



**Verified Carbon
Standard**

“WIND POWER PROJECT IN TAMIL NADU BY GREEN INFRA RENEWABLE ENERGY LIMITED”



Document Prepared by LGAI Technological Center, S.A. (Applus+
Certification)

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Summary:

LGAI Technological Center, S.A. (hereafter referred to as Applus+ Certification) has been contracted by Green Infra Renewable Energy Limited to conduct the verification of the project - “Wind Power Project in Tamil Nadu by Green Infra Renewable Energy Limited”, VCS ID 1904 regarding the relevant requirements of VCS programme guidelines and standard (VCS standard version 4.5, & VCS program guide version 4.4). The scope of verification includes confirming the implementation of the monitoring plan of the registered joint VCS PD&MR (version 02) dated 23/12/2019 and the application of the monitoring methodology “Grid-connected electricity generation from renewable sources”, ACM0002, Version 19. The monitoring period covers under this verification are from 01/09/2023 to 30/11/2023 (both days included).

The project capacity involved installation of 249.9 MW (2.1 MW*119) wind power project in Tuticorin district of Tamil Nadu state of India and supplying the electricity to the Integrated Indian Grid. Thus, projects aim to displace electricity produced by fossil fuel power plants harnessing wind energy. Therefore, the project reduces the greenhouse gas emissions and hereby contributing sustainable development.

A risk-based approach has been followed to perform this verification. During verification, 02 Corrective Action request (CARs), 00 Forward Action request (FARs), and 01 Clarification request (CLs) were raised and successfully closed.

The review of the Monitoring report and additional documents related to baseline and monitoring methodology; the subsequent background investigation, on-site visit, follow-up interviews and project owners have provided LGAI Technological Center S.A. (Applus+ Certification) with sufficient evidence to verify the fulfillment of the stated criteria of VCS.

LGA Technological Center S.A. (Applus+ Certification) confirms that the project is implemented in accordance with the registered joint VCS PD&MR /01/. The monitoring system is in place and the emission reductions are calculated without material misstatements. Our opinion relates to the project's GHG emissions, and the resulting GHG emission reductions reported and related to the valid and registered project baseline and monitoring and its associated documents. Based on the information seen and evaluated we confirm that the emission reductions from the project activity "Wind Power Project in Tamil Nadu by Green Infra Renewable Energy Limited" during the period 01/09/2023 to 30/11/2023 (including both days) amount to 140,728 tons of CO₂e.

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1 INTRODUCTION

1.1 Objective

LGAI Technological Center S.A. (Hereafter referred as Applus+ Certification) has been contracted by Green Infra Renewable Energy Limited, to undertake the verification of the renewable energy project titled “Wind Power Project in Tamil Nadu by Green Infra Renewable Energy Limited” (VCS ID-1904) The verifiers have reviewed the GHG data collected to date for the monitoring period from 01/09/2023 to 30/11/2023 (both days included) covered in this verification. The objective of this verification is a thorough and independent assessment of registered project activities against the applicable VCS requirement by the VVB. The verification process shall determine whether the proposed project activity complies with the requirements of latest VCS guidelines, applicability conditions of the selected methodology, relevant host country regulations and guidance issued by the VCS Board.

1.2 Scope and Criteria

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

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

1.3 Level of Assurance

The level of assurance of the verification report falls under reasonable assurance engagements. Reasonable assurance is a high level of assurance regarding material misstatements, but not an absolute one.

Reasonable assurance includes the understanding that there is a remote likelihood that material misstatements will not be prevented or detected on a timely basis. To achieve reasonable assurance, the auditor needs to obtain sufficient appropriate audit evidence to reduce audit risk to an acceptably low level. This means that there is some uncertainty arising from the use of sampling, since it is possible that a material misstatement will be missed.

The evidence used to achieve a reasonable level of assurance is specified in section 2.3 and 2.4 of this report. Materiality for the project is 5%, however the assessment team has verified 100% data (no sampling plan is applied), hence it is sufficient to meet the materiality requirements of the project.

1.4 Summary Description of the Project

The project activity involves electricity generation by wind electric convertors and supplying the generated electricity to the Indian Grid. The project being a renewable energy generation activity, it leads to removal of fossil fuel dominated electricity generation. The project activity results in reductions 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 consists of 119 WTGs (2.1 MW capacity each), making the total installed capacity to be 249.9MW in the district of Tuticorin in Tamil Nadu, India. The WTGs are of Suzlon make S111-120 -2.1 MW. The WTGs have been commissioned on 08/10/2018 as verified through the commissioning certificate issued by SECI/12/. The location of the project WTGs was verified through Google Map (<https://www.google.co.in/maps>) and found consistent with the data provided in the joint VCS PD &MR dated 23/12/2019/01/. The same was verified against the registered joint VCS PD&MR /01/ and commissioning certificates/12/. The emission reductions from the project activity during the period 01/09/2023 to 30/11/2023 (including both days) amount to 140,728 tonnes of CO₂e.

The verification team has physically verified the equipment's installed at site and SCADA monitoring system during the site visit. Based on the assessment of the documents, the assessment team can confirm that the project activity is fully functional and implemented as described in the registered joint VCS PD&MR /01/.

2 VERIFICATION PROCESS

The registered VCS project is undergoing fifth verification period, the approach adopted to ensure the quality of emission reductions is described in the following sections.

2.1 Method and Criteria

The verification approach consists of two phases.

In the first phase, Applus+ Certification completed a strategic review and risk assessment of the project's activities and processes in order to gain a full understanding of:

- Activities associated with all the sources contributing to the project emissions and emission reductions, including leakage if relevant;
- Protocols used to estimate or measure GHG emissions from these sources;
- Collection and handling of data;
- Controls on the collection and handling of data;
- Means of verifying reported data; and
- Compilation of the verification Report.

At the end of this phase, Applus+ Certification produced a Verification Checklist which, based on the risk assessment of the parameters and data collection and handling processes for each of those parameters, describes the verification approach and the sampling plan.

In the second phase using the Verification checklist, Applus+ Certification verified the implementation of the monitoring plan and the data presented in the VCS MR/05/ for the period in question. This involved on-site visit & interviews of project proponent representative's and a desk review of the Monitoring Report. This verification report describes the findings of this assessment.

Verification schedule is described in the below table:

Sr. No	Date	Milestones
1	15/12/2023	Contract signed
2	05/01/2024	Desk review
3	09/01/2024	Site visit
4.	03/02/2024	Draft verification report

2.2 Document Review

The verification is performed primarily as a document review of the registered joint VCS PD&MR /01/, previous MR and Verification report/2.1/ and associated documents as stated in detail in appendix 1 of this document. The assessment is performed by a verification team using a protocol. The cross checks between information provided in the Monitoring report, joint VCS PD&MR and information from sources other than those used, if available, the team's sectoral or local expertise and, if necessary, independent background investigations.

2.3 Interviews

The site visit for the project location, by the assessment team, was conducted on 09/01/2024, and the following stakeholders were interviewed.

S N	Name	Organization
1	Mr. Shivanjali Mishra	Manager, Green Infra Renewable Energy Limited
2	Mr. Debasis Sahoo	Senior Engineer, Green Infra Renewable Energy Limited
3	Mr. Selva Kumar	Assistant Manager, Green Infra Renewable Energy Limited
4	Mr. T. Mahalingam	Senior Engineer, Suzlon
5	Mr. Shankar	Site In-charge Suzlon

2.4 Site Visits

The onsite visit was undertaken by the verification team member Ravi Kant Soni (Lead Auditor), to carry out the following.

- An assessment of the implementation and operation of the registered project activity as per the registered VCS RCP PD and VCS MR.
- A review of information flows for generating, aggregating, and reporting the monitoring parameters.
- Interviews with relevant personnel to determine whether the operational and data collection procedures are implemented in accordance with the monitoring plan in the PD.
- A cross check between information provided in the monitoring report and data from other sources such as plant logbooks, inventories, purchase records or similar data sources.
- A check of the monitoring equipment including calibration performance and observations of monitoring practices against the requirements of the PD, the applied methodology including applicable tool(s), and, where applicable, the applied standardized baseline.
- A review of calculations and assumptions made in determining the GHG data and emission reductions.

- g) An identification of quality control and quality assurance procedures in place to prevent or identify and correct any errors or omissions in the reported monitoring parameters.

2.5 Resolution of Findings

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

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

Non-compliance with the monitoring plan, the methodology or the standardized baseline are found in monitoring and reporting and has not been sufficiently documented by the project participants, or if the evidence provided to prove conformity is insufficient;

Modifications to the implementation, operation and monitoring of the registered project activity has not been sufficiently documented by the project proponents;

Mistakes have been made in applying assumptions, data or calculations of emission reductions that will impact the quantity of emission reductions;

Issues identified in a FAR during validation to be verified during verification or previous verification(s) have not been resolved by the project participants. Clarification request (CL) is raised if information is insufficient or not clear enough to determine whether the applicable CDM requirements have been met. All CARs and CLs raised by the Applus+ Certification during verification shall be resolved prior to submitting a request for issuance.

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

During the current verification, 02 Corrective Action request (CARs), 00 Forward Action request (FARs), and 01 Clarification request (CLs) were raised and successfully closed. All the findings that are raised and communicated to project participant during the verification are included under Appendix 3. The section also includes the response, if provided, by the project participants and an assessment by the verification team if it was closed out or otherwise.

2.5.1 Forward Action Requests

The project activity is undergoing fifth verification, there were no FARs raised during the validation or previous verification/02.1/.

2.6 Eligibility for Validation Activities

This section is not applicable for present verification, as Applus+ Certification holds the accreditation for Validation of projects under this Sectoral Scope.

3 VALIDATION FINDINGS

There is one project deviation identified during the monitoring period and validation assessment of the same is provided under section 3.3 of this report..

3.1 Participation under Other GHG Programs

The project activity is registered under the VCS only (VCS Project ID 1904) and is not registered under any other emissions trading program or any other mechanism that includes GHG allowance trading. PP also confirms that net GHG emission reductions or removals generated during this monitoring period shall not be used for compliance under any such programs or mechanisms. This was confirmed through a declaration/15/ submitted by the PP and hence accepted by the assessment team.

The PP has submitted the declaration/15/ which states that the net GHG emission reductions generated by the project activity will not be used for compliance with any other emissions trading program or to meet binding limits on GHG emissions for the same monitoring period.

3.2 Methodology Deviations

There is no methodology deviation identified during the current monitoring period.

3.3 Project Description Deviations

During current monitoring period following project deviation is identified:

During the current monitoring period, calibration of the energy meters was not conducted as per the frequency determined in the registered PD and delay in the calibration was identified as project deviation in line with the guidelines as outlined section 3.21.2 of VCS standard v 4.5. As

verified through section 11.1.1 of PPA/13/, the metering system shall be tested, maintained, and owned by the power producer. However, for calibration the plant must be shut down for 3-4 hrs, hence state utility approval is required for the same. The calibration of meters usually conducted during low wind season (Jan-April) to minimize the generation loss due to plant shut down. The assessment team has checked the screenshot of SRDLC Portal/23/ and confirmed that the PP had requested state utility to grant approval indicating the expected dates of calibration as 27th -28th February 2024.

The project deviation is appropriately described and justified in the MR and the project remains in conformance with the VCS Program rules. The project deviation does not impact the applicability of the methodology, additionality, or the appropriateness of the baseline scenario.

3.4 Grouped Project

Not applicable. The project activity is not a grouped project.

4 VERIFICATION FINDINGS

4.1 Project Implementation Status

The project activity consists of 119 WTGs installed in Tuticorin district of Tamil Nadu state in India. The first and last machine under the project activity was commissioned on 08/10/2018. The WTGs are of S111-120 -2.1 MW with an individual capacity of 2.1 MW, summing up to 249.9 MW of total installation capacity.

The project activity is reducing the GHG emissions generated by the current generation energy mix in India's Power Grid, which is dominated by fossil fuel-based grid connected power plants. The power generated through the proposed project activity being supplied to Indian grid through contractual arrangement (PPA). The technical specification of the project activity equipment's has been physically checked during the site visit and are found to be consistent with the mentioned under section 3.1 of MR. The status of the project activity is verified through the SCADA system/19/, indicating the real-time generation data and hence it is confirmed that the project is fully functioning.

The monitoring plan of registered joint VCS PD&MR /01/ includes the parameter "Quantity of net electricity generation supplied by the project (wind) plant/unit to the grid in year y" ($EG_{PJ,y}$). This parameter being calculated on monthly basis as:

In accordance with the approach to be followed, the project proponent provides scheduled electricity generation to SRPC for each month, however the actual electricity supplied or injected to the grid may be different from scheduled electricity, and this is called as deviation. Based on the generation data submitted by PP (scheduled and actual energy generation), the state load dispatch centre (Southern Regional Power Committee) issues statement on deviation also called as Deviation Settlement Account document, that indicate the actual amount of electricity supplied to the grid by project activity.

The net electricity supplied to the grid will be directly sourced from “Deviation Settlement Account document”/08/. “Deviation Settlement Account document” issued by the ‘Southern Regional Power Committee’ (SRPC), Ministry of Power; Government of India entity, this entity coordinates planning and maintenance of generating machines of various generating companies of the region and are publicly available documents. It is to be noted that SRPC is an external government agency, and the PP has no influence in the entire procedure. Hence, the data issued by the SRPC is deemed authentic.

The project proponent raises monthly invoice to state utility based on scheduled electricity generation and deviated amount of electricity is settled on yearly basis, hence it is not feasible to cross check the monthly values of $EG_{PJ,y}$ through the invoices. Therefore, to make the cross-check process more robust the net electricity supplied to the grid is cross checked from “Monthly Generation Reports”/09/ provided by the O&M contractor. This approach is found to be appropriate, hence accepted.

The metering system comprises of one set of special energy meters (SEMs) installed at 230/33 kV Chandragin sub-station for each generating units for monitoring and recording of electricity generation through individual unit after transformation losses. The SEMs are of accuracy class 0.2s and under control of the Power Grid Corporation of India Limited.

The monitoring methodology applies consistently the choice of the option selected for monitoring of baseline emissions. The monitoring plan provide procedures for the collection and archiving of all relevant data necessary for estimation or measuring the emission reductions within the project boundary during the crediting period.

The VCS MR/04/ has been reviewed to check that the procedure for data uncertainty, emergency preparedness, roles and responsibility, operational and management structure are mentioned in the MR. The monitoring plan completely describes all measures to be implemented for monitoring all parameters required. The monitoring plan described the positioning of the equipment. Calibration frequency for Energy meters is once in 5 years. Also, CEA Notification/16/ No. 502/70/CEA/DP&D dated 17/03/2006 which is considered as national standard mentions that “All interface meters shall be tested at least once in five years.” Hence calibration frequency once in 5 years considered for the project activity is found to be appropriate.

Contribution of project activity to sustainable development:

The National CDM Authority (NCDMA), which is the Designated National Authority (DNA) for the Government of India (GOI) under the Ministry of Environment, Forest, and Climate Change (MoEFCC), has mentioned four indicators for the sustainable development:

- Social well being
- Environmental well being
- Economic well being
- Technological well being

The project’s contribution towards sustainable development has been assessed as under the below table:

Sr.No	Sustainable Indicator	VVB assessment
1	Social well being	There are several job opportunities were created to local people during erection, commissioning, and maintenance of the wind power project. This may result to a social balance in the region. The frequency of visiting to villages and nearby areas by skilled, technical and industrialist has increased due to installation /site visit/operation and maintenance work related to WTGs at plant site. This directly and indirectly positively effects the economy of nearby populace.

2	Environmental well being	Wind power is one of the cleanest renewable energy powers and does not involve any fossil fuel (https://www.eia.gov/energyexplained/wind/wind-energy-and-the-environment.php). There are no GHG emissions. The impact on land, water, air and soil is negligible. Thus, the project activity contributes to environmental well-being without causing any negative impact on the surrounding environment.
3	Economic well being	The project activity has generated permanent and temporary employment opportunity within the vicinity of the project. The electricity supply in the nearby area improves which directly and indirectly improves the economy and lifestyle of the area. The assessment team has interviewed the PPs representatives, site personnel and observed that almost all the personnel were unemployed before taking up the job with the project developer. In general, the project activity has delivered the following economic benefits: I. Employment opportunities II. Reduce rate of migration to urban area III. Improvement of a rural economy
4	Technological well being	The project activity is step forward in harnessing the untapped wind power potential and further diffusion of the technology in the region. The project activity leads to the promotion and demonstrates the success of wind projects in the region which further motivate more investors to invest in wind power projects. Hence, the project activity leads to technological well-being.

In view of the above assessment, the assessment team has considered that the project activity profoundly contributes to the sustainable development.

The information relating to the project implementation, provided in the Monitoring Report /04/ is consistent with that stated in the joint VCS PD&MR /01/. The data and variables provided in the monitoring report are the same as stated in the joint VCS PD&MR /01/. Total emission reductions achieved under this monitoring period 01/09/2023 to 30/11/2023 (including both days) is 140,728 tCO₂e.

Monitoring of SDGs:

During the current monitoring period, following SDGs are monitored:

Goal 7. Ensure access to affordable, reliable, sustainable, and modern energy for all

SDG Target: 7.2 By 2030, increase substantially the share of renewable energy in the global energy mix

SDG Indicator: 7.2.1 Renewable energy share in the total final energy consumption

Relevant Parameter: Quantity of net electricity generation supplied by the project plant/unit to the grid in year y in MWh, $EG_{PJ,y}$

Means of verification	Criteria/Requirements	VVB assessment
	Measuring /Reading /Recording frequency	The parameter is continuously measured and recorded monthly basis in line with the approved monitoring plan.
	Data source	This parameter is recorded on monthly basis in the Deviation Settlement Account document issued by state utility.
	How were the values in the monitoring report verified?	Cumulative value for entire monitoring period is reported in the monitoring report and monthly values are in the ER calculation sheet. The monthly values were verified from the “Deviation Settlement Account statement” issued by state utility and found to be consistent. Value of this parameter for the current monitoring period was verified as 149,621 MWh.
	If applicable, has the reported data been cross-checked with other available data?	Monthly reported values of $EG_{PJ,y}$ for the current monitoring period were further cross-checked with the monthly generation report /09/ to state utility and 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?	Yes, all the stakeholders, namely, the Grid Authority (PGCIL), and the Suzlon (O&M Contractor), implemented the adequate QA/QC procedures.
Findings	No issues identified and hence finding was not raised for this section	

Conclusion	The parameter has been monitored appropriately, in accordance with the registered monitoring plan (as per measurement methods and procedures to be applied) and applied methodology. The monitoring results were recorded consistently as per the approved frequency in the monitoring plan.
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Goal 8. Promote sustained, inclusive, and sustainable economic growth, full and productive employment, and decent work for all

SDG Target: 8.5.2 Unemployment rate, by sex, age and persons with disabilities

SDG Indicator: Implementation of the renewable energy power generation project activity has generated direct and indirect employment.

Relevant Parameter: Number of employments generated

Means of verification	Criteria/Requirements	VVB assessment
	Measuring /Reading /Recording frequency	This is a sustainable development parameter to monitor the total number of employment opportunities created. Total number of jobs created for the local population is monitored on annual basis or at least once in monitoring period.
	Data source	The records for the employments maintained by HR division.
	How were the values in the monitoring report verified?	Total number of jobs created by the project is 53 during the current monitoring period. This is verified from the HR records that all guards belong to the local areas/22/. Also, most of the staff of GIREL is from the local areas however it does have some senior personal from outside. Therefore, the assessment team is in opinion that the project activity contributes to the livelihood of the poor.
	If applicable, has the reported data been cross-checked with other available data?	The reported data has been cross checked with the HR records maintained by the project proponent and interviewing the site staff during the site visit.

	Does the data management ensure correct transfer of data and reporting of emission reductions and are necessary QA/QC processes in place?	The HR department monitors and maintains the up-to-date records of total number of jobs created, necessary QA/QC processes in place.
Findings	No finding was raised.	
Conclusion	The parameter has been monitored appropriately, in accordance with the sustainability monitoring plan (as per measurement methods and procedures to be applied). The monitoring results were recorded consistently as per the approved frequency in the monitoring plan.	

Goal 13. Take urgent action to combat climate change and its impacts.

SDG Target: 13.2 Integrate climate change measures into national policies, strategies, and planning.

SDG Indicator: 13.2.2 Total greenhouse gas emissions per year

Relevant Parameter: Emission reductions achieved (tCO₂)

Means of verification	Criteria/Requirements	VVB assessment
	Measuring /Reading /Recording frequency	Emission reductions achieved due to implementation of the solar power plant is monitored once during each monitoring period.
	Data source	Monthly JMRs & ER calculation sheet.
	How were the values in the monitoring report verified?	The value is calculated in line with the procedure as described in registered PD. Value of this parameter for the current monitoring period is 140,728 tCO ₂ .
	If applicable, has the reported data been cross-checked with other available data?	Not applicable

	Does the data management ensure correct transfer of data and reporting of emission reductions and are necessary QA/QC processes in place?	No separate QA/QC procedures is required.
Findings	No issues identified and hence finding was not raised for this section	
Conclusion	The parameter has been monitored appropriately, in accordance with the registered monitoring plan (as per measurement methods and procedures to be applied) and applied methodology. The monitoring results were recorded consistently as per the approved frequency in the monitoring plan.	

The audit history table is provided below:

Audit Type	Period	Program	VWB Name	Number of years
Joint Validation and Verification	08/10/2018 to 30/11/2019	<u>VCS</u>	LGAI Technological Centre, S.A. (Applus+ Certification)	1 year 1 month
Verification	01/12/2019 to 31/01/2021	<u>VCS</u>	TUV SUD South Asia Pvt. Ltd.	1 year 2 months
Verification	01/02/2021 to 31/01/2022	<u>VCS</u>	TUV SUD South Asia Pvt. Ltd.	1 year 0 months
Verification	01/02/2022 to 31/08/2023	<u>VCS</u>	LGAI Technological Center S.A. (Applus+ Certification)	1 year 6 months
Verification	01/09/2023 to 30/11/2023	<u>VCS</u>	LGAI Technological Center S.A. (Applus+ Certification)	3 months (undergoing issuance)
Total	08/10/2018 to 30/11/2023	-	-	6 years,0 months

The assessment team has checked the information about the audit history as provided in the above table and confirmed that the information provided are accurate.

Conclusion:

Assessment team concludes the following:

- a. There are no material discrepancies between project implementation and the project description provided in the registered PD/01/.
- b. The monitoring plan is implemented completely and monitoring system (i.e., process and schedule for obtaining, recording, compiling, and analysing the monitored data and parameters) is appropriate.
- c. There are no material discrepancies between the actual monitoring system, and the monitoring plan set out in the project description and the applied methodology/10/.
- d. The GHG emission reductions or removals generated by the project have not included in an emissions trading program or any other mechanism that includes GHG allowance trading/15/.
- e. The project has not received or sought any other form of environmental credit or has become eligible to do so since validation or previous verification/2.1/.
- f. The project is only registered under VCS program and is not participated or rejected under any other GHG programs.

In view of the information's as verified above the assessment team can conclude that the project has been implemented as described in the project description.

4.2 Safeguards

4.2.1 No Net Harm

There is no negative impact to any socio-economic conditions of the region due to the project activity. The type of project activities requires to conduct EIA assessment are categorized under the schedule 1 of Ministry of Environment and Forest notification dated 14/09/2006¹ and further notification number 3067 from MoEF dated 01/12/2009². The proposed project activity does not fall under the listed categories and hence not required an EIA to be done. This project activity will not involve any negative environmental or socio-economic impacts, as the project activity involves generation of power using wind energy which is a clean source of energy. Hence no mitigation measures are required.

4.2.2 Local Stakeholder Consultation

The PP conducted a consultation meeting with the local stakeholders on 20/06/2017 at Mela Thattaparai village in Tuticorin district of Tamil Nadu state of India.

The stakeholders comprised of villagers from nearby villages, employees of Green Infra Renewable Energy Limited and those of Suzlon and contractors working at the site. The stakeholders were invited by letters sent and through public notice. The stakeholders identified by the project participant were local villagers who are the major population of the area, local communities, and project employees, including O&M contractors. The assessment team verified the list of participants who attended the stakeholder meeting and confirms the stakeholders identified were relevant. The assessment team also verified the minutes of meeting to note that no negative comments were received.

The project activity undergoing fifth verification and local stakeholder consultation was appropriately conducted prior to validation to inform the design of the project and maximize participation from stakeholders during the validation.

The project proponent has implemented mechanism for ongoing communication with local stakeholders to allow stakeholders to raise concerns about potential negative impacts during implementation and operation of the project activity. The project proponent has placed a grievance register and a grievance box at the site office/21/, where the local villagers can register their concerns.

The assessment team has checked the grievance register maintained at site office/21/ and confirmed that no formal complaints were received during the current monitoring period.

¹ <http://envfor.nic.in/legis/eia/so1533.pdf>

² <http://moef.nic.in/downloads/rules-and-regulations/3067.pdf>

4.3 AFOLU-Specific Safeguards

Not applicable to the project activity.

4.4 Accuracy of GHG Emission Reduction and Removal Calculations

The calculation of the emission reductions is found to be correct. The details of the reported and the verified values for all parameters are listed in section 4.5 of this report.

The monitoring parameter ($EG_{PJ,y}$) is directly sourced from monthly “Deviation Settlement Account statement”/08/ prepared and issued by ‘Southern Regional Power Committee’, Ministry of power; Government of India entity. The PP has provided the complete set of data for all the monitored parameter in the ER spreadsheet/06/. This data has been verified as described in section 4.5 below. The formulae & method used to calculate the baseline emissions, project emissions and leakage are appropriate and in line with the approved methodology ACM0002 version 19.

The PP has calculated the grid emission factor as per the combined margin approach described in the ‘Tool to calculate the emission factor for an electricity system’, version 07.0. The grid emission factor has been calculated as the weighted average of OM & BM; and has been fixed ex-ante for the entire crediting period.

The OM and BM have been obtained from a publicly available source i.e., “CO₂ Baseline Database for Indian Power sector”, version 14 /11/ published by Central Electricity Authority, Ministry of Power, and Government of India. The OM has been determined as the average of the previous 3 years values obtained from the CEA database/11/. The value of BM has been identified directly from the CEA database. The combined margin emission factor was arrived at by applying weights of 75% for OM and 25% for BM, as specified in the tool. The OM and BM have been calculated to be 0.9610 tCO₂/MWh and 0.8644 tCO₂/MWh respectively. Applying the weights, the grid emission factor has been calculated to be 0.9368 t CO₂/MWh.

As per ER excel spreadsheet/06/ submitted by the PP, the net emission reductions for the current monitoring period were verified as 140,728 tCO₂e for the current monitoring period.

The assessment team able to confirm that the GHG emission reductions and removals have been quantified correctly in accordance with the project description and applied methodology.

4.5 Quality of Evidence to Determine GHG Emission Reductions and Removals

All the data recorded follows the registered joint VCS PD&MR and Monitoring Report. The assessment team has checked the “Deviation Settlement Account statement”/08/for electricity generated and supplied by project activity/09/ for the current monitoring period to verify the values of monitoring parameters reported in ER calculation sheet and found to be consistent. Since the monthly Credit notes prepared and issued by state utility, they are found to be reliable and authentic.

Green Infra Renewable Energy Limited is responsible for the operations, maintenance and monitoring of the project activity, whose operation and maintenance activities are ISO 14001:2015 (Environment Management System) and ISO 45001:2018 (Safety Management System) certified/20/. Hence it is confirmed that the management system of the VCS project is in place; with the responsibilities properly identified. The same was also verified during the interview of site personnel.

The monitoring of the project activity is found to be in accordance with the monitoring methodology described in ACM0002, Version 19 /10/. The monitoring mechanism is effective and reliable. During the phone-call, personnel involved at various levels of the operation of the project activity have been interviewed to confirm that the plant personnel are conscious of the importance of the monitoring activities. The verification has checked the plant records, substantiating consistency in recording and reporting of monitored data.

The assessment team has checked the SCADA system/19/ and confirmed that the monitoring systems have been installed and are operational. The meters comply with appropriate quality standards applicable for the used technology. The accuracy class of the meters installed for the project activity was physically verified and further verified through the registered joint VCS PD&MR /01/, MR /05/, and calibration certificates, the PPAs/14/ signed for the project activity, found to be consistent. The supporting records of monthly “Deviation Settlement Account statement”/10/ issued by the state utility and invoices raised to SECI for the entire monitoring period were checked and found to be sufficient to enable verification of emission reductions.

The following parameter has been verified for current monitoring period:

Parameter: Quantity of net electricity generation supplied by the project (Wind) plant/unit to the grid in year y, $EG_{PJ,y}$ MWh:

Means of verification	Criteria/Requirements	Assessment/Observation
	Measuring /Reading /Recording frequency	The parameter is monitored continuously and recorded on monthly basis.
	Is measuring and reporting frequency in accordance with the monitoring plan and monitoring methodology? (Yes / No)	Yes. The measuring and reporting frequency is in line with the monitoring plan as outlined in the registered joint VCS PD&MR/01/ and monitoring methodology/10/.
	Monitoring equipment	The metering system comprises of dedicated meters (one main and check meter) at the power station.
	Is accuracy of the monitoring equipment as stated in the monitoring plan? If the monitoring plan does not specify the accuracy of the monitoring equipment, does the accuracy of the monitoring equipment comply with local/national standards, or as per the manufacturer's specification?	The accuracy of the monitoring equipment used to measure the values is 0.2s, which is as per the registered joint VCS PD&MR/01/ which is as per the norm defined in the PPA/13/.
	Calibration frequency /interval:	The meters are calibrated every 5 years.

	Is the calibration interval in line with the monitoring plan and/or methodology? If the monitoring plan does not specify the frequency of calibration, is the selected frequency in accordance with the local/national standards, pending until the findings are closed or as per the manufacturer's specifications?	Yes, calibration interval of meters is 5 years, which is in line with the registered monitoring plan.
	Is the calibration of measuring equipment carried out by an accredited person or institution?	Yes, the calibration is conducted by Measurematic India which NABL Accredited (Ref: CC-221) Government institution/07/.
	Is (are) calibration(s) valid for the whole reporting period?	Delay in calibration of meters is identified during the current monitoring period. (Details provided under the heading "Calibration of meters")
	How were the values in the monitoring report verified?	Cumulative value for entire monitoring period is reported in the monitoring report and monthly values are in the ER calculation sheet. The monthly values were verified from the "Deviation Settlement Account statement " issued by state utility and found to be consistent. Value of this parameter for the current monitoring period was verified as 149,621 MWh.
	If applicable, has the reported data been cross-checked with other available data?	The monthly reported values of $EG_{PJ, y}$ was further cross checked with the monthly generation reports/09/ and found to be comparable.

	Does the data management ensure correct transfer of data and reporting of emission reductions and are necessary QA/QC processes in place?	Yes, the adequate QA/QC procedures were implemented by all the stakeholders, namely, the Power Grid Corporation of India Limited, the PP and SRPC. The data transfer process for the said parameter is as follows: The PP officials records the generation data through the energy meters installed at power station switch yard and submit the same to SRPC on weekly basis. Based on the scheduled and actual generation data provided, SRPC issued monthly “Deviation Settlement Account statement”, that provides the value of $EG_{PJ,y}$ and is directly used for emission reduction calculations. It is to be noted that all the meters are sealed by Power Grid Corporation of India Limited.
	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?	Not Applicable
Findings	CL #1, CAR #1, and CAR #2 were raised and resolved.	
Conclusion	The parameter has been monitored appropriately in accordance with the registered monitoring plan/01/ and applied methodology/10/. The monitored data was recorded consistently as per the approved frequency in monitoring plan/01/. Since 100% data has been monitored and verified, the verification team can ascertain that the values used for calculation of emission reduction are free from material errors. Implementation of the project is as per the registered monitoring plan/01/.	

Parameters fixed ex ante:

$EF_{grid,OM,y}$: The parameter is described as operating margin CO₂ emission factor of Indian Grid and is measured in unit tCO₂/MWh. The value provided in MR i.e., 0.9610 has been verified from PD/01/ and CO₂ Baseline Database for Indian Power Sector by Central Electricity Authority (version 14)/11/.

$EF_{grid,BM,y}$: The parameter is described as build margin CO₂ emission factor of INDIAN grid which is measured in units tCO₂/MWh. The value provided in MR i.e., 0.8644 has been verified from PD/01/ and CO₂ Baseline Database for Indian Power Sector by Central Electricity Authority (version 14)/11/.

$EF_{grid,CM,y}$: The parameter is described as combined margin CO₂ emission factor of INDIAN grid which is measured in units tCO₂/MWh. The value provided in MR i.e. 0.9368 has been verified from PD/01/.

Calibration of meters:

The energy meters installed at 230/33 KV Substation, Chandragin. As per the monitoring plan in the registered joint VCS PD&MR/01/ the meters are to be tested and calibrated once in 5 years. The assessment team has checked the metering arrangement during the site visit and meters specifications are found consistent with calibration certificates/07/. The details of monitoring equipment involved in the project activity and their calibration dates are mentioned Appendix-1 of the MR/04/ and are summarised in the tables below. All the meters are of accuracy class of 0.2s.

Meter Location	Meter Serial No	Meter Type	Meter Make/ Accuracy class	Calibration Date	Calibration Validity Date
230/33 KV Substation, Chandragin	NP 3285A	Main Meter	Secure/0.2s	25/09/2018	24/09/2023
	NP 3286A	Check meter	Secure/0.2s	25/09/2018	24/09/2023

As evident from the calibration details provided in the above table, there is delay in calibration of meters for the period from 24/09/2023 to 30/11/2023 identified during the current monitoring period. It is noted that calibration of meters was due on 24/09/2023 as indicated in the above table; however, it is not carried until date.

As verified through section 11.1.1 of PPA/13/, the metering system shall be tested, maintained, and owned by the power producer. However, for calibration the plant must be shut down for 3-4 hrs, hence state utility approval is required for the same. The calibration of meters usually conducted during low wind season (Jan-April) to minimize the generation loss due to plant shut down. The assessment team has checked the screenshot of SRDLC Portal/23/ and confirmed that the PP had requested state utility to grant approval indicating the expected dates of calibration as 27th -28th February 2024.

In accordance with the clause 11.3.1 of PPA, the main and check metering system shall be sealed by the representatives of power producer in the presence of representatives of DISCOM.

Furthermore, as per clause 11.3.2 of PPA, if the metering system and/or any component thereof are found to be outside the acceptable limits of accuracy or not functioning properly, it shall be repaired, re-calibrated or replaced by power producer. The assessment team has interviewed the site personnel with reference to the functioning of metering system and confirmed that all the meters were working properly during the current monitoring period.

It is worthy to note that, the state utility (DISCOM) is a Government Organization and a 3rd party with respect to this project and the purchaser of electricity supplied to the grid by project, hence, the state utility ensures that the energy meters are in proper working condition, because all monetary transactions done based on these meter readings.

As the recent calibration certificates for meters were not available, hence the PP has considered the calibration delay for entire monitoring period (01/09/2023 to 30/11/2023) and applied factor (-0.4%) to the values of $EG_{PJ,y}$ accordingly.

In accordance with the guidelines outlined under paragraph 366(a) of VVS PAs version 03, an error factor 0.2% should be applied for both export & import i.e. the measured values in the delayed calibration period. However, the monthly “Deviation Settlement account statement” issued by Southern Regional Power committee (SRPC) only provides the value of “Net electricity supplied to the grid by the project activity” ($EG_{PJ,y}$) and not the export and import values by the project activity. Hence the error for both export & import has been taken into account and a cumulative error factor of -0.4% on the parameter $EG_{PJ,y}$ is applied. The approach followed by the PP was found to be conservative and appropriate, hence accepted.

The CEA Notification No. 502/70/CEA/DP&D dated 17/03/2006 and its amendments Notified on 26/06/2010 No. 502/6/2009/DP&D/D-I /16/ which is considered as national standard, mentions that for voltage of 650 V up to 33 kV, 0.5s accuracy class or above is recommended. Hence, the accuracy classes of 0.2s for the energy meters installed at the project activity site are found to be appropriate.

The details of monitoring equipment are involved in the project activity and their calibration details/07/ are mentioned under section 4.3 of the VCS MR/05/. The CEA Notification No. 502/70/CEA/DP&D dated 17/03/2006/16/ which is considered as national standard mentions that “All interface meters shall be tested at least once in five years.” Hence, the stipulated calibration frequency once in 5 years is appropriate.

In view of the above discussion the assessment team able to confirm that evidence used to determine the GHG reductions and removals are sufficient and appropriate with respect to quality and quantity. Hence, the stipulated calibration frequency once in 5 years is appropriate.

GHG Calculations:

The emission reduction as per the applied methodology (ACM0002 version 19) 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:

$$BE_y = EG_{PJ,y} * EF_y$$

Where,

BE_y is the baseline emissions in year y, tCO₂e

$EG_{PJ,y}$ is the net electricity supplied in MWh

EF_y is the Grid Emission Factor in tCO₂e/MWh

The calculation of the net emission reduction achieved is done using the equation provided below:

$$\text{Net Emission reduction} = BE_y - PE_y$$

Where,

BE_y is baseline emissions

PE_y is project emissions

As per the clause 36 of applied methodology ACM0002 version 19, "For most renewable energy power generation project activities", $PE_y = 0$. Since the project activity is renewable energy power generation hence the values of the $PE_y = 0$.

Therefore,

$$\text{Net Emission Reductions} = BE_y - 0$$

$$\begin{aligned} BE_y &= 149,621 \text{ MWh} \times 0.9368 \text{ tCO}_2/\text{MWh} \\ &= 140,728 \text{ tCO}_2\text{e} \end{aligned}$$

The verification team confirms that appropriate methods and formulae for calculating baseline emissions have been followed. The assumptions, emission factors and default values that were applied in the calculations are justified.

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

4.6 Non-Permanence Risk Analysis

Not applicable for the project activity.

5 VERIFICATION OPINION

Applus+ Certification contracted by Green Infra Renewable Energy Limited, to perform the independent verification of the emission reductions for the VCS project activity “Wind Power Project in Tamil Nadu by Green Infra Renewable Energy Limited” (VCS ID- 1904) in India for the monitoring period 01/09/2023 to 30/11/2023 as reported in the Monitoring Report Version 02 dated 23/01/2024. The Green Infra Renewable Energy Limited is responsible for the collection of data in accordance with the monitoring plan and the reporting of GHG emissions reductions from the project activity.

It is our responsibility to express an independent verification statement on the reported GHG emission reductions from the project activity. Applus+ Certification commenced the verification based on the baseline and monitoring methodology ACM0002 version 19.0, the monitoring plan contained in the registered joint VCS PD&MR Version 02 and VCS program guide version 4.4 Monitoring Report Version 02 dated 23/01/2024 as per the process described under Section 2 of this report. Applus+ 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.

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

In our opinion the GHG emissions reductions reported for the project activity for the period 01/09/2023 to 30/11/2023 (both days included) are fairly stated in the Monitoring Report Version 02 dated 23/01/2024. The GHG emission reductions were calculated correctly based on the approved baseline and monitoring methodology ACM0002, Version 19, and the VCS standard version 4.5.

As summary the verification team able to conclude that:

- The project is in line with all relevant host country criteria (India) and all relevant VCS version 4 program guidelines requirements.
- Verification of the GHG statement was conducted in accordance with ISO 14064-3:2019.
- A reasonable level of assurance has been applied.

Verification period: 01/09/2023 to 30/11/2023 (including both days)

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

Year	Baseline emissions or removals (tCO ₂ e)	Project emissions or removals (tCO ₂ e)	Leakage emissions (tCO ₂ e)	Net GHG emission reductions or removals (tCO ₂ e)
2023 (01/09/2023 to 30/11/2023)	140,728	0	0	140,728
Total	140,728	0	0	140,728

Comparison of actual GHG emission reductions or net anthropogenic GHG removals by sinks with estimates in registered PD:

Monitoring Period	Ex-ante emissions reductions/removals	Achieved emissions reductions/removals	Percent difference	Justification for the difference
01/09/2023 to 30/11/2023	176,394	140,728	-20.2%	The actual emission reductions for the current monitoring period are 20.2% lower than estimated emission reductions which are mainly due to poor availability of wind at site. Wind availability is a natural phenomenon which is beyond the control of PP
Total	176,394	140,728	-20.2%	-

APPENDIX 1: DOCUMENT REFERENCE

S.No	Title of Document	Version	Date
1.	Registered joint VCS PD&MR	02	23/12/2019
2.	Joint VCS Validation and Verification Report	02	25/12/2019
2.1	Verification report (MP: 01/02/2022 to 31/08/2023)	3.0	26/12/2023
3.	VCS Monitoring Report	01	04/01/2024
4.	VCS Monitoring Report (Final)	02	23/01/2024
5.	ER spread sheet	01	04/01/2024
6.	ER spread sheet (corresponding to the final monitoring report)	02	23/01/2024
7.	Certificates of Calibration for all the meters belongs to project activity.		-
	Meter Sr. No-	Calibration date	
	Main meter: NP 3285A	25/09/2018	
	Check Meter: NP 3286A	25/09/2018	
8.	Monthly “Deviation Settlement Account document” issued by SRPC	For the period 01/09/2023 to 30/11/2023	-
9.	Monthly Generation Reports for the project activity	For the period 01/09/2023 to 30/11/2023	-
10.	Approved Consolidated Methodology ACM0002 “Grid-connected electricity generation from renewable sources”	19.0	-
11.	CEA Database	version 14	Dec 2018

S.No	Title of Document	Version	Date
12.	Commissioning certificate for all the WTGs of the project activity issued by SECI	-	10/10/2018
13.	Power Purchase Agreements signed between Project Proponent and Power Trading Corporation of India Limited	-	-
14.	VCS webpage for the project, VCS ID 1904. https://registry.verra.org/app/projectDetail/VCS/1904	-	-
15.	Letter of declaration dated from PP regarding not having created or sought any other form of environmental credit for the same period	-	22/01/2024
16.	Central Electricity Authority (Installation and Operation of Meters) Regulations Notified on 17/03/2006 <u>No. 502/70/CEA/DP&D</u> Amendments Notified on 26/06/2010 <u>No. 502/6/2009/DP&D/D-I</u>	-	-
17.	VCS Standard	Version 4.5	29/08/2023
18.	VCS Program Guide	Version 4.4	29/08/2023
19.	On- site visit observations	-	21/09/2023
20.	- ISO 9001:2015 certification for Scope of Design, Development and Operation of wind power plant - Quality policy implemented at site	-	-
21.	Grievance register/suggestion box placed at site office	-	-
22.	HR records regarding the employment	-	-
23.	Screen shot for the SRLDC approval request regarding calibration of meters	-	-

APPENDIX 2: ABBREVIATIONS

Abbreviations	Full texts
ABT	Availability Based Tariff
BEF	Baseline Emission Factor
BM	Build Margin
CAR	Corrective Action Request
CEA	Central Electricity Authority
CERC	Central Electricity Regulatory Commission
CL	Clarification Request
CMS	Central Monitoring System
CMP	Conference of Parties Serving as Meeting of Parties
CO ₂	Carbon dioxide
DISCOM	Distribution Company
EB	Executive Board
FAR	Forward Action Request
GEDA	Gujarat Electricity Development Authority
GHG	Green House Gas
ISO	International Standards Organization
JMR	Joint Meter Reading
kW	Kilowatt
kWh	Kilowatt hour
MFR	Multi-Function Relay
MGRs	Monthly Generation Reports
MR	Monitoring Report
MWh	Megawatt-hour
PD	Project Description
PGCIL	Power Grid Corporation of India Limited
PLF	Plant Load Factor
PP	Project Proponent
QA/QC	Quality Assurance and Quality Control
SECI	Solar Energy Corporation of India Limited
SLDC	State Load Dispatch Center
SRPC	Southern Regional Power Committee
TANGEDCO	Tamil Nadu Generation and Distribution Corporation

UNFCCC	United Nations Framework Convention on Climate Change
VCS	Voluntary Carbon Standard
VCSA	Voluntary Carbon Standard Association
VCS PD	VCS Project Description
VCUs	Voluntary Carbon Units

APPENDIX 3: FINDINGS OVERVIEW

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

FAR ID	NA	Section no.	XX	Date :DD/MM/YYYY
Description of FAR				
Not applicable				
Project participant response				Date :DD/MM/YYYY
NA				
Documentation provided by project participant				
NA				
DOE assessment				Date: DD/MM/YYYY

Table 2. CL from this verification

CL ID	01	Section no.	2.2	Date : 09/01/2024
Description of CL				
Please submit the following documents: Monthly deviation account settlement statements and corresponding invoices for the current monitoring period. Employment records				
Project participant response				Date : 24/01/2024
Monthly deviation statements and corresponding invoices for the months of September, October and November 2023 are submitted to the DOE. Employment records are also submitted along with.				
Documentation provided by project participant				
Monthly JMR and Invoices Employment records				
DOE assessment				Date: 30/01/2024
The PP has submitted the monthly deviation account settlement statements and corresponding invoices for the current monitoring period. The values of $EG_{P,y}$ is verified with the source document and cross checked with the invoices, found to be consistent. The PP has submitted the employment records and found them to be appropriate. CL #1 is closed.				

Table 1. CAR from this verification

CAR ID	01	Section no.	3.3	Date : 09/01/2024
Description of CAR				
Please submit the declaration confirming that the GHG Emission reductions or removals generated by the project activity will not be used for compliance with an emission trading program or to meet binding limits on GHG Emissions.				
Project participant response				Date : 23/01/2024
Declaration confirming the GHG emission reductions or removals generated by the project activity will not be used for compliance is submitted to the DOE.				
Documentation provided by project participant				
Declaration				
DOE assessment				Date: 30/01/2024
The PP has submitted the declaration confirming that the GHG Emission reductions or removals generated by the project activity will not be used for compliance with an emission trading program or to meet binding limits on GHG Emissions, found to be appropriate. CAR #1 is closed.				

CAR ID	02	Section no.	4.1	Date : 09/09/2024
Description of CAR				
The current monitoring period from 01/09/2023 to 31/12/2023, however the meters calibration was valid till 24/09/2023, please clarify why the calibration delay is not reported and addressed as per the applicable guidelines. Also clarify why the calibration delay is not considered as project deviation during the current monitoring period. Kindly submit the calibration certificates for all the meters valid for the current monitoring period.				
Project participant response				Date : 31/01/2024
As per the registered PD the energy meter needs to be calibrated once in 5 years. The energy Meter was calibrated on 25/09/2018 and the due date for the next calibration was 24/09/2023. However, calibration is not conducted till date, hence there is delay in calibration identified during this monitoring period. However, the calibration is not conducted till date, hence there is delay in calibration identified from 24/09/2023 to 30/11/2023 in the current monitoring period. The error factor has been applied to the net export values as provided in Deviation Settlement Account document issued by state utility for delay period as meters were not calibrated as per the calibration frequency. As per VVS requirement the error factor of "0.2%" should be applicable for both export & import i.e. the measured values. However, monthly Deviation Settlement Account document issued by state utility provides only net electricity generation, the separate export and import values are not available. Hence being conservative and to account for the error for both export & import, a cumulative error of "-0.4%" on net electricity generation has been applied for delay period.				
Documentation provided by project participant				
Revised Emission reduction sheet.				
DOE assessment				Date: 30/01/2024

As verified through section 11.1.1 of PPA, the metering system shall be tested, maintained, and owned by the power producer. However, for calibration the plant must be shut down for 3-4 hrs, hence state utility approval is required for the same. The calibration of meters usually conducted during low wind season (Jan-April) to minimize the generation loss due to plant shut down. The assessment team has checked the screenshot of SRDLC Portal and confirmed that the PP had requested state utility to grant approval indicating the expected dates of calibration as 27th -28th February 2024.

Accordance with the guidelines outlined under paragraph 366(a) of VVS PAs version 03, an error factor 0.2% should be applied for both export & import i.e. the measured values in the delayed calibration period. However, the monthly “Deviation Settlement account statement” issued by Southern Regional Power committee (SRPC) only provides the value of “Net electricity supplied to the grid by the project activity” ($EG_{PJ,y}$) and not the export and import values by the project activity. Hence the error for both export & import has been taken into account and a cumulative error factor of -0.4% on the parameter $EG_{PJ,y}$ is applied. The approach followed by the PP was found to be conservative and appropriate, hence accepted.

CAR #2 is closed.

APPENDIX 4: COMPETENCY STATEMENTS

According to the sectoral scope / technical area and experience in the sectoral or national business environment, Applus+ Certification has composed a project assessment team in accordance with the appointment rules in the internal Quality Management System of Applus+ Certification.

The composition of audit team shall be approved by the Applus+ Certification ensuring that the required skills are covered by the team. The four qualification levels for team members that are assigned by formal appointment rules are as presented below:

- Lead Auditor (LA).
- Auditor (A) / Auditor in Training (AiT).
- Technical Expert (TE).
- Technical Reviewer (TR).

The sectoral scope / technical area knowledge linked to the applied methodology/ies shall be covered by the assessment team.

Name	Qualification	Coverage of scope	Coverage of technical Area	Financial aspect	Host country Experience	Attendance to the On-Site Assessment
Ravi Kant Soni	Lead Auditor (LA)	Yes (1)	Yes (1.2)	N/A	Yes	Yes
Ravi Kant Soni	Technical Expert (TE)	Yes (1)	Yes (1.2)	N/A	Yes	Yes
Simon Shen	Technical Reviewer (TR)	Yes (1)	Yes (1.2)	N/A	N/A	N/A

Ravi Kant Soni is a certified lead auditor for Lead Auditor ISO 14001:2004&Lead Auditor ISO 14064:2006 GHG Inventory and verification. He has more than 10 years of work experience across Climate Change, Environmental Management & Monitoring, Health & Safety Management, and Statutory Compliance. He was involved in more than 100 CDM validation and verifications activities and Gold Standard, VER projects as a team leader/technical reviewer / validator / verifier covering the sectoral scope 1 technical area 1.2. He has done Master in Technology (Energy Management) from a premier institute, School of Energy & Environmental Studies, DAVV, Indore (M.P.), India and Bachelor of Engineering (Mechanical Engineering) from M.I.T.S Gwalior Jiwaji University Gwalior, India.

Simon Shen (master's degree in Thermal Energy Engineering, bachelor's degree in environmental engineering) is a Lead Auditor appointed by Applus+ Certification for the GHG project assessment. He is based in Shanghai. He has several years of work experience in environmental protection field. Before he joined Applus+ Certification, he had been worked for TÜV SÜD as a GHG Validator/Verifier and ISO 9001/14001 Lead Auditor for 5.5 years.