



“SATARA WIND POWER PROJECT IN MAHARASHTRA, INDIA”



Document Prepared By

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

Project Title	Satara Wind Power Project in Maharashtra, India.
Version	02
Report ID	BELL_VCS_VER_3321

Report Title	Verification Report “Satara Wind Power Project in Maharashtra, India.”
Client	NSL Wind Power Company (Satara) Private Limited
Pages	65
Date of Issue	22/11/2021
Prepared By	LGAI Technological Center, S.A.(Applus+ Certification)

Contact	Campus UAB – Ronda de la Font del Carme, s/n 08193 Bellaterra – Barcelona (Spain) Tel.: +34 93 567 20 08 Fax.: +34 93 567 20 01 www.appluscertification.com agustin.calle@applus.com carla.debat@applus.com
Approved By	LGAI Technological Center S.A. (Applus+ Certification) VVB Technical Manager – Mr. Agustín Calle de Miguel
Work Carried Out By	Lead Auditor & Technical Expert: Vivek Kumar Ahirwar, Technical Reviewer & Technical Expert: Simon Shen

Summary:

LGAI Technological Center, S.A. (Applus+ Certification) has performed the verification of the project “Satara Wind Power Project in Maharashtra, India.” VCS ID 1519, against VCS Standard Version 4.1. The scope of verification includes confirming the implementation of the monitoring plan of the registered VCS PD (version 03) dated 08/02/2016 and the application of the monitoring methodology “Consolidated baseline methodology for grid-connected electricity generation from renewable sources”, ACM0002, Version 16.

The verification consisted of three phases: i) desk review of the project; ii) remote visit and interviews with project stakeholders; iii) resolution of outstanding issues and the issuance of the final verification report and opinion. The overall verification, from Contract Review to Verification Report & Opinion, was conducted following Applus+ Certification internal quality procedures.

During the verification process 01 CARs, 02 CRs and 00 FARs were raised. All the findings have been closed satisfactorily and the same has been discussed in Appendix 4.

Applus+ Certification confirms that the monitoring system is in place and the emission reductions are calculated without material misstatements. The emission reductions from the project activity “Satara Wind Power Project in Maharashtra, India” in India during the period 01/11/2020 - 31/08/2021 (including both days) amount to 51,949 tonnes of CO₂e.

CONTENTS

1.	<i>Introduction</i>	5
1.1	Objective	5
1.2	Scope and Criteria	5
1.3	Level of Assurance	6
1.4	Summary Description of the Project	6
2.	<i>Verification Process</i>	7
2.1	Method and Criteria	7
2.2	Document Review	7
2.3	Interviews	7
2.4	Site Inspections	8
2.5	Resolution of Findings	12
2.5.1	Forward Action Requests	13
2.6	Eligibility for Validation Activities	13
3.	<i>Validation Findings</i>	13
3.1	Participation under Other GHG Programs	13
3.2	Methodology Deviations	14
3.3	Project Description Deviations	14
3.4	Grouped Project	14
4.	<i>Verification Findings</i>	15
4.1	Project Implementation Status	15
4.2	Safeguards	15
4.2.1	No Net Harm	15
4.2.2	Local Stakeholder Consultation	16
4.3	AFOLU-Specific Safeguards	17
4.4	Accuracy of GHG Emission Reduction and Removal Calculations	17
4.5	Quality of Evidence to Determine GHG Emission Reductions and Removals	17
4.6	Non-Permanence Risk Analysis	37
5.	<i>Verification conclusion</i>	37
	APPENDIX 1: <References>	39

APPENDIX 2: <Competency Statement>	41
APPENDIX 3: <Abbreviations>.....	42
APPENDIX 4: <Findings Overview>.....	44

1. INTRODUCTION

1.1 Objective

NSL Wind Power Company (Satara) Private Limited has contracted LGAI Technological Center, S.A. (Applus+ Certification) to perform periodical VCS Verification of the 'Satara Wind Power Project in Maharashtra, India' in India (hereafter called project). This project has already been registered as a VCS project (VCS ID 1519). The objective of this verification is a thorough and independent assessment of registered project activities against the applicable VCS requirement by the DOE. 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 of this project was based on the registered project description & monitoring report /4/ and supporting documents submitted by the project proponent to the verification team. The documents were reviewed against the following guidance and protocols:

VCS standard Version 4.1, Issued: 19-September-2019; updated: 22-April-2021 /16/

Approved baseline and monitoring methodology ACM0002 ver. 16.0 "Consolidated baseline methodology for grid-connected electricity generation from renewable sources"/09/

VCS Program Guide, Version 4.0, dated 19-September-2019 /17/

CDM VVS for project activities version 03.0 /20/

CDM PS for project activities version 03.0 /21/

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

1.3 Level of Assurance

The verification team verified the complete monitoring data for all the parameters of the monitoring plan and confirms that the reported emission reductions are free from any type of material errors. Therefore, Applus+ Certification confirms that the verification is conducted with reasonable level of assurance.

1.4 Summary Description of the Project

The project activity involves electricity generation by wind electric convertors and supplying the generated electricity to the NEWNE Grid (Before April 2016, the Indian electricity system was divided into two grids, the NEWNE and Southern Grid. These are now integrated as a single “Indian Grid” covering all the states). 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 20 WTGs (1500 kW capacity each), making the total installed capacity to be 30 MW at Mann village, in the district Satara, state of Maharashtra India.

Location of the project was verified through Google Map (<https://www.gps-coordinates.net/>) and found consistent with the data provided in the registered PD /01/. The WTGs generate 3-phase power at 400 V ($\pm 12.5\%$) in the frequency range of 47.5 – 51.5 Hz. It is further stepped up to 33 kV for further distribution by the state utility. This information was verified during remote visit and found to be in line with the details provided in the registered PD /01/. The WTGs have been commissioned between 06/03/2014 and 31/03/2014. The same was verified against the registered VCS PD/01/ and commissioning certificates/11/. The emission reductions from the project activity during the period 01/11/2020 - 31/08/2021 (including both days) amount to 51,949 tonnes of CO₂e.

2. VERIFICATIONPROCESS

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

2.1 Method and Criteria

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

- A desk review of the VCS PD and VCS MR
- Remote Site Inspection and interview with project representatives and issuance of findings.
- The resolution of outstanding issues and issuance of final report and opinion.

2.2 Document Review

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

2.3 Interviews

Due to the current situation with the global COVID-19 pandemic scenario and country wide lock down in India, an on-site inspection has not been performed by the assessment team. However, the representatives of the PP and O&M contractors were interviewed remotely online (via Google Meet Digital platform) on 30/10/2021 i.e. personnel responsible for monitoring of the project activity, data collection and management, and QA/QC procedure. The details of the people interviewed are mentioned in the table below:

S. No.	Name	Role	Organization
1	Mr. Feroze Sheikh	Project Coordination	NSL Wind Power Company (Satara) Private Limited
2	Mr. Abhay Agarwal	Consultant	Representative of Emergent Ventures International Pte. Ltd.
3.	Mr. Abhay Yadav	Project Site Coordination	NSL Wind Power Company (Satara) Private Limited

The topics covered during interview ranges from general features and implementation of project to technical details of the project like calibration details, monitoring and measuring

system and data collection, recording and archiving procedures. The assessment was drawn based on the feedback received during interview coupled with the documentation and off-site observations

2.4 Site Inspections

As discussed in the above section, physical site inspection is not done for the current verification. However, to achieve a reasonable level of assurance, the assessment team has followed the alternative means to substantiate the verification criteria as described in the below table –

Assessment Criteria	Means of verification/source documents	Assessment opinion
Description of project activity	i. Commissioning certificates /11/ ii. PPA signed with MSEDCL /12/ iii. Latest VCS verification report /4/. iv. Interview with PP representatives on 30-Oct-2021	The information's with reference to project capacity, technology, plant equipment's and commissioning dates as provided in section 1.1 of MR are found consistent with the documents.
Compliance of the project implementation with the registered project design document	i. Monthly JMRs signed by MSEDCL /8/ ii. Geographical co-ordinates (Location of Project activity) verified through Google Map ¹ as well as sharing of live location from PP representative onsite. iii. Latest VCS	Verified documents indicated the following information: • Serial number of energy meters (Main and Check) • Capacity of project • Name of project participant (Ownership of the project activity)

¹<https://www.gps-coordinates.net/>

Assessment Criteria	Means of verification/source documents	Assessment opinion
	verification report /4/. iv. PPA signed with MSEDCL /12/ v. Interview with PP representatives on 30-Oct-2021 vi. Latest photographs of major project equipment are installed at site (i.e. Wind Turbine, generators, energy meters etc.)/19/	Location of power house is verified through Google Map. Daily generation records are verified on sample basis to check the operational status of project activity. Grid connectivity of the project is confirmed through the PPA. All the information's regarding the project implementation as discuss above are further verified through previous VCS verification report/2.1/ and found consistent.
Compliance of the registered monitoring plan with applied methodologies	i. Interview with PP representatives on 30-Oct-2021 ii. PPA signed with MSEDCL /12/	The organizational structure, responsibilities and competencies of the personnel confirmed

Assessment Criteria	Means of verification/source documents	Assessment opinion
and standardized baselines	iii. Monthly JMRs signed by MSEDCL /8/ iv. Invoices raised by project developer to SEB/9/ v. Photograph of all the WTGs, energy meters installed at site and screen shots of online monitoring system/19/	through interview with PP representatives. Frequency of monitoring of parameters listed under approved monitoring plan is verified through JMRs /Invoices. The methods used for measuring, recording, storing, aggregating, and reporting the data on monitored parameters are verified through PPA and interactions with site personnel. Procedure for data uncertainty, emergency preparedness, roles and responsibility, operational and management structure are mentioned in the MR is confirmed through interview with PP

Assessment Criteria	Means of verification/source documents	Assessment opinion
		representatives and found satisfactory.
Compliance with the calibration frequency requirements for measuring instruments	i. Calibration certificates of energy meters/6/ ii. Monthly JMRs signed by MSEDCL /8/ iii. PPA signed with MSEDCL /12/	Calibration frequency and energy meter specifications (Sr.No., make, accuracy class) is verified through calibration certificates, photographs of energy meters and further verified through monthly Form-B/JMRs and found consistent. Responsibility of calibration and maintenance of energy meters is solely under control of MSEDCL; this is verified through the PPA.
Assessment of data and calculation of emission reductions or net removals	i. Monthly JMRs signed by MSEDCL /8/ ii. Invoices raised by project developer to MSEDCL /9/	Monthly values of monitoring parameters used in ER calculation are verified through JMRs and cross verified with the invoices. Methods, formulae

Assessment Criteria	Means of verification/source documents	Assessment opinion
		and emission factor for calculating baseline emissions have been followed are in accordance with the applied methodology /10/.

It is noteworthy that no sampling plan for verification is applied as 100% data is verified for the current monitoring period. Most of the reference documents referred by the assessment team (above table) are either issued /endorsed by grid utility (MSEDCL); government agency hence is deemed authentic.

The assessment team has also used documents such as validation report/2/ available publicly. Furthermore, the project activity already verified under VCS previously and currently undergoing periodic VCS verification. Hence, based on the information's available through approved documents (VCS verifications), it can be confirmed that project is implemented and being operated as described in the registered PD/1/.

The assessment team has verified sufficient appropriate audit evidences, to reduce audit risk to an acceptably low level as requisite to achieve reasonable level of assurance for the current verification.

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

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

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

- Modifications to the implementation, operation and monitoring of the registered project activity has not been sufficiently documented by the project participants;
- Mistakes have been made in applying assumptions, data or calculations of emission reductions that will impact the quantity of emission reductions;
- Issues identified in a FAR during validation to be verified during verification or previous verification(s) have not been resolved by the project participants.

Clarification request (CR) is raised if information is insufficient or not clear enough to determine whether the applicable CDM requirements have been met. All CARs and CRs raised by 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 verification process 01 CARs, 02 CRs and 00 FARs were raised. All the findings that are raised and communicated to project participant during the verification are included under Appendix 4. 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 periodical verification under VCS; there were no FARs raised during the validation or previous verification/2.1/.

2.6 Eligibility for Validation Activities

Not applicable.

3. VALIDATION FINDINGS

Not applicable.

3.1 Participation under Other GHG Programs

This project is registered under VCS (Project ID-1519). As verified through the records available at VCS registry. The project 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/14/ submitted by the PP and hence accepted by the assessment team.

Audit team checked the REC Mechanism database of India and found that the project activity is not accredited / registered under REC mechanism. Further, declaration for the same is checked and found correct by the assessment team. Also assessment team checked the following registries to confirm the same. The details of the registries checked are as follows:

1. <https://www.recregistryindia.nic.in/>
2. <http://cdm.unfccc.int/>
3. <http://www.goldstandard.org/>

Rejection by other GHG programs

The Project is not rejected by other GHG programs. A declaration/14/ for the same is checked and found correct by the assessment team. Also assessment team checked the following registries to confirm the same. The details of the registries checked are as follows:

1. <https://www.recregistryindia.nic.in/>
2. <http://cdm.unfccc.int/>
3. <http://www.goldstandard.org/>
4. <https://verra.org/verra-standards-and-programs/>

The Project has no intend to generate any other form of GHG-related environmental credit for GHG emission reductions or removals claimed under the VCS Program. Renewable energy certificates are available for trading in the host country However, the same is not availed by the Project Proponent. The undertaking regarding the same is submitted by the PP which is acceptable to the assessment team and assessment team also checked the REC web site (<https://recregistryindia.nic.in/>) and found the declaration/14/ to be correct.

3.2 Methodology Deviations

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

3.3 Project Description Deviations

There is no project description deviation identified during the current monitoring period.

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 20 WTGs installed at Mann village, in the district Satara, state of Maharashtra in India. The first and last machine under the project activity was commissioned on 06/03/2014 and 31/03/2014 respectively. The WTGs are of Vensys V87 type with an individual capacity of 1.5 MW, summing up to 30 MW of total installation capacity. The installation and specification of WTGs has been checked with commissioning certificates/11/ and on-site assessment/18/. The commissioning has also been duly validated in the VCS validation report of the project activity/02/. There was no major breakdown or shut downs during the monitoring period which might affect the applicability of methodology or might cause material errors in emission reductions.

Assessment team concludes the following:

- a) There is 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 is no material discrepancies between the actual monitoring system, and the monitoring plan set out in the project description and the applied methodology/09/.
- 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/14/.
- 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/.

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

4.2 Safeguards

4.2.1 No Net Harm

Being renewable wind power generation project there is no negative environmental and socio-economic impacts in fact project activity contributes positively by providing environment friendly power generation leading to sustainable development of the region. Also, the generation of employment supports upliftment of socio-economic status of region.

As per the EIA notification dated 14th September 2006, the wind power projects are exempted from environmental clearance. Hence, Environmental impact assessment is not required for this project activity.

The report on “Developmental Impacts and Sustainable Governance Aspects of Renewable Energy Projects” prepared by MNRE dated September 2013 also confirms that wind power project activity operations do not result in direct air pollution, noise pollution. Hence verification team confirms that there are no any significant impacts due to implementation of project activity on air, water, soil quality and ambience are envisaged due to the project activity.

4.2.2 Local Stakeholder Consultation

VVB Assessment team has verified that the Project is registered with VCS and registered VCS Project Description version 03 dated 08/02/2016, sections 6 describe the Local Stakeholder Consultation Process as in-line with VCS requirement. Same has been checked and verified during desk review of PD and confirm with the PP during remote assessment discussion.

VVB Assessment team has review the status of ongoing communication and continuous feedback from stakeholders with the PP, During remote assessment it was discussed and found that there were no other major comments or protest raised by the stakeholders and they were totally in support for setting up of these kinds of projects in the region.

Furthermore ongoing communication, VVB assessment team requested to the PP provide supporting documents for implementation of ongoing communication. The PP has explained that there is a grievance register is presented at onsite where in the stakeholder can put down his/her complain and the same if found genuine will be addressed immediately. However, being renewable wind power generation project there is no feedback/grievance has been reported within this monitoring period, the VVB assessment team has requested to review the supporting documents and the PP has submitted the photos of grievance register which verified from the review of photos provided by the Project Participant. This is found the there is no feedback/grievance has been reported during current monitoring period, hence accepted.

4.3 AFOLU-Specific Safeguards

Not applicable for this verification.

4.4 Accuracy of GHG Emission Reduction and Removal Calculations

The project monitoring has been carried in accordance with the registered VCS PD/01/ and the monitoring report/04/. The monitoring plan laid in the registered PD is being followed at the site/18/. 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/04/. The emission reductions are purely based on the net electricity generated and exported from the machines. 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/05/ provided by PP. the verification of each monitoring parameter has been discussed later in section 4.5.

The calculation method and formulae used in calculating baseline emission is in compliance to the methodology used i.e. ACM0002 Version 16 /09/. Since project activity is a wind power project, leakage emission and project emission has been considered as zero.

4.5 Quality of Evidence to Determine GHG Emission Reductions and Removals

The below tables describe how the parameter, that is to be measured according to the monitoring plan, has been verified to confirm that the actual monitoring complies with the monitoring plan, monitoring data has been thoroughly assessed and that the calibration requirements are met.

Parameter	Quantity of net electricity generation supplied by the project plant/unit to the grid in year y $EG_{\text{facility}, y}$ (MWh)	
Means of verification	Criteria/Requirements	Assessment/Observation
	Measuring /Reading /Recording frequency	The parameter is calculated and recorded on monthly basis. Quantity of net electricity generation supplied by the project plant/unit to the grid in year y, is calculated as: $EG_{\text{facility}, y} = (EG_{\text{JMR, NSL, export}, y}$

		EG_{JMR, NSL, import, y} Where, EG_{JMR, NSL, export, y}=Quantity of Electricity exported by the Project WTGs connected to the feeder i to the grid during the year y. EG_{JMR, NSL, import, y}= Quantity of Electricity imported by the Project WTGs connected to the feeder i from the grid during the year y.
	Is measuring and reporting frequency in accordance with the monitoring plan and monitoring methodology? (Yes / No)	Yes. The reporting frequency is in line with the monitoring plan as outlined in the registered PD/01/ and monitoring methodology/09/.
	Monitoring equipment	No monitoring equipment is used as this parameter is calculated. However the parameter EG_{JMR, NSL, export, y} and EG_{JMR, NSL, import, y} are calculated using measured values, are continuously monitored, hourly measured and monthly recorded.
	Is accuracy of the monitoring equipment as stated in the monitoring plan? If the monitoring plan does not specify the accuracy of the monitoring equipment, does the accuracy of the monitoring equipment comply with	The accuracy of the monitoring equipment used to measure the input values used to calculate EG_{JMR, NSL, export, y} and EG_{JMR, NSL, import, y} is 0.2s, which is as per the registered PD/01/ which is as per the norm defined in

	local/national standards, or as per the manufacturer's specification?	the PPA/12/.
	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.
	Calibration frequency /interval:	Calibration frequency of the meters is once in 3 years.
	Is the calibration interval in line with the monitoring plan and/or methodology? If the monitoring plan does not specify the frequency of calibration, is the selected frequency in accordance with the local/national standards, or as per the manufacturer's specifications?	Yes. The calibration frequency is once in 3 years as outlined in the registered PD/01/ is in accordance with the national standards/15/.
	Is the calibration of measuring equipment carried out by an accredited person or institution?	Yes the calibration is conducted by state utility which is NABL Accredited entity/06/.
	Is(are) calibration(s) valid for the whole reporting period?	There is no delay in Calibration of meters during the current monitoring period. (please refer discussion under heading "calibration of meters" in this section of this report for further details).
	Is the calibration carried out for a measuring range comparable with the range for which measurements	Yes. The calibration is carried out appropriately.

	have been carried out?	
	How were the values in the monitoring report verified?	Cumulative value of $EG_{\text{facility},y}$ for entire monitoring period is reported in the monitoring report/04/, and monthly values in the ER calculation sheet/05/. The monthly values were verified from the credit notes issued by state utility and found to be consistent. Value of this parameter for the current monitoring period was verified as 53,189 MWh.
	If applicable, has the reported data been cross-checked with other available data?	The monthly reported values of $EG_{\text{facility},y}$ were further cross checked with the monthly invoices raised by the PP /07/ 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?	Remote assessment of the project activity confirms that the necessary QA/QC procedures are in place and the data management system is effective and reliable.
	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.
Findings	CR#1 was raised and resolved.	

Conclusion	The parameter has been monitored appropriately, in accordance with the registered monitoring plan (as per measurement methods and procedures to be applied) and applied methodology. The monitoring results were recorded consistently as per the approved frequency in the monitoring plan. The emission reduction calculation for the project activity is estimated based on the electricity supplied by the WTGs. Since 100% data was verified, the team can ascertain that the values taken for emission reduction calculation are free from material errors.
-------------------	---

Parameter	Quantity of Electricity exported by the Project WTGs connected to the feeder i to the grid during the year y, $EG_{JMR, NSL, export, y}$ (MWh)	
Means of verification	Criteria/Requirements	Assessment/Observation
	Measuring /Reading /Recording frequency	The parameter is calculated from measured parameter as Monthly Export value of Wind Farm (JMR Reading) and Summation of Controller Reading of project WTGs and non-project WTGs. The parameter is reported monthly in the credit note, which is prepared for each project developer separately.
	Is measuring and reporting frequency in accordance with the monitoring plan and monitoring methodology? (Yes / No)	Yes. The reporting frequency is in line with the monitoring plan as outlined in the registered PD/01/ and monitoring methodology/09/.
	Monitoring equipment	No monitoring equipment is used as this parameter is calculated. However, the input value used to calculate the value of this parameter are continuously monitored, hourly measured and monthly

		recorded. The WTGs belongs to project activity are connected to different feeders and each feeder have exclusive dedicated metering arrangement at project site. Also, the WTGs of other project (non-project activity) are also connected to these feeders. The electricity generated by all the WTGs (project and non-project) is been fed to the NEWNE grid and monthly generation of all the WTGs at each feeder reading is recorded by the representatives MSEDCL in the presence of O&M contractor officials in the form of JMR. Based on the data recorded in the JMRs and generation recorded through controller meter at individual WTG, electricity supplied to the grid by the project activity is calculated by MSEDCL, using the apportioning procedure and credit note for each project developer is prepared.
	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,	The accuracy of the monitoring equipment used to measure the input values used to calculate (EG_{JMR, NSL, export,y}) is 0.2s, which is as per the registered PD/01/ which is as per the norm defined in the PPA/12/.

	or as per the manufacturer's specification?	
	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.
	Calibration frequency /interval:	Calibration frequency of the meters is once in 3 years.
	Is the calibration interval in line with the monitoring plan and/or methodology? If the monitoring plan does not specify the frequency of calibration, is the selected frequency in accordance with the local/national standards, or as per the manufacturer's specifications?	Yes. The calibration frequency is in line with the monitoring plan as outlined in the registered PD/01/.
	Is the calibration of measuring equipment carried out by an accredited person or institution?	Yes the calibration is conducted by state utility which is NABL Accredited entity/06/.
	Is(are) calibration(s) valid for the whole reporting period?	There is no delay in Calibration of meters during the current monitoring period. (please refer discussion under heading "calibration of meters" in this section of this report for further details).
	Is the calibration carried out for a measuring range comparable with the range for which measurements have been carried out?	Yes. The calibration is carried out appropriately.

	How were the values in the monitoring report verified?	Cumulative value of EG _{JMR, NSL, export,y} for entire monitoring period is reported in the monitoring report, however monthly values are reported in the ER calculation sheet/05/. The monthly values were verified from the credit notes/08/ issued by state utility and found to be consistent. Value of this parameter for the current monitoring period was verified as 53,216 MWh.
	If applicable, has the reported data been cross-checked with other available data?	The monthly reported values of EG _{JMR, NSL, export,y} were further cross checked with the monthly invoices raised by the PP /07/ 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?	Remote assessment of the project activity confirms that the necessary QA/QC procedures are in place and the data management system is effective and reliable.
	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.
Findings	CR#1 was raised and resolved.	
Conclusion	The parameter has been monitored appropriately, in accordance with the registered monitoring plan (as per measurement methods and procedures to be applied) and applied methodology. The	

	monitoring results were recorded consistently as per the approved frequency in the monitoring plan. The emission reduction calculation for the project activity is estimated based on the electricity supplied by the WTGs. Since 100% data was verified, the team can ascertain that the values taken for emission reduction calculation are free from material errors.
--	--

Parameter	Quantity electricity imported by the Project WTGs connected to the feeder i from the grid during the year y, $EG_{JMR, NSL, import, y}$ (MWh)	
Means of verification	Criteria/Requirements	Assessment/Observation
	Measuring /Reading /Recording frequency	The parameter is calculated from measured parameter as (a) Monthly Import Readings of Wind Farm (JMR Reading) and (b) Summation of Controller Reading of project WTGs and non-project WTGs. The parameter is reported monthly in the credit note, which is prepared for each project developer separately.
	Is measuring and reporting frequency in accordance with the monitoring plan and monitoring methodology? (Yes / No)	Yes. The reporting frequency is in line with the monitoring plan as outlined in the registered PD/01/ and monitoring methodology/09/.
	Monitoring equipment	No monitoring equipment is used as this parameter is calculated. However, the input values used to calculate the value of this parameter are continuously monitored, hourly measured

		and monthly recorded. The WTGs belongs to project activity are connected to different feeders and each feeder have exclusive dedicated metering arrangement at project site. Also, the WTGs of other project (non-project activity) are also connected to these feeders. The electricity generated by all the WTGs (project and non-project) is been fed to the Indian grid and monthly generation of all the WTGs at each feeder reading is recorded by the representatives MSEDCL in the presence of O&M contractor officials in the form of JMR. Based on the data recorded in the JMRs and generation recorded through controller meter at individual WTG, electricity supplied to the grid by the project activity is calculated by MSEDCL, using the apportioning procedure and credit note for each project developer is prepared.
	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 used to measure the input values used to calculate ($EG_{JMR, NSL, import, y}$) is 0.2s, which is as per the registered PD/01/ which is as per the norm

	the accuracy of the monitoring equipment comply with local/national standards, or as per the manufacturer's specification?	defined in the PPA/12/.
	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.
	Calibration frequency /interval:	Calibration frequency of the meters is once in 3 years.
	Is the calibration interval in line with the monitoring plan and/or methodology? If the monitoring plan does not specify the frequency of calibration, is the selected frequency in accordance with the local/national standards, or as per the manufacturer's specifications?	Yes. The calibration frequency is in line with the monitoring plan as outlined in the registered PD/01/.
	Is the calibration of measuring equipment carried out by an accredited person or institution?	Yes the calibration is conducted by state utility which is NABL Accredited entity/06/.
	Is(are) calibration(s) valid for the whole reporting period?	There is no delay in Calibration of meters during the current monitoring period. (please refer discussion under heading "calibration of meters" in this section of this report for further details).
	Is the calibration carried out for a measuring range comparable with the range for which measurements	Yes. The calibration is carried out appropriately.

	have been carried out?	
	How were the values in the monitoring report verified?	Cumulative value of $EG_{JMR, NSLimport,y}$ for entire monitoring period is reported in the monitoring report, however monthly values are reported in the ER calculation sheet/05/. The monthly values were verified from the credit notes/08/ issued by state utility and found to be consistent. Value of this parameter for the current monitoring period was verified as 27 MWh.
	If applicable, has the reported data been cross-checked with other available data?	The monthly reported values of $EG_{JMR, NSL, import,y}$ were further cross checked with the monthly invoices raised by the PP /07/ 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?	Remote assessment of the project activity confirms that the necessary QA/QC procedures are in place and the data management system is effective and reliable.
	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	No such issues.

	<table border="1"> <tr> <td data-bbox="598 280 1021 481">estimated as stipulated by Appendix 1 to the CDM Project Standard?</td><td data-bbox="1021 280 1436 481"></td></tr> </table>	estimated as stipulated by Appendix 1 to the CDM Project Standard?	
estimated as stipulated by Appendix 1 to the CDM Project Standard?			
Findings	CR#1 was raised and resolved.		
Conclusion	The parameter has been monitored appropriately, in accordance with the registered monitoring plan (as per measurement methods and procedures to be applied) and applied methodology. The monitoring results were recorded consistently as per the approved frequency in the monitoring plan. The emission reduction calculation for the project activity is estimated based on the electricity supplied by the WTGs. Since 100% data was verified, the team can ascertain that the values taken for emission reduction calculation are free from material errors.		
Parameter	Quantity electricity generated by the project activity WTGs recorded at respective controller meters, $EG_{\text{controller, gen}}$ (MWh)		

Means of verification	Criteria/Requirements	Assessment/Observation
	Measuring /Reading /Recording frequency	The parameter is continuously measured, recorded hourly and reported monthly in line with the registered monitoring plan.
	Is measuring and reporting frequency in accordance with the monitoring plan and monitoring methodology? (Yes / No)	Yes. The reporting frequency is in line with the monitoring plan as outlined in the registered PD/01/ and monitoring methodology/09/.
	Monitoring equipment	This parameter is measured through LCS meter (controller panel meter) integrated with WTG and monitored via online monitoring system (SCADA).
	Is accuracy of the monitoring equipment as stated in the monitoring plan? If the monitoring plan does not specify the accuracy of the monitoring equipment, does the accuracy of the monitoring equipment comply with local/national standards, or as per the manufacturer's specification?	Not applicable
	Is the accuracy valid for the entire measuring range or do different accuracy levels apply to different measuring ranges?	Not applicable

	Calibration frequency /interval:	Not applicable
	Is the calibration interval in line with the monitoring plan and/or methodology? If the monitoring plan does not specify the frequency of calibration, is the selected frequency in accordance with the local/national standards, or as per the manufacturer's specifications?	Not applicable
	Is the calibration of measuring equipment carried out by an accredited person or institution?	It is not possible to calibrate controller because it is integral part of WTG cannot be removed during operation. Same has been confirmed through telephonic interview of site personnel remote assessment.
	Is(are) calibration(s) valid for the whole reporting period?	Not applicable
	Is the calibration carried out for a measuring range comparable with the range for which measurements have been carried out?	The LCS meter at each WTG is a microprocessor based multi-function relay (MFR) which is highly accurate, and it monitors the electricity generated by each WTG. The relay runs software to sample inputs and numerically processes the information. It is therefore highly unlikely for this relay to wrongly read/record data. The data is generated and recorded in the SCADA system automatically. The O&M contractor, based on recorded data in the SCADA system, prepares the daily generation reports. These daily generation reports are used to prepare monthly

		generation reports. The monitoring procedures were sufficiently robust to enable accurate transmission of data.
	How were the values in the monitoring report verified?	Cumulative value of $\sum EG_{\text{Controller},j}$ for entire monitoring period is reported in the monitoring report, however monthly values are reported in the ER calculation sheet. The monthly values were verified from the monthly generation reports/19/ issued by state utility and found to be consistent. Value of this parameter for the current monitoring period is 55,740 MWh.
	If applicable, has the reported data been cross-checked with other available data?	Not applicable, as the generation recorded at the LCS meter is cross verified by the energy calculated by inverting system installed in the WTGs.
	Does the data management ensure correct transfer of data and reporting of emission reductions and are necessary QA/QC processes in place?	Remote assessment of the project activity confirms that the necessary QA/QC procedures are in place and the data management system is effective and reliable.
	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.
Findings	CR#1 was raised and resolved.	

Conclusion	The parameter has been monitored appropriately, in accordance with the registered monitoring plan (as per measurement methods and procedures to be applied) and applied methodology. The monitoring results were recorded consistently as per the approved frequency in the monitoring plan. The emission reduction calculation for the project activity is estimated based on the electricity supplied by the WTGs. Since 100% data was verified, the team can ascertain that the values taken for emission reduction calculation are free from material errors.
-------------------	---

Parameters fixed ex ante:

EF_{grid,OM,simple}; tCO₂/MWh: It is the operating margin emission factor of NEWNE grid fixed at the time of project registration the mentioned value of 0.9857 tCO₂/MWh is consistent with the registered PD/01/.

EF_{grid,BM,y}; tCO₂/MWh: It is build margin emission factor of NEWNE grid fixed at the time of project registration the mentioned value of 0.9495 tCO₂/MWh is consistent with the registered PD/01/.

EF_{grid,CM,y}; tCO₂/MWh: it is the combined margin emission factor of NEWNE grid fixed at the time of project registration the mentioned value of 0.9767 tCO₂/MWh is consistent with the registered PD/01/.

Calibration of meters:

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

WTG Ref No	Feeder No	Meter Details	Previous Calibration	Due Date	Current Calibration	Due Date
NSL-1	F-02	<u>Main Meter:</u> <u>Make: Elster, S.</u> <u>No: 13277651</u> <u>Class: 0.2s</u>	21/08/2018	21/08/2021	20/08/2020	20/08/2023
NSL-2						
NSL-3						
NSL-6						
NSL-7		<u>Check Meter:</u> <u>Make: Elster, S.</u> <u>No: 13277650</u> <u>Class: 0.2s</u>				
NSL-10						
NSL-11						
NSL-12						
NSL-13						
NSL-14						

NSL-15						
NSL-20	F-01	<u>Main Meter:</u> <u>Make: Elster, S.</u> <u>No: 13277649</u> <u>Class: 0.2s</u>	21/08/2018	21/08/2021	20/08/2020	20/08/2023
NSL-22						
NSL-17						
NSL-23						
NSL-26						
NSL-34						
NSL-36						
NSL-37						
NSL-28	F-05	<u>Main Meter:</u> <u>Make: Elster, S.</u> <u>No: 13277639</u> <u>Class: 0.2s</u>	06/10/2018	06/10/2021	20/08/2020	20/08/2023
		<u>Check Meter:</u> <u>Make: Elster, S.</u> <u>No: 13277640</u> <u>Class: 0.2s</u>				

Meters used to measure the parameters are of accuracy class 0.2s, as verified through calibration certificates/06/ and also remote inspection during the remote visit. 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 /15/ 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/06/ are mentioned in the table under Annexure-1 of the VCS MR/04/. The monitoring equipment for each feeder consists of a main and check meter at 132/33 kV DISCOM substation. The meters have been inspected remotely through photographs provided by PP during the remote audit and the meter details are found to be consistent. The CEA Notification No. 502/70/CEA/DP&D dated 17/03/2006/15/ 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 3 years is appropriate.

Assessment on delay in calibration:

There is no delay in meter calibration as the meter calibration frequency is "Once in three years". The meter calibration during the current monitoring period was ending in August 2020, meters are again calibrated till 2023 now which is outside the monitoring period.

The verification team has remotely checked all the meters and confirmed that the meters were working satisfactorily. Also, the calibration of meters is completely under preview of state utility and PP has no control over the same as confirmed through telephonic interviews of site personnel and PPA signed by the PP with state utility/12/.

The registered VCS PD/01/ & MR /04/ and remote audit observations confirm that the metering equipment are sealed and maintained by the state utility.

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.

GHG Calculations

The emission reduction as per the applied methodology equals the baseline emissions (project emissions and leakage emissions for such project activities is considered zero). The formula provided for the calculation of baseline emissions is:

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

Where:

BE_y : Baseline emissions in year y (tCO₂)

$EG_{PJ, y}$: 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)

$EF_{grid, CM, y}$: Combined Margin (CM) Emission Factor of NEWNE (tCO₂/MWh)

Since the project activity is the installation of a new grid-connected renewable power plant/unit at a site where no renewable power plant was operated prior to the implementation of the project activity, hence:

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

Where,

$EG_{facility, y}$ = Quantity of net electricity generation supplied by the project plant/unit to the grid in year y (MWh/yr)

$$\text{Thus, } BE_y = EG_{facility, y} * EF_{grid, CM, y}$$

$$\text{Thus, } BE_y = 53,189 \text{ MWh} * 0.9767 \text{ tCO}_2/\text{MWh}$$

$$= 51,949 \text{ tCO}_2\text{e (Rounded down value)}$$

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. The actual emission reduction achieved during the current monitoring period are 17.70% higher than the estimated amount of emission reductions at the time of validation, which is due to the high PLF achieved by the project activity during the monitoring period. It is to be noted that PLF is completely governed by the availability of wind, which is natural phenomenon and same is beyond the control of PP. Furthermore, the assessment team checked the registered PD and verified that in the sensitivity analysis, increase in PLF is outside the standard 10% sensitivity range, however such increment in generation is found to be unpredicted and not under the direct control of PP; and does not lead to any negative impact on additionality established at the time of registration. In this regard, verification team has reviewed the Investment Analysis sheet submitted to VCS at the time of registration (publically available in VERRA project database) and following are the observation:

- (i) The equity IRR of the project, which was based on investment analysis at the time of project registration, can only be improved above the expected benchmark when generation of the project is increased by 17.80% as compared to the input values of the IRR; which

- leads to an increase in PLF value of 3.6% increase to reach the benchmark. However, during the current monitoring period, the actual increase in PLF is only 2.51% (i.e. actual generation 53,189 MWh).
- (ii) Additionally, assessment team has reviewed from the investment analysis sheet that sensitivity threshold for project cost was -15.70%, whereas actual project cost incurred is about 14% higher. Similarly, the assessment team has verified that actual O&M and power tariff or the project is also fixed and can't be reduced and increased further respectively,

Furthermore, VVB has verified that the increase in emission reduction of the project activity does not have any negative impact on the project financial additionality. Also, as the actual project cost is already 14% higher, hence any further increase in PLF/generation is also well addressed within the threshold sensitivity range. VVB has cross-checked and verified from the investment analysis sheet; that the IRR (with actual project cost, which is 14% higher than the input value) will reach the expected benchmark only when PLF/generation increases by 33.80% (i.e. PLF value reaches 26.8%). Hence final Emission Reductions achieved during the current monitoring period do not have any material impact on the project additionality.

Hence the assessment team has concluded the increase in emission reduction of the project activity does not have any negative impact on the additionality, hence final Emission Reductions are justified and acceptable.

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.

4.6 Non-Permanence Risk Analysis

Not applicable for the project activity.

5. VERIFICATION CONCLUSION

LGA Technological Center, S.A. (Applus+ Certification), contracted by NSL Wind Power Company (Satara) Private Limited, has performed the independent verification of the emission reductions for the VCS project activity (VCS ID- 1519) "Satara Wind Power Project in Maharashtra, India" in India for the monitoring period 01/11/2020 - 31/08/2021 as reported in the Monitoring Report Version 1.1 dated 10/11/2021. The NSL Wind Power Company (Satara) Private 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 on the basis of the baseline and monitoring methodology ACM0002 Version 16, the monitoring plan contained in the registered VCS PD Version

03, dated 08/02/2016 and VCS guidelines version 4, Monitoring Report Version 1.1 dated 10/11/2021 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 fairly stated.

In our opinion the GHG emissions reductions reported for the project activity for the period 01/11/2020 - 31/08/2021 are fairly stated in the Monitoring Report Version 1.1 dated 10/11/2021. The GHG emission reductions were calculated correctly on the basis of the approved baseline and monitoring methodology ACM0002, Version 16, and the VCS standard.

Verification period: From 01/11/2020 - 31/08/2021 (including both days)

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

Year	Baseline emissions or removals (tCO ₂ e)	Project emissions or removals (tCO ₂ e)	Leakage emissions (tCO ₂ e)	Net GHG emission reductions or removals (tCO ₂ e)
Year 2019 (01/11/2020 to 31/12/2020)	5,985	0	0	5,985
Year 2020 (01/01/2021 to 31/08/2021)	45,964	0	0	45,964
Total	51,949	0	0	51,949

APPENDIX 1: <REFERENCES>

S.No	Title of Document	Version	Date
1.	Registered VCS PD	03	08/02/2016
2.	VCS Validation Report	1.0	10/02/2016
3.	VCS Monitoring Report	01	26/10/2021
4.	VCS Monitoring Report (Final)	1.1	10/11/2021
5.	ER spread sheet (corresponding to the final monitoring report)	1.1	10/11/2021
6.	Certificates of Calibration for all the meters belongs to project activity	-	-
7.	Invoice issued by PP to state DISCOM	-	For the period 01/11/2020 - 31/08/2021
8.	Monthly JMR and Credit notes issued by MSEDCL for the current verification period.	-	For the period 01/11/2020 - 31/08/2021
9.	"Consolidated baseline methodology for grid-connected electricity generation from renewable sources", ACM0002	16.0	-
10.	CEA Database	Version 10	-
11.	Commissioning certificate for all the WTGs of the project activity issued by state electricity authority	-	Commissioned from 09/07/2013 to 06/03/2014
12.	Power Purchase Agreements signed between Project Proponent and state electricity authority	For 7.5 +12 MW	Dated 06/05/2014
		For 10.5 MW	Dated 13/08/2014
13.	VCS webpage for the project, VCS ID 1519; https://registry.verra.org/app/projectDetail/VCS/1519	-	Last accessed on 16/11/2021
14.	Letter of declaration dated from PP regarding not having created or sought any other form of environmental credit for the same period	-	-
15.	Central Electricity Authority (Installation and Operation	-	Dated

S.No	Title of Document	Version	Date
	of Meters) Regulations Notified on 17/03/2006 <u>No. 502/70/CEA/DP&D</u> Amendments Notified on 26/06/2010 <u>No.</u> <u>502/6/2009/DP&D/D-I</u>		17/03/2006
16.	VCS Standard	Version 4.1	19/09/2019 updated: 22-April-2021
17.	VCS Program Guide	Version 4	19/09/2019
18.	Remote assessment –interviews of staff personnel	-	30/10/2021
19.	Monthly generation reports issued by O&M contractor	-	For the period 01/11/2020 - 31/08/2021
20	Clean Development Mechanism Validation and Verification Standard for Project Activity (CDM-VVS for PA), as per EB 101, Annex 2	3.0	09/09/2021
21	Clean Development Mechanism Project Standard for Project Activity (CDM-PS for PA), as per EB 101, Annex 1	3.0	09/09/2021

APPENDIX 2: <COMPETENCY STATEMENT>

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
Vivek Kumar Ahirwar	Lead Auditor (LA) & 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

The curricula vitae of the DOE's team members are provided below:

Vivek Kumar Ahirwar is a BEE-Certified Energy Auditor by Govt of India with over 12 years of relevant experience in energy efficiency, energy audit, thermal and electrical energy generation technology from renewable source and energy conservation in energy intensive industries, designated consumers and commercial buildings, implementation of energy conservation building codes, research, process and green building projects. He is a certified lead auditor for ISO 14001 EMS and 14064. He has experience under various categories of projects stating from renewable to waste to supercritical projects and WCD. He has successfully audited more than 400 GHG (CDM/VCS/GS) projects in different states across the India. 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 Govt. Engineering college, Rewa, RGPV, India.

Mr. Vivek K. Ahirwar is based in Indore, India.

Mr. Vivek K. Ahirwar may participate in the Audit Team as Lead Auditor and Technical Expert.

Simon Shen (Master Degree in Thermal Energy Engineering, Bachelor Degree in Environmental Engineering) is a Lead Auditor appointed by Applus+ LGAI 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+ LGAI, he had been worked for TÜV SÜD as a GHG Validator/Verifier and ISO 9001/14001 Lead Auditor for 3.5 years.

APPENDIX 3: <ABBREVIATIONS>

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
CO2	Carbon dioxide
DISCOM	Distribution Company
EB	Executive Board
EPC	Engineering, Procurement and Construction
FAR	Forward Action Request
GHG	Green House Gas
ISO	International Standards Organization
JMR	Joint Meter Reading
kW	Kilowatt
kWh	Kilowatt hour
MEDA	Maharashtra Energy Development Agency
MFR	Multi-Function Relay

MR	Monitoring Report
MSEDCL	Maharashtra State Electricity Distribution Company Limited
MW	Megawatt
MWh	Megawatt-hour
NEWNE	Northern Eastern Western Northern-Eastern
O&M	Operation and Maintenance
PD	Project Description
PLF	Plant Load Factor
PP	Project Proponent
PPA	Power Purchase Agreement
QA/QC	Quality Assurance and Quality Control
TOD	Time of the Day
UNFCCC	United Nations Framework Convention on Climate Change
WEC	Wind Energy Convertor
WEG	Wind Energy Generator
WTG	Wind Turbine Generator
VCS	Voluntary Carbon Standard
VCSA	Voluntary Carbon Standard Association
VCS PD	VCS Project Description
VCUs	Voluntary Carbon Units

APPENDIX 4: <FINDINGS OVERVIEW>

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

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

Table 2. CR from this verification

CR ID	01	Section no.	ER	Date : 09-11-2021
Description of CR				
- PP is requested to specify version number and date of ER Sheet. - PP is requested to justify the difference of value in invoice and credit note in yellow highlighted cells. - PP is requested to clarify why formula is not applied in the orange highlighted cells.				
Project participant response				Date : 10/11/2021
- Version number and date has been added to ER Sheet. - Justify for the difference of value in invoice and credit note in yellow highlighted cells has been provided. Mostly it is in the last decimal points of the value recorded in the two documents. But this difference is not material and does not impact emission reductions. - Formula has been now applied in the orange highlighted cells.				
Documentation provided by project participant				
1. ER sheet V1.1				
DOE assessment				Date: 16/11/2021
Assessment team confirms that : - Version number and date has been added to ER Sheet. - PP has justified for the difference of value in invoice and credit note in yellow highlighted cells has been provided. - Formula has been now applied in the orange highlighted cells. Hence,accepted. 4. CR#1 Closed.				

CR ID	02	Section no.	MR	Date : 09-11-2021
Description of CR				
PP is requested to clarify how the tools mentioned in Section 1.8 of MR are applicable .				
Project participant response				Date : 10/11/2021
This is an edit error. Reference to irrelevant tools is removed.				
Documentation provided by project participant				
MR Version 1.1				
DOE assessment				Date: 16/11/2021
Assessment Team confirms that irrelevant tools have been removed.Hence,accepted.				
CR#2 Closed.				

Table 2. CAR from this verification

CAR ID	01	Section no.	MR	Date :09-11-2021
Description of CAR				
1.PP is requested to make the duration of the monitoring period consistent with the title page in Section 1.1 of MR.				
2.PP is requested to follow the font color instructions as per the latest template version (v 04) of VCS-MR throughout the MR.				
3.PP is requested to follow the prescribed format of font style as per VCS MR template v04 throughout the MR.				
4.PP is requested to maintain consistency with regard to the format throughout the MR.				
Project participant response				Date : 10/11/2021
1.Duration of the monitoring period is made consistent with the title page in Section 1.1 of MR.				
2.Fontcolor instructions as per the latest template version (v 04) of VCS-MR throughout the MR have been followed.				
3. Prescribed format of font style as per VCS MR template v04 throughout the MR has been followed.				
4.Consistency with regard to the format is now maintained throughout the MR.				
Documentation provided by project participant				
MR Version 1.1				

DOE assessment	Date: 16/11/2021
Assessment team confirms that : 1. Duration of the monitoring period was made consistent with the title page in Section 1.1 of MR. 2. Font color instructions as per the latest template version (v 04) of VCS-MR throughout the MR have been followed. 3. Prescribed format of font style as per VCS MR template v04 throughout the MR has been followed. 4. Consistency with regard to the format is now maintained throughout the MR. Hence,accepted. CAR#1 Closed.	

Table 3. FAR from this validation

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