"VERIFICATION REPORT FOR "150 MW GRID CONNECTED WIND POWER BASED ELECTRICITY GENERATION PROJECT IN GUJARAT, INDIA"

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Summary:

Earthood Services Private Limited (ESPL) has been contracted by Infinite Solutionsto conduct verification of the project "150 MW grid connected Wind Power based electricity generation project in Gujarat, India", VCS PL ID 292, against VCS Standard Version 4.0/2.2/.

The verification includes confirming the project's design description, project's baseline, monitoring plan and the project's compliance with relevant VCS and host party criteria and implementation of the monitoring plan of the PD version 3 dated 24/11/2008/1.1/ for monitoring period 18/06/2016 to 29/09/2017 and PD version 03 dated 11/11/2019/1.1/for monitoring period 30/09/2017 to 30/09/2019 and MR version 02 dated 03/04/2020/1.2/ (Project ID 292) and the application of the monitoring methodology as per ACM0002 version 7: "Grid-connected electricity generation from renewable sources"/2.5/ for monitoring period 18/06/2016 to 29/09/2017 ACM0002 version 19: "Grid-connected electricity generation from renewable sources"/2.1/ for monitoring period 30/09/2017 to 30/09/2019. A site visit was conducted to verify the data submitted in the monitoring report.

The purpose of this project activity is to generate clean form of electricity through renewable wind energy source for sale of electricity to the grid. The project activity consists of 100 WTGs (1.5 MW capacity each), making the total installed capacity to be 150 MW at the Kutch region of Gujarat India. The total GHG emission reductions in monitoring period (18/06/2016 to 29/09/2017 is 367,046 tCO2e and in monitoring period 30/09/2017 to 30/09/2019) is **488,173 tCO2e,** total emission reduction **855,219 tCO2e.**

A risk based approach has been followed to perform this verification. In the course of verification, 03 Corrective Action request (CARs) and 00 Clarification request (CLs) were raised. There is no FAR raised.

The purpose of the verification is to review the VCS MR for the monitoring results and verify that monitoring methodology was implemented according to monitoring plan and monitoring data, further based on review of ER sheet confirm that the reductions in anthropogenic emissions by sources is sufficient, definitive and presented in a concise and transparent manner. In particular, monitoring plan, VCS PD of CP1 (30/09/2007 to 29/09/2017), VCS PD of CP2 (30/09/2017 to 29/09/2027)/1.1/& MR, ER sheet and the project's compliance with relevant VCS and host party criteria are verified in order to confirm that the project has been implemented in accordance with design and conservative assumptions, as documented.

The scope of the verification included as verification of project implementation and operation with respect to the VCS MR, implemented monitoring plan with the VCS MR and applied baseline and monitoring methodology, the actual monitoring systems and procedures are in compliance with the monitoring systems and procedures described in the monitoring plan , Evaluation of the GHG emission reduction data and express a conclusion with a reasonable level of assurance about whether the reported GHG emission reduction data is free from material misstatement, confirmation of reported GHG emission data is sufficiently supported by evidence.

ESPL confirms that that the project is meeting the criteria specified by VCS MR template versions 4.0/2.2/ respectively, VCS Standard version 4.0and applied methodology ACM0002 (version 19)/2.1/ for CP2 and; ACM0002 (version 07)/2.5/ for CP1 and hence be successfully verified and further certified for emission reductions under VCS. Further confirms a combined positive validation and verification opinion confirming the project complies with the applicable VCS requirements, thus recommending the project for registration and issuance.

Our opinion relates to the project's GHG emissions and the resulting GHG emission reductions reported and related to the valid 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 "150 MW grid connected Wind Power based electricity generation project in Gujarat, India" during the period 18/06/2016 to 30/09/2019 (including both days) amount to **855,219 tCO2e**.The total GHG emission reductions in monitoring period (18/06/2016 to 29/09/2017 is **367,046 tCO2e** and in monitoring period 30/09/2017 to 30/09/2019) is **488,173 tCO2e,** total emission reduction **855,219 tCO2e.**

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1.INTRODUCTION

1.1 Objective

ESPL has been contracted by Infinite Solutions to undertake verification of the renewable energy project titled“150 MW grid connected Wind Power based electricity generation project in Gujarat, India”. The verifiers have reviewed the GHG data collected to date for the monitoring period from 18/06/2016 to 30/09/2019 (both days included) covered in this verification, monitoring period 18/06/2016 to 29/09/2017 is under CP1 and in monitoring period 30/09/2017 to 30/09/2019 is under CP2.The objective of the verification is to have an independent third-party assessment of the VCS MR/1.2/ and supporting documentation to ensure compliance with the rules, regulations and guidelines by VCS requirements. In particular;

- The project’s monitoring plan is assessed against “ACM0002- Version 07”/2.5/ and “ACM0002 - Version 19”/2.1/
- The projects compliance with VCS guideline and standard version 4.0/2.2/

Verification is a requirement for all VCS projects and is seen as necessary to provide assurance to stakeholders of the quality of the project and its intended generation of verified carbon units (VCUs). This report contains the findings and resolutions from the verification of the project activity.

1.2 Scope and Criteria

The scope of the verification was the independent and objective review and ex-post determination of the monitored reductions in GHG emissions from “150 MW grid connected Wind Power based Electricity generation project in Gujarat, India” The verification of this project was based on the validated VCS project description of CP1 and CP2 & monitoring report, CDM registered PDD version 04 (dated 07/12/2012)/1.1/ and supporting documents submitted by the project proponent to the verification team. The documents were reviewed against the following guidance and protocols:

- VCS Program Guide (v4, dated 19/09/2019)/2.2/
- VCS Standard (v4, dated 19/09/2019)/2.2/
- VCS Program Definitions (v4, dated 19/09/2019)/2.2/
- VCS Registration & Issuance Process (v4, dated 19/09/2019)/2.2/
- UNFCC CDM approved methodology ACM0002 (Version 07)/2.5/ andACM0002 (version 19)/2.1/

The verification is not meant to provide any consulting towards the client. However, stated request for clarifications and/or corrective actions may provide input for improvement of the project design.

1.3 Level of Assurance

The verification has been planned and organized to achieve a Reasonable Level of assurance as per the requirements of VCS.

1.4 Summary Description of the Project

The purpose of the project activity involves the establishment of a wind farm of 150 MW installed capacity enabling generation of electricity by state-of-art 1.5 MW capacity Wind Turbine Generators (WTGs) (One of the latest available technologies in the country developed by Suzlon Energy Limited) in the state of Gujarat.

The main purpose of the project activity is to generate electrical energy through sustainable renewable energy means using wind power and feed the generated output to the local grid in Gujarat and contribute to climate change mitigation efforts.

The WTGs for the project activity got commissioned between 30-09-2007 to 31-Mar-2008. All WTGs were commissioned before 31-Mar-2008.

	Period	Actual ER achieved (tCO_{2e})
Total Emission Reduction achieved in this Monitoring Period	18-June-2016 to30-September-2019	855,219
Period covered in this MP under VCS Crediting Period-1	18-June-2016 to 29-September-2017	367,046
Period covered in this MPunder VCS Crediting Period-2	30-september-2017 to 30-September-2019	488,173

The total GHG emission reductions in monitoring period (18/06/2016 to 29/09/2017 is **367,046 tCO2e**and in monitoring period 30/09/2017 to 30/09/2019) is **488,173 tCO2e,** total emission reduction **855,219 tCO2e.**

The project activity promotes environmental and social well being as it results in zero GHG emissions due to installation and operation of clean, renewable energy technology for electricity generation. The design lifetime of the entire wind project is 20 years, which is based on the DPR (As per registered PDD) and deemed acceptable to the verification team.

The total actual GHG emission reduction for the project is **855,219 tCO_2e** for the current monitoring period ranging from **18/06/2016 – 30/09/2019**.The total GHG emission reductions in monitoring period (18/06/2016 to 29/09/2017 is **367,046 tCO2e** and in monitoring period 30/09/2017 to 30/09/2019) is **488,173 tCO2e,** total emission reduction **855,219 tCO2e.**

This was confirmed based on review of VCSPDs (CP1 & CP2) /1.1/ & MR/1.2/, ER verification spreadsheet/1.3/, Certificate for share of Electricity reports/3.5/ and Invoices/3.6/ issued to state DISCOMs.

2. VERIFICATIONPROCESS

The registered project activity is undergoing the verification for two monitoring periods falls under separate crediting periods and details of the same is provided in the below table:

Verification period and Monitoring period (MP) number	**Crediting period number**
18/06/2016 to 29/09/2017 (Second MP)	First crediting period
30/09/2017 to 30/09/2019 (First MP)	Second crediting period

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

2.1 Method and Criteria

Verification was conducted using ESPL's procedures in line with the requirements specified in the VCS standard Requirements, CDM M&P, the CDM Validation and Verification Standard, and relevant decisions of the COP/MOP and the CDM EB and applying standard auditing techniques.

It is to be 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 and verification process consist of the following three phases;

1. A desk review of the VCS PD for CP1 and VCS PD for CP2/1.1/

2. A desk review of the VCS MR/1.2/and ER sheet (with supporting documents)/1.3/.
3. Site visit and follow up interviews with project stakeholders.

2.2 Document Review

The verification is performed primarily as a document review of the VCS MR 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

The site visit for the project location, by the assessment team, was conducted on 14/11/2019 and the following stakeholders were interviewed.

SN	Name	Role	Organization
1	Mr. Vikash Yadav	VCS Project Consultant	Infinite Solutions
2	Mr. Jimmy Sah	VCS Project Consultant	Infinite Solutions
3	Mr. Rajesh Pandya	Manager (O & M)	BLP
4	Mr. Vinod Khojag	Engg (O & M)	BLP
5	Mr. Abdul Kadin	Engg (O & M)	BLP
6	Mr. Sonil Solanki	Engg (O & M)	Suzlon Energy Limited
7	Mr. Vimal Patel	Engg (O & M)	Suzlon Energy Limited
8	Mr Sourabh Aggarwal	Engg (O & M)	Suzlon Energy Limited
9	Mr. Kanji Ram	Engg (O & M)	Suzlon Energy Limited

The topics covered during interview ranges from general features and implementation of project to project technical details of the project like design & technical specification, project implementation status, project start date, location, baseline identification and additionality 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 on-site observations

2.4 Site Inspections

Site Location visited: Lathedi, Jakhau, Nani Sindhodi, Moti Sindhodi, Chachhi, Sandhan, Budhia, Ranpar, Rapargarh, Sayra, Suthari, Vanku, and Dhutai of Gujarat state

A site visit was undertaken by the verification team on 14/11/2019 to carry out the following;

2. An assessment of the project design and technical specification, project location, implementation status and operation of the project activity as per the VCS PD &MR and CDM registered PDD;

3. A review of information flows for generating, aggregating and reporting the monitoring parameters;

4. Interviews with relevant personnel to determine whether the operational and data collection procedures are implemented in accordance with the monitoring plan in the VCS PD& MR and CDM registered PDD;

5. 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;

6. A check of the monitoring equipment including calibration performance and observations of monitoring practices against the requirements of the VCS PD& MR and CDM registered PDD, the applied methodology including applicable tool(s), and, where applicable, the applied standardized baseline;

7. A review of calculations and assumptions made in determining the GHG data and emission reductions;

8. 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 project description, technical specification, baseline and additionality, monitoring parameter

and monitoring plan, implementation status 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 validation cum 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 project description, applicability of monitoring methodology and its tools, additionality tools and has not been sufficiently documented by the project participants, or if the evidence provided to prove conformity is insufficient;

- 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 (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 ESPL during validation and verification shall be resolved prior to submitting a request for registration and issuance.

During the current VCS verification, 03 Corrective Action request (CARs) and 00 Clarification request (CLs) were raised and successfully closed.

All the findings that are raised and communicated to project participant during the validation and 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

Forward Action Request (FAR) is to be raised when the monitoring and reporting require attention and/or adjustment for the next verification period. FARs does not relate to VCS requirements for issuance of ERs achieved during subject monitoring.

ESPL has not raised any FAR during this VCS verification period.

2.6 Eligibility for Validation Activities

ESPL is accredited for validation and verification under scope applied by the project. (https://verra.org/project/earthood-services-private-limited/)

3. VALIDATION FINDINGS

3.1 Participation under Other GHG Programs

The project is already registered with CDM mechanism with UNFCCC CDM reference no. 2347. The VCS start date of the project activity is 30/09/2007. The project crediting first period starts on 30/09/2007 and ends on 29/09/2017 with a total crediting period of 10 years (renewable two times). The monitoring period for this VCS verification is chosen from 18/06/2016 – 30/09/2019 (including both days) which includes 2 crediting period. 2nd crediting period starts on 30/09/2017 and end on 29/09/2027. The project activity achieved 855,219 tCO2e emission reductions during this monitoring period.

Participation under Other GHG Programs: This project is registered with UNFCCC (reference number 2347), however an undertaking has been submitted by PP for double counting would never happen with any other GHG program.

3.2 Methodology Deviations

Not Applicable as there are no methodology deviations for the project.

3.3 Project Description Deviations

As per VCS Standard Version 4/2.2/ section 3.18.2 "Where the deviation does not impact the applicability of the methodology, additionality or the appropriateness of the baseline scenario, and the project remains in compliance with the applied methodology, the deviation shall be described and justified in the monitoring report."

PP has taken following deviations in current monitoring period:

1. **Delay in meter calibration**: As per PD "The project adheres to all the mandatory regulatory and statutory requirements at the state as well as national level." Assessment team has checked that the calibration is not under the purview of the Project Participant (PP) and is performed by the state govt. authority / DISCOM, which is the authorized body for meter testing. The meters are tested, sealed and maintained by DISCOM officials only in the presence of authorized representative of the PP who also signs the results. As per CEA order para 18 b, "all energy meter shall be tested once in five years."/3.8/ In compliance to the CEA order, meter calibration was not conducted by GETCO within the three years of specified period. However, PP has followed conservative approach and hence, an error factor equating the maximum permissible limit of error for the meters has been applied for the delayed period.

Change in Ownership of the project activity: There is a change in the ownership of the project activity has happened due to the fact that DLF Limited is no longer in existence and BLP Vayu (Project 1) Private Limited has purchased the entire Wind Power project and accordingly PP has received the revised Letter of Approval from the Indian DNA and the same is reflected on the CDM Project webpage. Also, BLP Vayu (Project 1) Private Limited have received the revised approvals from various government Agencies including the Power Purchase Agreement/3.4/. Based on review of PPA/3.4/, it is confirm that BLP Vayu (Project 1) Private Limited is the legal owner of the project activity and project proponent for this project activity.

Hence, assessment team can be confirmed from the above explanation that the deviation does not have an impact on the applicability of the methodology, additionality or the appropriateness of the baseline scenario.

3.4 Grouped Project

Not applicable. The project activity is not a grouped project

4. VERIFICATION FINDINGS

4.1 Project Implementation Status

The main purpose of the proposed project activity is to generate clean energy through renewable energy sources. The proposed project activity is a wind power project owned by BLP Vayu (Project 1) Private Limited, who is also the project proponent for the project activity. The total installed capacity of the wind power plant is 150 MW. The electricity produced from the project activity shall be supplied to the regional electrical national grid of India.

Technical specifications of the project as stated in section A.4.3 of the CDM registered PDD/1.1/ and MR/1.2/ were verified from the technical specification supporting documents submitted by the PP. The project is located within the Kutch region, state Gujarat in country India and the geographical boundary is within the country of India.

The geo coordinates of the project activity, were verified using Google Map (Ref: https://www.gps-coordinates.net/) and were found to be consistent with the same reported in the VCS PD/1.1/ and MR/1.2/ and CDM registered PDD/1.1/.

The VCS start date of the project activity is 30/09/2007which is the date of commissioning of first WTG. The start date of the project activity has been confirmed through review of Commissioning certificate of WTGs /3.3/.

The project crediting period starts on 30/09/2007 and ends on 29/09/2017 with a total crediting period of 10 years (renewable two times).

Second crediting period starts on 30/09/2017 and end on 29/09/2027.

The total estimated GHG emission reductions expected for the project is CP1as 3,137,550 tCO2e and in CP2 as3,262,030 tCO_2e for the entire crediting period (of ten years). Thus, the estimated annual average emission reductions will be 313,755 tCO2e in CP1 and 326,203 tCO_2e in CP2. This was confirmed based on the review of ER spreadsheet /1.3/ and other supporting documents like Certificate for share of Electricity Report /3.5/.

The total GHG emission reductions in monitoring period (18/06/2016 to 29/09/2017 is 367,046 $tCO_2e$and in monitoring period 30/09/2017 to 30/09/2019) is **488,173 tCO2e,** total emission reduction **855,219 tCO2e.** This was confirmed based on the review of ER verification spreadsheet /1.3/.

Prior to the project initiation, the entire electricity delivered to the grid by the project activity would have otherwise been generated by the operation of grid-connected power plants and by the addition of new generation sources.

The above scenario is also the respective baseline scenario and was confirmed to be accurate during on site assessment and interviews with representatives of PP /3.9/.

The project is in compliance with the applicable regulatory framework on wind power projects in targeted country of India.

Participation under Other GHG Programs: The Project has no intent to generate any other form of GHG-related environmental credit for GHG emission reductions or removals claimed under the VCS Program.

The project is registered with UNFCCC CDM (UN ref. no. 2347) on 18/06/2009 with Renewal crediting period 18/06/2009 to 17/06/2016. And emission reduction claimed from 18/06/2009 to 17/06/2016 under CDM.

Legislative:

The project participants obtained all clearances from stakeholders hence no legal risks are anticipated.

Socio-economic well-being:

Project activity has generated direct and indirect employment for skilled and unskilled manpower during construction phase as well as during operational stage and thus helped in controlling migration from the region and alleviation of poverty.

The project activity's contribution of power supply towards the Indian grid is helping in the upliftment of the social life of the people by ensuring a sustainable and reliable source of power for the region.

The Project activity has improved the infrastructural facilities like water availability, road, and medical facilities etc in the region.

Environmental well-being:

The project activity generates clean and green power thus causing negligible emissions of greenhouse gases. By building and operating the power project, much pollution is avoided. In the absence of the project activity, equivalent power would have been generated based on the fossil fuels resulting in more Green House Gas emissions into the atmosphere.

The project activity has reduced the dependence on fossil fuels for power generation thus conserving the natural reserves. The project has led to greenhouse gas emission reduction and hence contributed in mitigating climate change

Technological well-being:

The project activity has increased awareness and interest among the private players to make investments in similar areas. The project activity envisages installation of high efficiency turbines and generators and the power will be transmitted at high voltage to ensure low losses. Moreover, the technology being used is well established, most updated and environmentally safe.

The project is registered CDM project activity with ref. no. 2347. Based on its assessment through review of relevant documentation (as cited above), the assessment team confirms that the description given in the VCS PD/1.1/ & MR /1.2/ and registered CDM PDD/1.1/ is accurate, complete, and provides an understanding of the nature of the project, and the project has been implemented as described in the VCS PD/1.1/ & MR /1.2/ and registered CDM PDD/1.1/.

4.2 Safeguards

4.2.1 No Net Harm

No potential negative environmental and socio-economic impacts have been identified. The project activity promotes environmental and socio-economic well-being as it results in zero GHG emissions due to installation and operation of clean, renewable energy technology for electricity generation.

This is as per the requirements laid out in section 3.16.1 of the VCS Standard (version 4.0) /2.2/ and deemed acceptable to the verification team.

4.2.2 Local Stakeholder Consultation

The local stakeholder consultation process has been described in detail, by the PP, in section 5.3 of the Registered CDM PDD/1.1/.All the stakeholders are happy with the implementation and operation of the project activity and no negative comments envisaged for the project activity. There was no change in project description form the registered CDM PDD. Discussions with Local stakeholders are being carried out at periodic intervals. There are no negative comments received for the project. In line with VCS requirements all the processes have been implemented to receive comments from local stakeholders as well as communicate with them at periodic intervals.

Assessment team confirmed during the verification site visit that no negative comment has been received by PP from stakeholders during the monitoring period.

4.3 AFOLU-Specific Safeguards

Not applicable for this verification.

4.4 Accuracy of GHG Emission Reduction and Removal Calculations

The data and parameters used to calculate the GHG emission reductions and removals have been listed below:

Parameters with Default Values (ex-ante parameters):

For 1st crediting Period (30/09/2007 to 29/09/2017) and monitoring period 18/06/2016 to 29/09/2017

Parameter	Description	Value	Unit	Source
$EF_{Grid,OM,y}$	Weighted Average Simple Operating margin of the grid	1.0035	tCO2e/MWh	As per registered CDM PDD; Calculated as per "Tool to calculate the emission factor for an electricity system (version 01.1.0)/2.4/" The value has been used form the Central Electricity Authority (CEA) database (Version 3.0, dated December 2008)/3.1/ for the calculation of the Baseline emissions.
$EF_{Grid,BM,y}$	Build Margin of the grid.	0.5937	tCO2e/MWh	As per registered CDM PDD; Calculated as per "Tool to calculate the emission factor for an electricity system (version 01.1.0)/2.4/" The value has been used form the Central Electricity Authority (CEA) database (Version 3.0, dated December 2008)/3.1/ for the calculation of the Baseline emissions.
$EF_{Grid,CM,y}$	Combined Margin emission factor of the grid	0.90105	tCO2e/MWh	As per registered CDM PDD; Calculated as per "Tool to calculate the emission factor for an electricity system (version 01.1.0)/2.4/" The value has been used form the Central Electricity Authority (CEA) database (Version 3.0, dated December 2008)/3.1/ for the calculation of the Baseline

				emissions.

For Second Crediting Period (30/09/2017 to 29/09/2027) and monitoring period 30/09/2017 to 30/09/2019

Parameter	Description	Value	Unit	Source
$EF_{Grid,OM,y}$	Weighted Average Simple Operating margin of the grid	0.9610	tCO_2e/MWh	As per registered CDM PDD; Calculated as per "Tool to calculate the emission factor for an electricity system (version 07)/2.3/" The value has been used form the Central Electricity Authority (CEA) database (Version 14.0)/3.2/ for the calculation of the Baseline emissions.
$EF_{Grid,BM,y}$	Build Margin of the grid.	0.8644	tCO_2e/MWh	As per registered CDM PDD; Calculated as per "Tool to calculate the emission factor for an electricity system (version 07)/2.3/" The value has been used form the Central Electricity Authority (CEA) database (Version 14.0)/3.2/ for the calculation of the Baseline emissions.
$EF_{Grid,CM,y}$	Combined Margin emission factor of the grid	0.9368	tCO_2e/MWh	As per registered CDM PDD; Calculated as per "Tool to calculate the emission factor for an electricity system (version 07)/2.3/" The value has been used form the Central Electricity Authority (CEA) database (Version 14.0)/3.2/ for the calculation of the Baseline emissions.

Parameter(s) monitored ex-post:

Parameter	EG_y(Quantity of net electricity generation supplied by the project plant/unit to the grid in year y (MWh))

Means of verification	

Criteria/Requirements	Assessment/Observation
Measuring /Reading /Recording frequency	The electronic energy meter at the sent out point of the project activity plant is used to measure the data of electricity exported to grid.
Is measuring and reporting frequency in accordance with the monitoring plan and monitoring methodology? (Yes / No)	Yes. The reporting frequency is in line with the monitoring plan as outlined in the VCS PD/1.1/ & MR/1.2/, CDM PDD/1.1/ and monitoring methodology/2.1/. This parameter is continuous monitoring and Monthly recording from Energy Meters.
Monitoring equipment	Monitoring: Electrical Energy Meters which are electronic tri-vector meters of accuracy class 0.2s (Main & Check meters) Calibration Agency : GETCO (which is NABL accredited) There is some delay is observed in calibration of energy meter during this current monitoring period. PP has applied maximum permissible error of 0.2% for the delay period July 2016 to Aug 2018, Aug 2019 and Sept 2019 conservatively, which is acceptable. Furthermore, the details of meter

			calibration are mentioned below the table.
		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?	Yes, the accuracy of the monitoring equipment used is 0.2s, which is as per the VCS PD/1.1/ & MR/1.2/ and registered CDM PDD/1.1/.
		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 annually.
		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 VCS PD/1.1/ & MR/1.2/ and registered CDM PDD/1.1/.
		Is the calibration of measuring equipment carried out by an accredited person or institution?	Yes the calibration is conducted by NABL accredited lab /3.7/.

		Is(are) calibration(s) valid for the whole reporting period?	There is some delay observed in calibration of energy meter during this current monitoring period. PP has applied maximum permissible error of 0.2% for the delay period July 2016 to Aug 2018, Aug 2019 and Sept 2019 conservatively, which is acceptable. Furthermore, the details of meter calibration are mentioned below the table.
		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_y** for entire monitoring period is reported in the monitoring report, however monthly values are reported in the ER calculation sheet/1.3/.The monthly values were verified from the Share Certificate of electricity generation and found to be consistent. Value of this parameter for the current monitoring period was verified as Under Crediting Period 1: 407,354.39 *MWh* Under Crediting Period 2: 521,107.71*MWh* Total = 928,462.11*MWh*
		If applicable, has the reported data been cross-checked with other available	Total electricity exported to grid is cross checked from the invoices raised by the

	data?	project participant to the grid. The same is found to be consistent.
	Does the data management ensure correct transfer of data and reporting of emission reductions and are necessary QA/QC processes in place?	On site assessment of the project activity confirms that the necessary QA/QC procedures are in place and the data management system is effective and reliable.
Findings	CAR#2 raised and resolved successfully.	
Conclusion	The parameter has been monitored appropriately, in accordance with the PD monitoring plan (as per measurement methods and procedures to be applied), CDM PDD and applied methodology. The monitoring results were recorded consistently as per the approved frequency in the monitoring plan.	

Parameter	$EG_{y,\ Export}$(Quantity of Electricity exported to GUVNL facility)	
Means of verification	**Criteria/Requirements**	**Assessment/Observation**
	Measuring /Reading /Recording frequency	The electronic energy meter at the sent out point of the project activity plant is used to measure the data of electricity exported to grid.
	Is measuring and reporting frequency in accordance with the monitoring plan and monitoring methodology? (Yes / No)	Yes. The reporting frequency is in line with the monitoring plan as outlined in the VCS PD/1.1/ & MR/1.2/, CDM PDD/1.1/ and monitoring methodology/2.1/. This parameter is continuous monitoring and Monthly recording from Energy Meters, Summarized

			Annually.
		Monitoring equipment	Monitoring: Electrical Energy Meters which are electronic tri-vector meters of accuracy class 0.2s. Calibration Agency : GETCO (which is NABL accredited) There is no delay observed in calibration of energy meter during this current monitoring period.
		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?	Yes, the accuracy of the monitoring equipment used is 0.2s, which is as per the VCS PD/1.1/ & MR/1.2/ and registered CDM PDD/1.1/.
		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 annually.
		Is the calibration interval in line with the monitoring plan and/or methodology? If the monitoring plan does not specify the frequency of	Yes. The calibration frequency is in line with the monitoring plan as outlined in the VCS PD/1.1/ & MR/1.2/ and registered

		calibration, is the selected frequency in accordance with the local/national standards, or as per the manufacturer's specifications?	CDM PDD/1.1/.
		Is the calibration of measuring equipment carried out by an accredited person or institution?	Yes the calibration is conducted by NABL accredited lab /3.7/.
		Is(are) calibration(s) valid for the whole reporting period?	Yes. Calibration of meters is valid for the whole reporting period.
		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 EGy, export for entire monitoring period is reported in the monitoring report, however monthly values are reported in the ER calculation sheet/1.3/.The monthly values were verified from the plant data and found to be consistent. Value of this parameter for the current monitoring period was verified as Under Crediting Period 1: 407,354.39 *MWh* Under Crediting Period 2: 521,107.71 MWh Total = 928,462.11 MWh

	If applicable, has the reported data been cross-checked with other available data?	Total Electricity export from grid is cross checked from the invoices raised by the project participant to the grid. The same is found to be consistent.
	Does the data management ensure correct transfer of data and reporting of emission reductions and are necessary QA/QC processes in place?	On site assessment of the project activity confirms that the necessary QA/QC procedures are in place and the data management system is effective and reliable.
Findings	Not Applicable	
Conclusion	The parameter has been monitored appropriately, in accordance with the PD monitoring plan (as per measurement methods and procedures to be applied), CDM PDD and applied methodology. The monitoring results were recorded consistently as per the approved frequency in the monitoring plan.	

Parameter	EG_{WEG}(Electricity generated by each WEG)	
Means of verification	**Criteria/Requirements**	**Assessment/Observation**
	Measuring /Reading /Recording frequency	Each WEG is equipped with an integrated electronic meter. These meters are connected to the Central Monitoring Station (CMS) of the entire wind farm through communication cables. The generation data of individual WEG can be monitored as a real-time entity at CMS. This data for each individual WEG will be recorded daily.
	Is measuring and reporting frequency in accordance with the monitoring plan and monitoring methodology?	Yes. The reporting frequency is in line with the monitoring plan as outlined in the VCS PD/1.1/ & MR/1.2/, CDM PDD/1.1/

		(Yes / No)	and monitoring methodology/2.1/. This parameter is continuous monitoring and Monthly recording from Energy Meters. .
		Monitoring equipment	The meter is a software based meter integrated with the control panel of the WEG. In case of any fault in the system, the control panel shall shutdown the WEG until the error is rectified.
		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?	NA
		Is the accuracy valid for the entire measuring range or do different accuracy levels apply to different measuring ranges?	NA
		Calibration frequency /interval:	NA
		Is the calibration interval in line with the monitoring plan and/or methodology? If the monitoring plan does not	NA

		specify the frequency of calibration, is the selected frequency in accordance with the local/national standards, or as per the manufacturer's specifications?	
		Is the calibration of measuring equipment carried out by an accredited person or institution?	NA
		Is(are) calibration(s) valid for the whole reporting period?	NA
		Is the calibration carried out for a measuring range comparable with the range for which measurements have been carried out?	NA
		How were the values in the monitoring report verified?	Value of EG_{WEG}, for entire monitoring period is reported in the monitoring report, however monthly values are reported in the ER calculation sheet/1.3/.The monthly values were verified from the daily generation report provided by Suzlon and found to be consistent. This data will not be used for the calculation of emission reductions per say but would act as a backup data for the net electricity generated.
		If applicable, has the reported data been cross-	NA

	checked with other available data?	
	Does the data management ensure correct transfer of data and reporting of emission reductions and are necessary QA/QC processes in place?	On site assessment of the project activity confirms that the necessary QA/QC procedures are in place and the data management system is effective and reliable.
Findings	Not Applicable	
Conclusion	The parameter has been monitored appropriately, in accordance with the PD monitoring plan (as per measurement methods and procedures to be applied), CDM PDD and applied methodology. The monitoring results were recorded consistently as per the approved frequency in the monitoring plan.	

Parameter	EG_{VCB}(Electricity generation recorded at the Vacuum Circuit Breaker (VCB))	
Means of verification	**Criteria/Requirements**	**Assessment/Observation**
	Measuring /Reading /Recording frequency	Each WEG is equipped with an integrated electronic meter. These meters are connected to the Central Monitoring Station (CMS) of the entire wind farm through communication cables. The generation data of individual WEG can be monitored as a real-time entity at CMS. This data for each individual WEG will be recorded daily.
	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 VCS PD/1.1/ & MR/1.2/, CDM PDD/1.1/ and monitoring methodology/2.1/. This parameter is continuous monitoring and Monthly

			recording from Energy Meters. .
		Monitoring equipment	The meter is a software based meter integrated with the control panel of the WEG. In case of any fault in the system, the control panel shall shutdown the WEG until the error is rectified.
		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?	NA
		Is the accuracy valid for the entire measuring range or do different accuracy levels apply to different measuring ranges?	NA
		Calibration frequency /interval:	NA
		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	NA

		standards, or as per the manufacturer's specifications?	
		Is the calibration of measuring equipment carried out by an accredited person or institution?	NA
		Is(are) calibration(s) valid for the whole reporting period?	NA
		Is the calibration carried out for a measuring range comparable with the range for which measurements have been carried out?	NA
		How were the values in the monitoring report verified?	Value of EG_{VCB}, for entire monitoring period is reported in the monitoring report, however monthly values are reported in the ER calculation sheet/1.3/.The monthly values were verified from the daily generation report provided by Suzlon and found to be consistent. This data will not be used for the calculation of emission reductions per say but would act as a backup data for the net electricity generated.
		If applicable, has the reported data been cross-checked with other available data?	NA

	Does the data management ensure correct transfer of data and reporting of emission reductions and are necessary QA/QC processes in place?	On site assessment of the project activity confirms that the necessary QA/QC procedures are in place and the data management system is effective and reliable.
Findings	Not Applicable	
Conclusion	The parameter has been monitored appropriately, in accordance with the PD monitoring plan (as per measurement methods and procedures to be applied), CDM PDD and applied methodology. The monitoring results were recorded consistently as per the approved frequency in the monitoring plan.	

Meter calibration Details

Energy Meter calibration is controlled by state government regulatory body and thus PP has no control over the government body proceedings. Verification team has identified the delay period in substation energy meter calibration and applied the maximum permissible error for the delayed period conservatively. Verification team confirm that calibration of energy meter is not under the purview of the Project Participant (PP) and is performed by the state govt. authority / DISCOM, which is the authorized body for meter testing. The meters are tested, sealed and maintained by DISCOM officials only in the presence of authorized representative of the PP who also signs the results. As per CEA order/3.8/ para 18 b, "all energy meter shall be tested once in five years." In compliance to the CEA order, meter calibration will be at-least conducted by GETCO within the five years of specified period in the CEA order/3.8/. However, PP has followed conservative approach (considering annual calibration frequency) and hence, an error factor equating the maximum permissible limit of error for the meters has been applied for the delayed period after completing of one year from last calibration.

Details have been provided below:

GUJARAT		**SUBSTATION METER CALIBRATION STATUS - FY 2016-19**				**(In Months)**
Meter Sr. No.	**Substation details**	**Accuracy Class**	**Testing Date**	**Meter Remarks**	**Due Date**	**Delay Period**
GJ-2319-A	Suthari ABT Meter Line 1	0.2S	16/07/2015	Billing Meter at 220 KV end, Calibration required once in a year. Due date was	15/07/2016	28

				15/Aug/16 but meter calibration has happened on 15/Aug/18 so there is a delay in meter calibration has been identified from 15-July-16 to 15-Aug-2018. PP has applied max permissible error from Jul-16 to Aug-18 Conservatively.		
			15/08/2018	Delay in meter calibration has been identified in Aug 2019 as well. Hence PP has applied maximum permissible error for the delay period i.e. for Aug & Sep 2019 whole month.	14/08/2019	2
GJ-2320-A	Suthari ABT Meter Line 2	0.2S	16/07/2015	Billing Meter at 220 KV end, Calibration required once in a year. Due date was 15/Aug/16 but meter calibration has happened on 15/Aug/18 so there is a delay in meter calibration has been identified from 15-July-16 to 15-Aug-2018. PP has applied max permissible error from Jul-16 to Aug-18 Conservatively.	15/07/2016	28
			15/08/2018	Delay in meter calibration has been	14/08/2019	2

				identified in Aug 2019 as well. Hence PP has applied maximum permissible error for the delay period i.e. for Aug & Sep 2019 whole month.		
GJ-2317-A	Nani Sindhodi ABT Meter Line 1	0.2S	16/08/2015	Billing Meter at 220 KV end, Calibration required once in a year. Due date was 15/Aug/16 but meter calibration has happened on 15/Aug/18 so there is a delay in meter calibration has been identified from 15-July-16 to 15-Aug-2018. PP has applied max permissible error from Jul-16 to Aug-18 Conservatively.	14/08/2016	26
			15/08/2018	Delay in meter calibration has been identified in Aug 2019 as well. Hence PP has applied maximum permissible error for the delay period i.e. for Aug & Sep 2019 whole month.	14/08/2019	2
GJ-2318-A	Nani Sindhodi ABT Meter Line 2	0.2S	16/08/2015	Billing Meter at 220 KV end, Calibration required once in a year. Due date was 15/Aug/16 but meter calibration has happened on	14/08/2016	26

				15/Aug/18 so there is a delay in meter calibration has been identified from 15-July-16 to 15-Aug-2018. PP has applied max permissible error from Jul-16 to Aug-18 Conservatively.		
			15/08/2018	Delay in meter calibration has been identified in Aug 2019 as well. Hence PP has applied maximum permissible error for the delay period i.e. for Aug & Sep 2019 whole month.	14/08/2019	2

The equations for calculation of emission reduction as provided in the VCS PD/1.1/ & MR /1.2/ , registered CDM PDD/1.1/ and confirmed with the applied methodology ACM0002 (version 19) /2.1/ have been checked and found to be correct. The values as provided in the VCS PD/1.1/ & MR /1.2/ and registered CDM PDD/1.1/ have been compared with ER verification sheet /1.3/ and raw values from Certificate for share of Electricity Reports /3.5/ and Invoices issued to state utility /3.6/ to ensure that no manual transposition errors between data sets have occurred. The verification team confirms that that all electricity generation values are matching between the above three documents. Moreover, the formulae applied in the ER spreadsheet /1.3/ were also reviewed and found to be consistent with the applied methodology. The verification team confirms that all parameters are used correctly in the calculations, all results are verifiable and transparent, all assumptions are described and based on verifiable evidence and calculations are done in accordance with the formulae laid out in the applied methodology ACM0002 (version 07) in CP1/2.5/ACM0002 (version 19) in CP2 /2.1/ and requirements of the monitoring plan.

The total GHG emission reductions in monitoring period (18/06/2016 to 29/09/2017 is 367,046 **tCO2e**and in monitoring period 30/09/2017 to 30/09/2019) is **488,173 tCO2e,** total emission reduction **855,219 tCO2e**. The calculation of emission was checked in ER sheet and found to be correct, hence accepted.

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

Based on review of ER sheet/1.3/, it confirm that the comparison between actual GHG emission reductions with estimated in CDM PDD/1.1/ and VCS PD/1.1/ and MR/1.2/:

	Period	Actual ER achieved (tCO_{2e})
Total Emission Reduction achieved in this Monitoring Period	18-June-2016 to 30-September-2019	855,219
Period covered in this MP under VCS Crediting Period-1	18-June-2016 to 29-September-2017	367,046
Period covered in this MP under VCS Crediting Period-2	30-september-2017 to 30-September-2019	488,173

Monitoring Period 18-Jun - 2016 to 30-Sep-2019	Within Crediting Period - 1		Within Crediting Period - 2		Aggregated for this monitoring period
	From	To	From	To	
	18-Jun-2016	29-Sep-2017	30-Sep-2017	30-Sep-2019	18-Jun -2016 to 30-Sep-2019
No. of days	469		731		1200
Annual emission reductions estimated in the PDD (tCO_{2e})	313,755		326,203		639,958
Emission reductions for the considered period as per estimates in the PDD (tCO_{2e})	403,154		653,300		1,056,453
Actual reductions for the monitoring period (tCO2e)	367,046		488,173		855,219
Difference in estimation and actual reductions	-36,108		-165,127		-201,234
Aggregated Difference in percentage	-0.09		-0.25		**-0.1905**

There is around 19.05% lesser emission reduction is achieved during the current monitoring period as compared to the projected ERs of equivalent period, which is mainly due to the lower PLF achieved during the current monitoring period, which is reasonable and accepted by the audit team.

4.5 Quality of Evidence to Determine GHG Emission Reductions and Removals

The quality of supporting documents that are provided by the PP as evidence is adequate. Raw values from Certificate for share of Electricity Reports /3.5/ and Invoices issued to state utility /3.6/ are provided, which tallies with the data provided in the ER verification spreadsheet /1.3/.

Competent employees are recruited for the management and operation of the project. The quality of supporting evidences submitted for verification is adequate and found to be verifiable. Certificate for share of Electricity Reports /3.5/, Invoices issued to state utility /3.6/ and other supporting documents related to quality and maintenance were checked by the assessment team to confirm the authenticity of the documents and to check the correctness of the calculations. The verification team for the records and future reference also obtains copies of these documents. The detailed information flow with the roles and responsibilities of the individuals and the monitoring system have been discussed and found to be appropriate.

Based on the above, the assessment team confirms the sufficiency and appropriateness of the quality of evidence provided by the PP to determine the GHG reductions and further deems them to be acceptable.

4.6 Non-Permanence Risk Analysis

Not applicable for the project activity.

5. VERIFICATION CONCLUSION

Earthood Services Private Limited (also referred to as ESPL), contracted by Infinite Solutions, to perform a verification of the VCS project activity "150 MW grid connected Wind Power based electricity generation project in Gujarat, India.

The verification process was performed on the basis of all guidance and criteria as provided in VCS Standard (version 4), VCS Program Guide (version 4), VCS Validation and Registration & Issuance Process (version 4) /2.2/.

The conclusions of verification process can be individually summarised as follows:

Verification Conclusion for CP1 (18/06/2016 to 29/09/2017):

ESPL 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. ESPL planned and performed the verification by obtaining evidence and other information and explanations that ESPL 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 18/06/2016 – 29/09/2017 are fairly stated in the PD/1.1/ and MR/1.2/. The GHG emission reductions were calculated correctly on the basis of the approved baseline and monitoring methodology and the VCS standard.

Verification period: From 18/06/2016 – 29/09/2017 (including both days)

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

Year	Baseline emissions or removals (tCO_2e)	Project emissions or removals (tCO_2e)	Leakage emissions (tCO_2e)	Net GHG emission reductions or removals (tCO_2e)
2016 (18/06/2016 to 31/12/2016)	147,212	0	0	147,212

2017 (01/01/2017 to 29/09/2017)	219,834	0	0	219,834
Total	367,046	0	0	367,046

ESPL confirms a positive verification opinion confirming that the project complies with the applicable VCS requirements, thus recommending the project for issuance.

Verification Conclusion for CP1 (30/09/2017 to 30/09/2019):

ESPL 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. ESPL planned and performed the verification by obtaining evidence and other information and explanations that ESPL 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 30/09/2017 – 30/09/2019 are fairly stated in the PD/1.1/ and MR/1.2/. The GHG emission reductions were calculated correctly on the basis of the approved baseline and monitoring methodology and the VCS standard.

Verification period: From 30/09/2017 – 30/09/2019 (including both days)

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

Year	Baseline emissions or removals (tCO_2e)	Project emissions or removals (tCO_2e)	Leakage emissions (tCO_2e)	Net GHG emission reductions or removals (tCO_2e)
2017 (30/09/2017 to 31/12/2017)	43,861	0	0	43,861
2018 (01/01/2018 to 31/12/2018)	241,299	0	0	241,299
2019 (01/01/2019 to 30/09/2019)	203,013	0	0	203,013

Total	488,173	0	0	488,173

ESPL confirms a positive verification opinion confirming that the project complies with the applicable VCS requirements, thus recommending the project for issuance.

Approved by

Dr. Kaviraj Singh

Managing Director

Earthood Services Privated Limited

Date: 01/05/2020

Place: Gurugram, India

APPENDIX 1- COMPETENCE OF TEAM MEMBERS AND TECHNICAL REVIEWERS

Competence Statement			
Name	Vivek Kumar Ahirwar		
Country	India		
Education	B.E. (Mechanical Engineering) M.Tech (Energy Management)		
Experience	10 Years +		
Field	Climate Change & Environment		
Approved Roles			
Team Leader	YES		
Validator	YES		
Verifier	YES		
Methodology Expert	ACM0002, AMS.I.D		
Local expert	YES (India)		
Financial Expert	NO		
Technical Reviewer	NO		
TA Expert	YES (1.1, 1.2, 13.1)		
Reviewed by	Shreya Garg	**Date**	11/09/2018
Approved by	Anshika Gupta	**Date**	11/09/2018

Competence Statement	
Name	Shreya Garg
Country	India

Education	M.Sc. (Climate Science & Policy), TERI University		
Experience	6 Years +		
Field	Climate Change		
Approved Roles			
Team Leader	YES		
Validator	YES		
Verifier	YES		
Methodology Expert	AMS.I.A., AMS.I.C., AMS.I.D., AMS.I.F., AMS.II.D., AMS.II.G., AMS.II.J., AMS.III.AV., ACM0002, ACM0012		
Local expert	YES (India)		
Financial Expert	NO		
Technical Reviewer	YES		
TA Expert	YES (TA 1.2, TA 3.1)		
Reviewed by	Abhishek Mahawar	**Date**	01/03/2018
Approved by	Ashok Gautam	**Date**	01/03/2018

APPENDIX 2:DOCUMENTS REVIEWED OR REFERENCED

No.	Author	Title	References to the document	Provider
1.	Basic Documents (Monitoring Report, Project Design Documents, Previous Verification Reports)			
1.1	PP	CDM Registered PDD Version 4	Dated 07/12/2012	PP
		CP1- VCS Registered PD version 3	Dated 24/11/2008	PP
		CP2- VCS Registered PD version 3	Dated 11/11/2019	PP
1.2	PP	MR, version 01	Dated 16/10/2019	PP
		MR, version 02	Dated 03/04/2020	
		MR, version 3 (Final)	Dated 16/04/2020	
1.3	PP	ER version 01	Dated 16/10/2019	PP
		ER, version 02	Dated 03/04/2020	
		ER, version 3 (Final)	Dated 16/04/2020	
1.4	TUV Nord	Validation PRC Report of the registered CDM project activity	Dated 30/01/2013	Other: UNFCCC
1.5	UNFCCC	CDM Project activity view page “150 MW grid connected Wind Power based Electricity generation project in Gujarat, India” https://cdm.unfccc.int/Projects/DB/BVQI1229917560.	-	Other: UNFCCC

		71/view		
1.6	TUV Nord CERT GmbH	Verification report for seven monitoring period (01/07/2014 – 17/06/2016),Version 02.1	Dated 07/08/2017	Other: UNFCCC
1.7	BVC	Validation Report of the registered VCS project activity	Dated 07/03/2009	
1.8	BVC	Validation report of registered CDM Project	Dated 06/12/2008	Other: UNFCCC
2.	**References and requirements at UNFCCC/IPCC/etc.**			
2.1	UNFCCC website	Applied Methodology, ACM0002 Version 19: Grid-connected electricity generation from renewable sources	Dated 31/08/2018	Other: UNFCCC
2.2	VCS	VCS Requirements: - Verified Carbon Standard Program Guide, v4; - Verified Carbon Standard, v4; - VCS Program Definitions, Ver. 4 - VCS Registration and Issuance Process, v4 - VCS Validation and Verification Manual, v3.2 - VCS Project Description, v 4 - VCS Monitoring Report Template, v4 - VCS Verification Report Template, v4	19/09/2019	VCS webpage
2.3	CDM EB	Tool to calculate the emission factor for an electricity system	Version 7.0	Other: UNFCCC
2.4	CDM EB	Tool to calculate the emission factor for an electricity system	Version 1.1	Other: UNFCCC
2.5	UNFCCC website	Applied Methodology, ACM0002 Version 07 Grid-connected electricity generation from renewable sources	Dated 30/11/2007	Other: UNFCCC
3.	**Project implementation information**			
3.1	CEA	CEA CO_2 Baseline Database for the Indian Power Sector Version 3	December 2008	
3.2	CEA	CEA CO_2 Baseline Database for the Indian Power Sector Version 14	December 2018	Other
3.3	PP	Commissioning certificates of WTGs	30/09/200	PP

			7 and 31/03/2008	
3.4	PP	Revised Power Purchase Agreements signed between Project Proponent and state electricity authority	28/03/2013	PP
3.5	GUVNL	Certificate for share of Electricity Reports for the monitoring period	From 18/06/2016 to 30/09/2019	PP
3.6	PP	Invoices raised by the PP to the state electricity board for the monitoring period	From 18/06/2016 to 30/09/2019	PP
3.7	GETCO	Calibration certificates for the electricity meters used during the monitoring period	From 18/06/2016 to 30/09/2019	PP
3.8	CEA	CEA Regulation on meter calibration dated 17/03/2006 https://www.aegcl.co.in/Metering_Regulations_Of_CEA_17_03_2006.pdf	Dated 17/03/2006	PP
3.9	ESPL	Site visit Photos, Attendance and interview sheet	14/11/2019	ESPL

APPENDIX 3- ABBREVIATIONS

Abbreviations	Full texts
ABT	Availability Based Tariff
CAR	Corrective Action Request
CDM	Clean Development Mechanism
CDM PCP	Clean Development Mechanism Project Cycle Procedure
CDM PAs	Clean Development Mechanism Project Activities
CDM VVS	Clean Development Mechanism Validation and Verification Standard
EB	Executive Board
EF	Emission Factor
EPC	Engineering ,Procurement and Construction
ER	Emission Reductions
CEA	Central Electricity Authority

CER	Certified Emission Reduction
CL	Clarification Request
DOE	Designated Operational Entity
DNA	Designated National Authority
FAR	Forward Action Request
GHG	Greenhouse Gas(es)
GETCO	Gujarat Energy Transmission Corporation
GOI	Government of India
GUVNL	Gujarat Urja Vikas Nigam Limited
IPCC	Intergovernmental Panel on Climate Change
MP	Monitoring Plan
MR	Monitoring Report
MWh	Megawatt hour
PDD	Project Design Document
PPA	Power Purchase Agreement
PP	Project Participant
PRC	Post Registration Changes
PS	Project Standard
RCP	Renewal Crediting Period
RMP	Revised Monitoring Plan
TR	Technical Review
UNFCCC	United Nations Framework Convention on Climate Change
VVS	Validation and Verification Standard

APPENDIX 4: FINDINGS OVERVIEW

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

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

Table 2. CL from this verification

CL ID	N/A	Section no.	N/A	Date : N/A
Description of CL				
N/A				
Project participant response				Date : N/A
N/A				
Documentation provided by project participant				
N/A				
DOE assessment				Date:N/A
N/A				

Table 3. CAR from this verification

CAR ID	01	Section no.	MR	Date :09/11/2019
Description of CAR				
PP is requested to make font size and Font (Arial) consistent in report.				
Project participant response				Date:03/04/2020
PP has updated font size and template as per VCS version 4 requirement.				
Documentation provided by project participant				

Revised MR dated 03/04/2020	
DOE assessment	**Date:**09/03/2020
Assessment team confirm that PP has updated font and VCS template, hence accepted. CAR#1 Closed	

CAR ID	02	**Section no.**	4.1 &4.2	**Date : 09/11/2019**
Description of CAR				
1. As project monitoring period covering 2 crediting period, PP is requested to include ex-ante parameter of 1st crediting period as well in section 4.1. 2. PP is requested to define monitored parameter of 1st crediting period and include values of 1st crediting period and 2nd crediting period in section4.2.				
Project participant response				**Date:**03/04/2020
1. PP has included ex-ante parameter of 1st crediting period in section 4.1 of monitoring report. *2. PP has included monitoring period of 1st crediting period and 2nd crediting period in section 4.2 of the monitoring period.*				
Documentation provided by project participant				
Revised MR dated 03/04/2020				
DOE assessment				**Date:**09/03/2020
1. Assessment team confirm that PP has included ex-ante parameter of 1st crediting period under section 4.1 of monitoring report. 2. Assessment team confirm that PP has included ex-ante parameter of 1st crediting period under section 4.2 of monitoring report. CAR#2 Closed				

CAR ID	03	**Section no.**	4.4	**Date : 09/11/2019**
Description of CAR				
PP is requested to include comparison of estimated emission reduction and ex-ante value for both crediting period as mentioned in ER sheet in section 4.4.				
Project participant response				**Date:**03/04/2020
PP has included ER comparison in section 5.4 of monitoring report.				
Documentation provided by project participant				
Revised MR dated 03/04/2020				
DOE assessment				**Date:**09/03/2020

Assessment team confirm that PP has included ER comparison in section 5.4 of monitoring report, which is acceptable. CAR#3 Closed

Table 4. FAR from this verification

FAR ID	N/A	**Section No.**	N/A	**Date :** N/A
Description of FAR				
No FAR raised				
Project participant response				**Date :** N/A
N/A				
Documentation provided by project participant				
N/A				
DOE assessment				**Date:** N/A
N/A				