <b>Status</b> | <a href="#">Closed</a>          | <b>Date</b> |
| <a href="#">26-October-2023</a>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |  |               |                                 |             |
| <p><b>5. In section 3.2.2 of MR:</b></p> <p>5.1 Assessment team confirms that PP has updated the MR and provided this as a project description deviation in the updated MR which is found appropriate, hence accepted.</p> <p><b>7. In section 4.2 of MR:</b></p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |  |               |                                 |             |

7.2 Assessment team confirms that PP has updated the metering point and described the scenario as per actual project scenario. Hence accepted.

Hence CAR#05 is Closed

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| <b>Type</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |               | <b>Date</b>      | 13-December-2023                                 |
| CAR#06                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |               | <b>Reference</b> | Section of Ver protocol:<br>Section 2 and 4/PRR/ |
| <b>Description of the Non-Conformance</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |               |                  |                                                  |
| <p>1. <b>Section 2.2 of MR</b><br/>                     1.1 As per the comments from VERRA- this section does not define clearly the process of handling grievances. The same section mentions that a grievance register is maintained at 'project site', however it does not specify which site. Moreover, placement of notice regarding continuous feedback is also not clearly identified.</p> <p>2. <b>Section 3.2.2 of MR</b><br/>                     2.1 As per comments from VERRA- the emission reduction calculation sheet does not reflect the apportioning calculation as mentioned in the project deviation section of the MR. Also, the date of the billing period is not clarified. VVB has not added these details and any assessment thereof.</p> <p>3. <b>Section 5.4 of MR</b><br/>                     3.1 As per PRR comment from VERRA- the estimated ER values for current monitoring period are stated as 534,041.72 tCO<sub>2</sub>e and actual achieved Emission reduction values as 515,379 tCO<sub>2</sub>e, however in the same section PP has mentioned that actual values are 3.49% higher than estimated values which is incorrect.</p> |               |                  |                                                  |
| <b>1<sup>st</sup> Response from PP</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |               | <b>Date</b>      | 21-December-2023                                 |
| <p>1. <b>Section 2.2 of MR</b><br/>                     1.1 Grievance/suggestion register and a grievance box placed at the project site the same thing is incorporated. Placement of notice regarding continuous feedback is clearly mentioned.</p> <p>2. <b>Section 3.2.2 of MR</b><br/>                     2.1 The calculated value after apportioning would be used for calculation of emission reductions during that period. The apportioning is not applied in the current monitoring period as the billing months cover the complete dates mentioned in the monitoring period and there is no mismatch with the dates of the billing period. But the process of apportioning is added to just explain the point no.6 pro rata calculation of section 4.3-monitoring plan.</p> <p>3. <b>Section 5.4 of MR</b><br/>                     3.1 It's a typographical error, the actual values are 3.49% lower than estimated values the same is updated in MR as well as in ER sheet.</p>                                                                                                                                                                            |               |                  |                                                  |
| <b>1<sup>st</sup> Assessment by Audit Team</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | <b>Status</b> | Closed           | <b>Date</b>                                      |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |               |                  | 04-January-2024                                  |
| <p>1 <b>Section 2.2 of MR</b></p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |               |                  |                                                  |

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|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p>1.1 PP has revised this section in revised MR version 04 which clearly defines the process of handling grievances for project site. The same section mentions that a grievance register is maintained at project site and no grievances were received under current monitoring period. It is also to be noted that VVB has verified project site physically and confirms that on the site procedure has established of grievance and no grievances were found in the current monitoring period.</p> <p><b>2 Section 3.2.2 of MR</b></p> <p>2.1 PP confirms and it was also verified by VVB that no apportioning procedure is applicable under current monitoring period, since start date of monitoring period coincides with the billing period start date and monitoring period end dates coincides with the billing period end date, hence no apportioning is applicable, but same has been clarified by PP in section 4.3 of MR which is found acceptable.</p> <p><b>3 Section 5.4 of MR</b></p> <p>3.1 PP has updated the ER sheet and MR and the typo error is corrected by PP which is assessed by VVB and found that it to be correct, hence accepted.</p> <p><b>Hence CAR#06 is Closed</b></p> |
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|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------|--------------------------------------------------------------|
| <b>Type</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | <b>Date</b>      | 28-June-2023                                                 |
| CL#01                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | <b>Reference</b> | Section 1.9, 1.10, 3.3, 4.3 of Ver protocol: Section 4 and 5 |
| <b>Description of the Non-Conformance</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                  |                                                              |
| <p><b>1. Section 1.9 &amp; 1.10 of MR;</b></p> <p>1.1 PP to provide evidence to confirm this statement about not participating in any other GHG program/environmental credit and emission trading program.</p> <p><b>2. Section 3.3 of MR;</b></p> <p>2.1 In section 1.2 of this MR version 01, PP states that this is not a grouped project activity, how is this applicable here. Please clarify.</p> <p><b>3. Section 4.3 of MR;</b></p> <p>3.1 PP is requested to clarify how CDM team is applicable in the VCS project mentioned in flow chart, under the section 4.3.</p> <p>3.2 The SLD provided here does not depict the project site and metering points clearly. Also, assessment team has not observed any standby meter at the metering location site, how is this valid here?</p> |                  |                                                              |
| <b>1<sup>st</sup> Response from PP</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | <b>Date</b>      | 25-August-2023                                               |
| <p><b>1.Section 1.9 &amp; 1.10 of MR;</b></p> <p>1.1 undertaking from PP is submitted for not participating in any other GHG program/environmental credit and emission trading program</p> <p><b>2. Section 3.3 of MR;</b></p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                  |                                                              |

|                                                                                                                                          |               |        |             |                   |
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| 2.1 This is not a grouped project activity. This sentence is corrected in MR Version 2.0.                                                |               |        |             |                   |
| <b>3. Section 4.3 of MR;</b>                                                                                                             |               |        |             |                   |
| 3.1 In section 4.3 of revised MR Version 2.0 the flow chart for organizational structure is corrected as per VCS project activity        |               |        |             |                   |
| 3.2 In section 4.3 the SLD diagram is corrected as per project activity.                                                                 |               |        |             |                   |
| <b>1<sup>st</sup> Assessment by Audit Team</b>                                                                                           | <b>Status</b> | Closed | <b>Date</b> | 10-September-2023 |
| <b>1. Section 1.9 &amp; 1.10 of MR;</b>                                                                                                  |               |        |             |                   |
| 1.1 PP has provided evidence about not participating in any other GHG program/environmental credit and emission trading program. #CLOSED |               |        |             |                   |
| <b>2. Section 3.3 of MR;</b>                                                                                                             |               |        |             |                   |
| 2.1 PP has removed those lines #CLOSED                                                                                                   |               |        |             |                   |
| <b>3. Section 4.3 of MR;</b>                                                                                                             |               |        |             |                   |
| 3.1 PP has updated flow chart in section 4.3 of MR. #CLOSED                                                                              |               |        |             |                   |
| 3.2 Assessment Team found that PP has provided SLD and updated also in the MR version 02. #CLOSED                                        |               |        |             |                   |
| <b>Hence CL#01 is Closed</b>                                                                                                             |               |        |             |                   |

|                                                                                                                                                                                                                                                                                                                                                                                                                                  |                  |                                    |
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| <b>Type</b>                                                                                                                                                                                                                                                                                                                                                                                                                      | <b>Date</b>      | 28-June-2023                       |
| CL#02                                                                                                                                                                                                                                                                                                                                                                                                                            | <b>Reference</b> | Section of Ver protocol: Section 4 |
| <b>Description of the Non-Conformance</b>                                                                                                                                                                                                                                                                                                                                                                                        |                  |                                    |
| PP is requested to provide the following documents to verify the MR and project completely: <ol style="list-style-type: none"> <li>1. SLD of the Plant site</li> <li>2. PPA agreement</li> <li>3. O&amp;M Agreement</li> <li>4. Undertaking for not claiming credits from other GHG Program and other form of credits.</li> <li>5. JMRs and Invoices for the current monitoring period.</li> <li>6. Breakdown details</li> </ol> |                  |                                    |
| <b>1<sup>st</sup> Response from PP</b>                                                                                                                                                                                                                                                                                                                                                                                           | <b>Date</b>      | 25-August-2023                     |
| Following documents are submitted herewith <ol style="list-style-type: none"> <li>1 SLD of the Plant site</li> </ol>                                                                                                                                                                                                                                                                                                             |                  |                                    |

|                                                                                                                                                                                                                                                                                                                                                                                                                                                        |               |        |             |                   |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------|--------|-------------|-------------------|
| 2 PPA agreement<br>3 O&M Agreement<br>4 Undertaking for not claiming credits from other GHG Program and other form of credits.<br>5 JMRs and Invoices for the current monitoring period.<br>6 Breakdown details                                                                                                                                                                                                                                        |               |        |             |                   |
| <b>1<sup>st</sup> Assessment by Audit Team</b>                                                                                                                                                                                                                                                                                                                                                                                                         | <b>Status</b> | Closed | <b>Date</b> | 10-September-2023 |
| 1. PP has provided SLD of the Plant site. #CLOSED<br>2. PP has provided PPA. #CLOSED<br>3. PP has provided O&M Agreement. #CLOSED<br>4. PP has provided evidence of undertaking for not claiming credits from other GHG Program and other form of credits. #CLOSED<br>5. PP has provided JMRs and Invoices for the current monitoring period. #CLOSED<br>6. PP has provided Breakdown details of this project. #CLOSED<br><b>Hence CL#02 is Closed</b> |               |        |             |                   |

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| <b>Type</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | <b>Date</b>      | 10-October-2023                             |
| CL#03                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | <b>Reference</b> | Section 1.1, 3.1, 4.2, 4.3 of Ver protocol: |
| <b>Description of the Non-Conformance</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                  |                                             |
| 1. <b>Section 1.1 of MR;</b><br>1.1 PP to clarify the number of WTGs against the commissioned capacity as the present numbers refer to no of WTG as per commissioning certificates<br><br>2. <b>Section 4.2 of MR;</b><br>2.1 PP to clarify whether this is a dedicated feeder or other non-VCS WTGs are connected to this feeder.<br><br>3. <b>Section 4.3 of MR;</b><br>3.1 PP to clarify how readings will be done when there is delay in the calibration and how is the procedure conservative. |                  |                                             |
| <b>1<sup>st</sup> Response from PP</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                              | <b>Date</b>      | 23-October-2023                             |
| 1. <b>Section 1.1 of MR;</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                  |                                             |

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|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------|--------|-------------|-----------------|
| <p>1.1 The number of WTGs against the commissioning plant has been added in the table and revised.</p> <p><b>2. Section 4.2 of MR;</b></p> <p>2.1 It has their own dedicated feeders and no other non-VCS WTGs are connected to this feeder and the same has been mentioned.</p> <p><b>3. Section 4.3 of MR;</b></p> <p>3.1 If there is delay in calibration apportioning formula will be used as described in the given section.</p>                                                                                                                                                                                                           |               |        |             |                 |
| <b>1<sup>st</sup> Assessment by Audit Team</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | <b>Status</b> | Open   | <b>Date</b> | 24-October-2023 |
| <p><b>1. Section 1.1 of MR;</b></p> <p>1.1 Assessment team confirms that PP has updated the number of WTGs against the commissioned capacity as the present numbers refer to No. of WTG as per commissioning certificates, hence accepted.</p> <p><b>2. Section 4.2 of MR;</b></p> <p>2.1 Assessment team confirms that each feeder has its own meters and all belong to one PP thus no proportion criteria is valid, hence accepted.</p> <p><b>3. Section 4.3 of MR;</b></p> <p>3.1 The response is incomplete and does not show the appropriate action to be taken in case both the meters got delayed. (OPEN)</p> <p>Hence CL#03 is Open</p> |               |        |             |                 |
| <b>2<sup>nd</sup> Response from PP</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |               |        | <b>Date</b> | 25-October-2023 |
| <p><b>3. In section 4.3 of MR:</b></p> <p>3.1 If there is delay in calibration and in case both the meters got delayed than apportioning formula will be used as described in the given section and error factor will be used in that case.</p>                                                                                                                                                                                                                                                                                                                                                                                                 |               |        |             |                 |
| <b>2<sup>nd</sup> Assessment by Audit Team</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | <b>Status</b> | Closed | <b>Date</b> | 26-October-2023 |
| <p><b>3. In section 4.3 of MR:</b></p> <p>3.1 Assessment team confirms that PP has updated the MR and included the description which clears the scenario in case of delay in calibration.</p> <p>Hence CL#03 is Closed</p>                                                                                                                                                                                                                                                                                                                                                                                                                      |               |        |             |                 |

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| <b>Type</b>                                                                                                                                                                                                                                                                                                                     |               | <b>Date</b>      | 24-October-2023                       |
| FAR#01                                                                                                                                                                                                                                                                                                                          |               | <b>Reference</b> | Section of Ver protocol:<br>Section 1 |
| <b>Description of the Non-Conformance</b>                                                                                                                                                                                                                                                                                       |               |                  |                                       |
| Assessment team confirms that the installed capacity of plant is 107.1 MW as per registered VCS Joint PD&MR and in the current third verification, this is same since project registration, rest 27.3 MW is yet to be commissioned and this needs to be confirmed in the next subsequent verifications. (Refer CAR#05, Point-1) |               |                  |                                       |
| <b>1<sup>st</sup> Response from PP</b>                                                                                                                                                                                                                                                                                          |               | <b>Date</b>      | 25-October-2023                       |
| The FAR has been noted down.                                                                                                                                                                                                                                                                                                    |               |                  |                                       |
| <b>1<sup>st</sup> Assessment by Audit Team</b>                                                                                                                                                                                                                                                                                  | <b>Status</b> | Open             | <b>Date</b>                           |
|                                                                                                                                                                                                                                                                                                                                 |               |                  | 26-October-2023                       |
| VVB to confirm this in the next verification                                                                                                                                                                                                                                                                                    |               |                  |                                       |

# APPENDIX C: COMPETENCE STATEMENT

Team Leader

## COMPETENCE STATEMENT

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

## 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) | YES |
| Financial Expert                    | NO  |

|                    |                                         |             |            |
|--------------------|-----------------------------------------|-------------|------------|
| <b>Reviewed by</b> | Vandana Gupta (Quality Manager)         | <b>Date</b> | 13/05/2023 |
| <b>Approved by</b> | Vivek Kumar Ahirwar (Technical Manager) | <b>Date</b> | 13/05/2023 |

**Technical Reviewer:**


Certification Pvt. Ltd.

VKU.F50W, Competence Statement

**COMPETENCE STATEMENT**

|                         |                                                                           |
|-------------------------|---------------------------------------------------------------------------|
| Name                    | Sanjay Kumar K                                                            |
| Nationality             | Indian                                                                    |
| Countries of Experience | India                                                                     |
| Education Qualification | B.E. (Civil Engineering)<br>M. Tech (Environmental Engineering)           |
| Year of Experience      | 20 Years +                                                                |
| Area of Expertise       | Climate Change & Environment<br>Sustainable Development<br>GHG Footprints |
| Eligible Sectoral Scope | TA 1.2 - Renewables<br>TA 3.1 - Energy Demand<br>TA 6.1 - Construction    |

**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 (1.2, 3.1, 6.1)   | YES |
| Financial Expert            | YES |

|                    |                                         |             |            |
|--------------------|-----------------------------------------|-------------|------------|
| <b>Reviewed by</b> | Vandana Gupta (Quality Manager)         | <b>Date</b> | 03.03.2023 |
| <b>Approved by</b> | Vivek Kumar Ahirwar (Technical Manager) | <b>Date</b> | 03.03.2023 |

**Validator/Verifier**
**COMPETENCE STATEMENT**

|                         |                                                                |
|-------------------------|----------------------------------------------------------------|
| Name                    | Shivani Chauhan                                                |
| Nationality             | Indian                                                         |
| Countries of Experience | India                                                          |
| Education Qualification | B.Sc. (Environmental Science)<br>M.Sc. (Environmental Science) |
| Year of Experience      | 2 years as Intern<br>9 months as Employee                      |
| Area of Expertise       | Climate Change & Environment                                   |
| 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)     | NO  |
| TA Expert (X.X)            | NO  |
| Financial Expert           | NO  |

|                    |                                         |             |            |
|--------------------|-----------------------------------------|-------------|------------|
| <b>Reviewed by</b> | Vandana Gupta (Quality Manager)         | <b>Date</b> | 03.04.2023 |
| <b>Approved by</b> | Vivek Kumar Ahirwar (Technical Manager) | <b>Date</b> | 03.04.2023 |

**Project Trainee**


Certification Pvt. Ltd.

VKU.F50W. Competence Statement

**COMPETENCE STATEMENT**

|                         |                                              |
|-------------------------|----------------------------------------------|
| Name                    | Km Nisha Chauhan                             |
| Nationality             | Indian                                       |
| Countries of Experience | India                                        |
| Education Qualification | B.Sc. (PCM)<br>M.Sc. (Environmental Science) |
| Year of Experience      | NA, Fresher                                  |
| Area of Expertise       | Climate Change & Environment                 |
| 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> | Vandana Gupta (Quality Manager)         | Date | 29/11/2022 |
| <b>Approved by</b> | Vivek Kumar Ahirwar (Technical Manager) | Date | 30/11/2022 |