



**Verification and certification report form for
CDM project activities
(Version 03.0)**

Complete this form in accordance with the instructions attached at the end of this form.

BASIC INFORMATION

Title and UNFCCC reference number of the project activity	GEI Wind Power Project in Karnataka, India (UNFCCC Ref. No. 4144)
Scale of the project activity	<input checked="" type="checkbox"/> Large-scale <input type="checkbox"/> Small-scale
Version number of the verification and certification report	02
Completion date of the verification and certification report	09/10/2020
Monitoring period number and duration of this monitoring period	03 (01/01/2013 to 31/12/2019; inclusive of both days)
Version number of the monitoring report to which this report applies	03
Crediting period of the project activity corresponding to this monitoring period	01/04/2011 - 31/03/2021 (Fixed)
Project participants	Generacion Eolica India Limited
Host Party	India
Applied methodologies and standardized baselines	ACM0002, "Consolidated baseline methodology for grid connected electricity generation from renewable sources" (Version 11.0) Standardized Methodology: Not Applicable
Mandatory sectoral scopes	1: Energy industries (renewable - / non-renewable sources)
Conditional sectoral scopes, if applicable	NA
Estimated amount of GHG emission reductions or GHG removals for this monitoring duration in the registered PDD	448,841 tCO ₂ e
Certified amount of GHG emission reductions or GHG removals for this monitoring period	GHG emission reductions or net GHG removals by sinks reported up to 31 December 2012: 0 tCO ₂ e GHG emission reductions or net GHG removals by sinks reported from 1 January 2013 onwards: 323,633 tCO ₂ e
Name and UNFCCC reference number of the DOE	LGAI Technological Center, S.A. (Applus+ Certification) UNFCCC Ref. No.: E-0032
Name, position and signature of the approver of the verification and certification report	Mr. Juan Sendín Caballero Applus+ Certification Business Unit Managing Director Signature:

SECTION A. Executive summary

The Project activity is wind power project located in Karnataka State of India developed by Generacion Eolica India Limited. The project activity consists of 39 wind turbines of Enercon make (E-53 model) each 800 kW capacity and thus the total capacity of 31.2 MW.

The project was commissioned phase-wise; the first WTG was commissioned on 17/12/2007 and the last WTG on 10/10/2008. The expected operational lifetime of the project is for 20 years.

The project activity utilizes renewable wind energy for generation of electricity. The project activity replaces anthropogenic emissions of greenhouse gases (GHG's) into the atmosphere by displacing the equivalent amount of electricity generation through the operation of existing fuel mix in the grid comprising mainly fossil fuel based power plants and future capacity expansions connected to the grid.

During the monitoring period 01/01/2013 to 31/12/2019; (inclusive of both days) the project activity has achieved emission reductions 323,633 tCO_{2e}.

1. Verification Scope: The verification scope encompasses an independent and objective review and ex-post determination of the monitored reductions in GHG emissions by the DOE. The verification is based on the submitted monitoring report, the validated and registered PDD as well as its validation report, the applied monitoring methodology, relevant decisions, clarifications and guidance from the CMP and the EB and any other information and references relevant to the project activity's resulting emission reductions. These documents are reviewed against the requirements of the Kyoto Protocol, the CDM Modalities and Procedures and related rules and guidance. Based on the requirements in the "CDM validation and verification standard for project activities, Version 02.0", Applus+ Certification has applied a rule-based approach for the verification of the project. The principles of accuracy, completeness, relevance, reliability and credibility were combined with a conservative approach to establish a traceable and transparent verification opinion. The verification considers both quantitative and qualitative information on emission reductions. The verification is not meant to provide any consultancy towards the client. However, stated requests for clarifications, corrective and/or forward actions may provide input for improvement of the monitoring activities.

2. Methodology:

LGAI Technological Center, S.A. (Applus+ Certification) – Hereinafter referred as Applus+ Certification - approach to the verification is a two-stage process.

In the 1st stage, Applus+ Certification completed a strategic review and risk assessment of the project's activities and processes in order to gain a full understanding of:

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

Applus+ Certification used a Periodical Verification Checklist which, based on the risk-based assessment of the parameters and data collection and handling processes for each of those parameters, describes the verification approach and the sampling plan.

3. Desk Review

In the 2nd stage, using the Verification Checklist, Applus+ Certification verified the implementation of the monitoring plan and the data presented in the Monitoring Report for the period in question. This involved a site visit and a desk review of the Monitoring Report. This Verification Report describes the findings of this assessment.

The Monitoring Report version 01 submitted by the PP was made publicly available on the UNFCCC website before the verification activities started. The published MR was assessed based on all the relevant documents. The aim of the assessment in the desk review was to:

- Verify the completeness of the data and the information presented in the MR;
- Check the compliance of the MR with respect to the monitoring plan depicted in the registered PDD and verify that the applied methodology was carried out. Particular attention to the frequency of measurements, the quality of the metering equipment including calibration requirements, and the quality assurance and quality control procedures was paid;
- Evaluate the data management and the quality assurance and quality control system in the context of their influence on the generation and reporting of emission reductions.

4. Assessment team

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

The composition of audit team shall be approved by the LGAI Technological Center, S.A. (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	Role	SS Coverage	TA Coverage	Financial aspect
Dr. Atul Takarkhede	LA/TE	YES	YES	NA
Mr. Denny Xue	TR	YES	YES	NA

The curriculum vitae of the DOE's Verification team members are provided in Appendix 2 of this report.

5. Review of Documentation:

The Monitoring Report version 01 submitted by the PP was made publicly available on the UNFCCC website before the verification activities started. The published MR was assessed based on all the relevant documents. A cross-check between information provided and information from other sources has been done. A complete list of documents reviewed is available in Appendix 3 of this report.

6. On-site Assessment and follow-up Interviews:

As a part of the verification, the on-site inspection has been performed by the assessment team. The objective of the on-site assessment is to:

- Confirm the implementation and operation of the project;
- Review the data flow for generating, aggregating and reporting the monitoring parameters;
- Confirm the correct implementation of procedures for operations and data collection;
- Cross-check the information provided in the MR documentation with other sources;
- Check the monitoring equipment against the requirements of the PDD and the approved methodology, including calibrations, maintenance, etc.

- Review the calculations and assumptions used to obtain the GHG data and ER;
- Identify if the quality control and quality assurance procedures are in place to prevent or correct errors or omissions in the reported parameters.

The details are mentioned in section D.2 of this report.

7. Quality of Evidences

Sufficient evidence covering the full verification period in the required frequency is available to verify the figures stated in the final MR. The source of the evidences will be discussed in Appendix 3 of this report. Specific cross-checks have been done in cases that further sources were available. The monitoring report's figures were checked by the assessment team against the raw data. The data collection system meets the requirements of the monitoring plan as per the methodology.

8. Reporting of Findings

As an outcome of the verification process, the assessment team can raise different types of findings.

Where a non-conformance arises the assessment team shall raise a Corrective Action Request (CAR). A CAR is issued, where:

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

The assessment team shall raise a Clarification Request (CL) if information is insufficient or not clear enough to determine whether the applicable CDM requirements have been met.

All CARs and CLs raised during verification shall be resolved prior to submitting a request for issuance.

Forward Action Requests (FARs) may be raised during verification for actions where the monitoring and reporting require attention and/or adjustment for the next verification period. All the CARs/CLs/FARs are being discussed in Appendix 4 of this report

9. Internal Quality Control

As a final step of verification, the final documentation including the verification report has to undergo an internal quality control by the Technical Reviewer. Each report has to be finally approved either by the DOE's Technical Manager or the Deputy. In case one of these two persons is part of the assessment team, the approval can only be given by the person who is not a part of the assessment team. If the documents have been satisfactorily approved, the request of issuance is submitted to CDM EB along with the requisite documents.

SECTION B. Verification team, technical reviewer and approver**B.1. Verification team member**

No.	Role	Type of resource	Last name	First name	Affiliation (e.g. name of central or other office of DOE or outsourced entity)	Involvement in			
						Desk/document review	On-site inspection	Interviews	Verification findings
1.	Lead Auditor/ Technical Expert	OR	Takarkhede	Atul	True Quality Certifications Private Limited-Outsourced entity	Yes	No	Yes	Yes

B.2. Technical reviewer and approver of the verification and certification report

No.	Role	Type of resource	Last name	First name	Affiliation (e.g. name of central or other office of DOE or outsourced entity)
1	Technical reviewer	EI	Xue	Denny	Applus+ Certification
2.	Approver	IR	Sendin Caballero	Juan	Applus+ Certification

SECTION C. Application of materiality

C.1. Consideration of materiality in planning the verification

No.	Risk that could lead to material errors, omissions or misstatements	Assessment of the risk		Response to the risk in the verification plan and/or sampling plan
		Risk level	Justification	
1	Human errors: Readings from Meters (if not automatic)	LOW	Human error is likely to occur if the monitoring personnel are not trained well or inexperienced in data recording procedures and monitoring processes.	All the personal are well trained to monitor and collect data and thus risk associated with Human error is minimized. Assessment team checked the training records to confirm that all the personal are well trained to handle the activities related to monitoring. Assessment team checked the training records for the complete monitoring period and confirm that the personal are well trained to monitor and collect data for the project activity.
2	Human error: Quantification of emission reduction	LOW	Use of spreadsheets without adequate data control, changes/updates, version tracking, traceability and security	All the JMR (Monthly meter report/Generation Report) sheets and the invoices/Obligation Reports for the complete monitoring period are checked and thus the assessment team confirms that the ER value is conservative and correct.

C.2. Consideration of materiality in conducting the verification

In line with Guidelines for Application of materiality in verifications, the verification team has conducted a complete verification of all the information presented in the monitoring report and data monitored as presented in the emission reduction calculation spread sheet. There are no material errors, overestimation of ER, omission or misstatement.

SECTION D. Means of verification

D.1. Desk/document review

The verification was performed primarily based on the review of the monitoring report and the supporting documentation. This process included review of data and information presented to verify their completeness and review of the monitoring plan and monitoring methodology, paying particular attention to the frequency of measurements, the quality of metering equipment used including calibration requirements, and the QA/QC procedures, and an evaluation of data management and the QA/QC system in the context of their influence on the generation and reporting of emission reduction.

The initial MR Version 01 submitted by the project participant and additional background documents related to the emission reductions are reviewed as an initial step of the verification process. The subsequent step involved the identification of corrective action requests, clarification requests and Forward action request (CAR, CL and FAR) which are presented in Appendix 4 of this report. As a result of these findings, the MR is revised to MR Version 03. A complete list of all documents and records reviewed is as attached in Appendix 03 of this report.

D.2. On-site inspection

No Physical verification was conducted by the DOE for this CDM verification due to high threat of COVID-19 in entire state of India. Government of India has ordered nationwide lockdown from 25/03/2020 to 14/04/2020 in first phase & further extended to 30/06/2020¹. Latter it was further extended and during unlock various state governments-imposed state-wise lockdown and quarantine rules. State of Karnataka has implemented 14 days quarantine rule for the travellers from other states². Passengers arriving from all the Indian states, including Maharashtra (home state of assessment team) will have to do a mandatory 14 days of home quarantine, as mentioned in the Government of Karnataka order dated 06/07/2020. Also for business travellers returning in seven days, mandatory COVID 19 test along with 48 hours institutional quarantine until the results are received.

Hence, in line with the guidance to relax mandatory site visits by DOEs due to COVID 19 pandemic published by UNFCCC³, DOE has taken alternative measures to arrive at conservative estimation of emission reductions achieved, applying standard auditing techniques for verification, as referred in section 9.1.3 of the "CDM validation and verification standard for project activities, Version 02". Moreover, as verified from the ERPA provided by PP, PP has commitment of supplying of CERs to buyer by 08/10/2020. So, the site visit cannot be postponed to a later date. Thus, as per guidance to relax mandatory site visits by DOEs due to COVID 19 pandemic, assessment team have conducted remote audit and used standard auditing techniques to verify information and compliance with applicable requirements to the extent possible, to ensure the completeness and credibility of the audit.

The remote audit was conducted through MS Teams and audit was attended by Site In-charge of both sites as well as consultants. Details of attendees is given below in section D.3.

The topics discussed during the remote audit is given in below table and explained in detailed latter part.

¹ https://www.mha.gov.in/sites/default/files/MHADOLrDt_3052020.pdf

² [https://timesofindia.indiatimes.com/travel/travel-news/bengaluru-airport-quarantine-rules-everything-you-wanted-to-know/as76974213.cms#:~:text=2\)%20Passengers%20arriving%20from%20all,order%20dated%20July%206%2C%202020.](https://timesofindia.indiatimes.com/travel/travel-news/bengaluru-airport-quarantine-rules-everything-you-wanted-to-know/as76974213.cms#:~:text=2)%20Passengers%20arriving%20from%20all,order%20dated%20July%206%2C%202020.)

³ https://cdm.unfccc.int/newsroom/latestnews/releases/2020/01041_index.html

Duration of on-site inspection: 11/08/2020 (Remote Audit through MS Teams)				
No.	Activity performed on-site	Site location	Date	Team member
1.	<p>The verification team conducted visit to the project site to confirm the information and to resolve issues identified in the document review. An on-site assessment was conducted as a part of verification activity and involved:</p> <ol style="list-style-type: none"> 1) an assessment of the implementation and operation of the CDM project activity as per the registered PDD 2) a review of information flows for generating, aggregating and reporting of the monitoring parameters 3) interviews with relevant personnel to confirm that the operational and data collection procedures are implemented in accordance with the Monitoring Plan 4) a cross-check between information provided in the MR and data from other sources 5) a check of the monitoring equipment including calibration performance, and observations of monitoring practices against the requirements of the PDD and the applied methodology 6) a review of calculations and assumptions made in determining the GHG data and ERs, and 7) an identification of QA/QC procedures in place to prevent, or identify and correct, any errors or omissions in the reported monitoring parameters 	<p>Harthi, Kurtakoti and Malasamudra villages, Gadag district, Karnataka, India</p> <p>(Remote Audit through MS Teams)</p>	11/08/2020	Dr. Atul Takarkhede

As referred above, the objective of the remote assessment was to verify the following issues:

- Confirm the implementation and operation of the project in line with CDM PDD: the project activity is implemented as per the registered PDD and there is no change in capacity or design of the project activity since commissioning. Same was confirmed from commissioning certificates, technical specifications of the WTGs & recent site photographs, PPA, interviews with PP/Site in charge and JMR as well as invoices raised by PP towards state utility;
- Review the data flow for generating, aggregating and reporting the monitoring parameters: JMR procedures are followed at the project site in line with the state utility practice and is in line with the registered PDD. JMR procedure is confirmed during the interviews with PP and assessment team also checked entire monthly JMRs issued by the state utility for the project activity with the values provided in the ER sheet for the calculations of the emission reductions;
- Confirm the correct implementation of procedures for operations and data collection: during interviews with PP/Site In-charge it was confirmed that implementation of procedures for operations and data collection is in line with registered PDD. Service provider is responsible for the operations, maintenance as well as maintaining other technical data of the project activity. Performance and operation data of each WTG is controlled and maintained by service provider through the dedicated software and made available to the PP as & when required;
- Cross-check the information provided in the MR documentation with other sources: the information provided in the MR was crosschecked with the commissioning certificates, PPA, calibration certificates and JMRs are issued by Statutory authority and invoices are used for cross-checking;

- Check the monitoring equipment against the requirements of the PDD and the approved methodology, including calibrations, maintenance, etc.: monitoring meters are cross checked with the previous verification reports, interviews with PP, current photographs/videos submitted by PP and calibration is checked with the calibration certificates issued by State Utility company i.e. Hubali Electricity Supply company Limited;
- Review the calculations and assumptions used to obtain the GHG data and ER: calculation procedures and monthly generation data is checked with JMR and crosschecked with invoices;
- Identify if the quality control and quality assurance procedures are in place to prevent or correct errors or omissions in the reported parameters: during interviews with PP it was confirmed that quality control and quality assurance procedures are in place. Metering arrangements & JMR procedure is defined and controlled by state utility and PP do not have control on it. Assessment team checked all the monthly JMR values as well as crosschecked with the invoices and found that emission reductions are calculated conservatively.

Thus, to verify the implementation of project activity, onsite operation & maintenance, monitoring & management practices; assessment team has conducted MS Teams video call/telephonic interviews with onsite in-charge, O&M team and also had a detail discussion with the PP representative and reviewed third party statutory documents i.e. Commissioning certificates, Power Purchase Agreement, Complete set of JMRs covering monitoring period, Invoice (for cross check of Net electricity supplied to the grid as per revised PDD), training records, breakdown log, O&M schedule, complaint/feedback register and other relevant records.

After telephonic/MS Team interviews with concerned onsite persons, document reviews & site videos/photographs submitted by PP; assessment team concluded that the project activity is still implemented and operated in-line with the registered PDD. There is no change in the project design or operation and monitoring practices at site which can alter the applicability of meth or additionality of the project activity. In addition to the interviews with PP, assessment team have checked the commissioning certificate, PPA and JMRs and found that the project activity is implemented as per the PDD, and Monitoring report submitted by the PP for current monitoring period. From review of JMR and invoices assessment team therefore of the opinion that project is implemented as described in the registered PDD and there is no change in monitoring practices as well as all monitoring parameters as envisaged in the PDD. All the monitored values are supported by the evidences i.e. JMRs and found that information provided in the MR is inline with the submitted evidences. Assessment team reviewed all the calibration certificates and found that monitoring meters are calibrated periodically. Detailed assessment provided later in Section E.7 of this report.

Some snapshots of the remote audit through Skype and some photographs of the project activity are provided in Appendix 5 of this report.

D.3. Interviews

No.	Interviewee			Date	Subject	Team member
	Last name	First name	Affiliation			
1.	Belari	Nagraj	Site Incharge (Harthi site)	11/08/2020	As mentioned above in section D.2 of this report	Dr. Atul Takarkhede
2.	Kumar	Prakash	Project Manager, EKI			
3.	Mitra	Souvik	Project Manager, EKI			

D.4. Sampling approach

No sampling is used as the verification team has visited site along with the substations. The verification team has reviewed all the documents like commissioning certificates, JMR (monthly reports) sheets, invoices/ Obligation Reports, etc.

D.5. Clarification requests (CLs), corrective action requests (CARs) and forward action requests (FARs) raised

Areas of verification findings	No. of CL	No. of CAR	No. of FAR
Compliance of the monitoring report with the monitoring report form	00	01	00
Compliance of the project implementation and operation with the registered PDD	00	00	00
Post-registration changes	00	00	00
Compliance of the registered monitoring plan with the methodologies including applicable tools and standardized baselines	00	00	00
Compliance of monitoring activities with the registered monitoring plan	00	01	00
Compliance with the calibration frequency requirements for measuring instruments	00	01	00
Assessment of data and calculation of emission reductions or net removals	00	01	00
Assessment of reported sustainable development co-benefits	00	00	00
Global stakeholder consultation	00	00	00
Others (please specify)	00	00	00
Total	00	04	00

SECTION E. Verification findings

E.1. Compliance of the monitoring report with the monitoring report form

Means of verification	The verification team has determined whether the monitoring report was completed using the valid version of the applicable monitoring report form. The verification team has checked whether all the sections of the monitoring report follows the guidelines provided in the template.
Findings	CAR 01 was raised during the verification process. Please refer Appendix 4 of this report for the complete closure of the CAR.
Conclusion	The MR was web hosted in version 07.0 of the MR form which is the current and active version in the UN platform. The monitoring report has been prepared as per the instructions provided in the template. DOE has made the version 01 of the monitoring report covering the monitoring period 01/01/2013 to 31/12/2019; (both the days included) publicly available through its dedicated interface on the UNFCCC CDM website on 27/04/2020 i.e. before undertaking the remote audit for the verification. The verification team has concluded that the monitoring report was completed using the valid version of the applicable monitoring report form and is followed the guidelines contained in the template. However, CAR 01 was raised for Monitoring period number and weblinks for tools used. CAR was closed on revision of the MR for this CAR.

E.2. Remaining forward action requests from validation and/or previous verifications

This is 3rd periodic verification of the project activity. No FAR was raised during the validation and previous verification of the project the project activity.

E.3. Compliance of the project implementation and operation with the registered project design document

Means of verification	The verification team determined the conformity of the actual implemented project activity and its operation with the registered project design document. DOE has, by means of a desk review and an on-site visit, assessed whether all physical features of the proposed CDM project activity proposed in the registered PDD are in place, and that the project participants have operated the CDM project activity as per the registered PDD.				
Findings	No finding was raised on the project implementation and operation.				
Conclusion	<p>The verification team has reviewed the commissioning certificates to conclude that the capacity of the project is same as mentioned in the registered PDD. The capacity does not change after the registration of the project activity as confirmed by the assessment team during verification remote audit and verified from the commissioning certificates, PPA and JMRs of the project activity.</p> <p>The project activity is located at Harthi, Kurtakoti and Malasamudra villages in Bailhongal and Belgaum Taluk, Belgaum District, Karnataka, India.</p> <p>The above details are checked by the assessment team from commissioning certificates which are issued by statutory agency. Same are found in line with registered PDD. The detail also forms the part of Monitoring report and thus acceptable to the assessment team.</p> <p>Technical details of the project activity</p> <p>The project activity consists of 39 WTGs of Enercon make (E-53 model) of 800 kW capacity each and thus total capacity of 31.2 MW. The turbines generate 3-phase power at 400V, which is stepped up to 33 KV at the project site and further stepped up to 220 KV at the Receiving sub- station of the KPTCL/HESCOM. The project activity can operate in the frequency range of 47.5–51.5 Hz and in the voltage range of 400 V \pm 12.5%. The average life time of the WEC is around 20 years as per the industry standards. Technical specifications are checked from the turbine manufacturer brochure and found correct in line with registered PDD.</p> <p>Technical Specifications of E 53:</p> <table border="1"> <tr> <td>Turbine model</td><td>Enercon E- 53</td></tr> <tr> <td>Rated power</td><td>800 KW</td></tr> </table>	Turbine model	Enercon E- 53	Rated power	800 KW
Turbine model	Enercon E- 53				
Rated power	800 KW				

	Rotor diameter	53 m
	Hub height	75 m
	Turbine Type	Gearless horizontal axis wind turbine with variable rotor speed
	Power regulation	Independent electromechanical pitch system for each blade.
	Cut in wind speed	2.5 m/s
	Rated wind speed	12 m/s
	Cut out Wind speed	28-34 m/s
	Extreme Wind Speed	59.5 m/s
	Rated rotational speed	32 rpm
	Operating range rot. speed	12-29 rpm
	Orientation	Upwind
	No of Blades	3
	Blade Material	Fibre Glass Epoxy reinforced with integral lightning protection
	Gear box type	Gear less
	Generator type	Synchronous generator
	Braking	Aerodynamic
	Output Voltage	400 V
	Yaw System	Active yawing with 4 electric yaw drives with brake motor and friction bearing
	Tower	74 m concrete
	<p>The metering arrangement of the energy meter is provided in the MR and found in line with remote audit observations and description in the registered PDD and MR.</p> <p>The plant undergone scheduled maintenance as per the manufacturer's specifications and no unforeseen incident observed by the assessment team during the monitoring period. The details are checked by the assessment team from the plant log records and found correct.</p> <p>Project is operating normally and same is verified from the monthly JMRs issued by the state utility.</p> <p>Based on the documentary evidence of commissioning certificates, PPA, O&M agreement and JMRs DOE concludes that the project was implemented as per the registered PDD.</p>	

E.4. Post-registration changes

E.4.1. Temporary deviations from the registered monitoring plan, applied methodologies, standardized baselines or other methodological regulatory documents⁴

Not applicable for present Monitoring period.

E.4.2. Corrections

Not applicable for present Monitoring period.

E.4.3. Changes to the start date of the crediting period

Not applicable for the project activity.

⁴ Other standards, methodologies, methodological tools and guidelines (to be) applied in accordance with the applied(selected) methodologies are collectively referred to as the other (applied) methodological regulatory documents).

E.4.4. Inclusion of a monitoring plan

Not applicable for present Monitoring period.

E.4.5. Permanent changes from registered monitoring plan, or permanent deviation of monitoring from the applied methodologies, standardized baselines or other methodological regulatory documents

Not applicable.

E.4.6. Changes to the project design

Not applicable for present Monitoring period.

E.4.7. Changes specific to afforestation and reforestation project activities

Not applicable being renewable energy project.

E.5. Compliance of the registered monitoring plan with applied methodologies, applied standardized baselines, and other applied methodological regulatory documents

Means of verification	The verification team determined whether the registered monitoring plan is in accordance with the applied methodology ACM0002, "Consolidated baseline methodology for grid connected electricity generation from renewable sources" (Version 11.0) including applicable tools.
Findings	No finding was raised on the registered monitoring plan.
Conclusion	The verification team is able to confirm that the monitoring plan contained in the registered PDD is in accordance with the approved methodology applied by the project activity, i.e. ACM0002, "Consolidated baseline methodology for grid connected electricity generation from renewable sources" (Version 11.0) and its applicable tools. The same is followed onsite and thus assessment team confirms that project activity comply with the requirement of Approved methodology and registered PDD.

E.6. Compliance of monitoring activities with the registered monitoring plan**E.6.1. Data and parameters fixed ex ante or at renewal of crediting period**

Means of verification	The assessment team checked the registered PDD to confirm the ex-ante fixed parameter mentioned in the current monitoring report. Assessment team also interviewed the personal onsite to check further regarding the ex-ante values used for emission reduction calculation.
Findings	No finding were raised on the Data and parameters fixed ex ante.
Conclusion	<p>$EF_{Grid, OM, y}$, $EF_{Grid, BM, y}$ & $EF_{Grid, CM, y}$ was mentioned as ex-ante fixed parameters. Assessment team checked the values, source of data, choice of data, purpose of the data mentioned in the MR from the registered PDD and confirms that the same approach was followed for the current monitoring period also.</p> <p>The value for EF_y or $EF_{Grid, CM, y}$ was considered from the CO₂ baseline database, version 04 published by Central Electricity Authority (CEA). The default value as mentioned in the registered PDD and MR are same i.e. 0.92694 tCO₂/MWh.</p>

E.6.2. Data and parameters monitored

Means of verification	The assessment team checked the registered PDD to confirm the ex-post parameter mentioned in the current monitoring report. Assessment team also interviewed the personal onsite to check further regarding the ex-post parameter monitoring and confirms that the same is in line with the registered PDD. ACM0002, "Consolidated baseline methodology for grid connected electricity generation from renewable sources" (Version 11.0) which was the applied methodology during the registration of the project is also checked to ensure that monitoring parameter as
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	mentioned in the registered PDD and current MR are in compliance with the methodology.
Findings	CAR 02 was raised during the verification process. Please refer Appendix 4 of this report for the complete closure of the CAR.
Conclusion	<p>As per the registered monitoring plan and requirement of the registered methodology following parameters needs to be monitored:</p> <p>1. Net electricity supplied to the grid by the Project (EG_y):</p> <p>This is calculated parameter. The net electricity supplied to the grid is recorded by Joint Meter Reading (JMR)/Form B for the project activity connected to 39 turbines at the project site. The JMR (Form B) contains the value energy exported, Imported and the net export to the grid. The electricity exported and imported by the project activity is measured at 33 kV on metering point (billing point) by one main meter and one check meter. The 33kV feeder further connected to step up transformer and subsequently to bulk meters at 220 kV KPTCL substation. However, Project activity used only one main meter and one check meter for transmission loss from 33 KV Pooling station to 220 KV substation. Net electricity supplied to grid by the project activity is calculated as per below formula:</p> <p>EG_y = Electricity exported – 115% of Electricity imported – Transmission loss.</p> <p>Transmission loss during the export of electricity by the project activity is being calculated by apportioning procedure (pro-rate basis) on the basis of electricity exported to the grid by all WTGs connected to that particular feeder and electricity exported by the project activity. This is as per the registered PDD for the project activity and same has been checked and confirmed on site during remote audit carried out for the project activity. The value of this parameter is directly mentioned in Joint Meter Report and it is found to be consistent with the MR and Excel spread-sheet. The net electricity supplied to the grid by the project activity is further cross-checked against invoices which were raised by the project participant during current monitoring period. This is found to be appropriate and it is accepted.</p> <p>2. Electricity Export recorded at the meter(s) connected 39 machines of the project activity (G_{pe})</p> <p>This is a measured parameter. Electricity exported to the grid by the project activity is being measured at 33 kV metering point located at the metering yard owned by Wind World (India) Limited's (formally Enercon) who is acting as EPC contractor for the project activity. Electricity exported is being monitored continuously, measured hourly and the same is being recorded monthly. The PP reported electricity exported to the grid by the project activity on a monthly basis. This is in line with the applied methodology ACM0002, version 11.0 and registered PDD. Joint Meter Readings are being taken on a monthly basis and it is signed by HESCOM officials and B-forms are prepared accordingly. Since HESCOM is the third party government agency and billing is based on B-Forms; this parameter has been considered from the B-Forms for emission reductions calculations for the project activity. The electricity exported by the project activity is further cross-checked against invoices which were raised by the project participant in the current monitoring period. This is found to be appropriate and it is accepted.</p> <p>3. Electricity Import recorded at the meter(s) connected 39 machines of the project activity. (G_{pi})</p> <p>This is a measured parameter. Electricity imported by the project activity from the connected grid is being measured at two 33 kV c metering point located at metering yard owned by Wind World (India) Limited's (formally Enercon) who is acting as EPC contractor for the project activity. Electricity imported is being monitored continuously, measured hourly and same is being recorded monthly. The PP reported electricity imported by the project activity from the connected grid on monthly basis. This is in line with the applied methodology ACM0002, version 11.0 and registered PDD. Joint Meter Readings are being taken on a monthly basis and it is signed by HESCOM officials and B-forms are prepared accordingly. Since HESCOM is the third party government agency and billing is based on B-Forms, this parameter has been considered from the B-Forms for emission reductions calculations for the project activity. The electricity imported by the project activity is</p>

	<p>further cross-checked against invoices which were raised by the project participant in the current monitoring period. This is found to be appropriate and it is accepted.</p> <p>4. Transmission loss between the metering point for the project activity feeding the pooling substation of Enercon and the metering point at EB Substation/Switching Station. (Li)</p> <p>This is a calculated parameter. Transmission loss by the project activity is being calculated by HESCOM officials on a pro-rate basis of electricity exported by the project activity measured at common meters and the same are being reflected in the JMRs (B – Forms) signed by HESCOM's officials and representative of the project participant. The monthly reported values of this parameter is checked and confirmed from JMRs (B – Forms) signed jointly by HESCOM officials and Wind World (India) Limited's (formally Enercon) officials (as being the PP's representative) for the project activity. This is found to be in line with the registered monitoring plan. The same has been further crosschecked with the invoices raised by the project participant. This is found to be appropriate and it is accepted.</p> <p>Calibration of the meter is to be carried out once in a year as registered PDD. The monitoring meters were calibrated periodically, and yearly frequency of calibration is followed. Calibrations are found to be carried out as per the registered monitoring plan and no delay in calibration is observed. The test results are within the permissible limit and are found to be accepted.</p> <p>The bulk meters (both main & check meters) at 220 kV sub-station were found delayed calibration result is within permissible limit of accuracy class, an error factor (0.2% accuracy class) is applied to Transmission losses from months of September 2013 to September 2018.</p> <p>During the verification all relevant monitoring parameters (as listed in section B.7.1 of PDD) have been verified with regard to the appropriateness of the applied measurement / determination method, the correctness of the values applied for ER calculation, the accuracy, and applied QA/QC measures. The Verification team identified that the correct emission factor is reported under the section D.2 of the monitoring report to apply the appropriately report the emission factor. Based on above assessment the verification team confirms that requisite parameters are monitored in line with registered monitoring plan.</p>
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E.6.3. Implementation of sampling plan

Means of verification	The verification assessed whether the compliance of the sampling efforts and surveys with the registered sampling plan in accordance with the "Standard for sampling and surveys for CDM project activities and programme of activities" if PP had applied a sampling approach to determine data and parameters monitored.
Findings	There is no CAR/CL raised in this section.
Conclusion	PP did not apply sampling plan to determine data and parameters monitored during this monitoring period. The verification team has checked all the documents such as JMR (Monthly meter Readings)/ obligation schedules and injection schedule reports, invoice etc. and hence sampling plan was not required. The verification team hereby confirms that are checked all the documents.

E.7. Compliance with the calibration frequency requirements for measuring instruments

Means of verification	The verification team determined whether the calibration of the measuring equipment that has an impact on the claimed emission reductions is conducted by the PP at a frequency specified in the registered monitoring plan
Findings	CAR 03 was raised during the verification process and closed successfully. Please refer Appendix 4 of this report for the detail closure of the CAR.
Conclusion	Electricity exported & imported by the project activity is being measured at 33 kV metering point located at the metering yard owned by Wind World (India) Limited's (formally Enercon) who is acting as EPC contractor for the project activity. The transmission loss from 33 KV Pooling station to 220 KV substation is measured by bulks meter (one main Meter and one check meter) located at 220 KV substation.
	Meters are L & T make and accuracy class of 0.2s. During interview with O&M

personnel also conforms the same. The detail of the meter's calibration are as follows:

Meter Type	Meter Serial No.	Calibration date		Validity of calibration	
Main Meter	05389382	2012	15/09/2012	2013	14/09/2013
		2013	06/06/2013	2014	27/11/2014
			28/11/2013		
		2014	28/05/2014	2015	24/10/2015
			25/10/2014		
		2015	20/08/2015	2016	09/12/2016
			10/12/2015		
		2016	31/03/2016	2017	05/12/2017
			06/12/2016		
		2017	14/06/2017	2018	27/12/2018
			28/12/2017		
		2018	21/07/2018	2019	20/07/2019
2019	04/02/2019	2020	15/05/2020		
	16/05/2019				
Check Meter	07022924	2012	15/09/2012	2013	14/09/2013
		2013	06/06/2013	2014	27/11/2014
			28/11/2013		
		2014	28/05/2014	2015	24/10/2015
			25/10/2014		
		2015	20/08/2015	2016	09/12/2016
			10/12/2015		
		2016	31/03/2016	2017	05/12/2017
			06/12/2016		
		2017	14/06/2017	2018	27/12/2018
			28/12/2017		
		2018	21/07/2018	2019	20/07/2019
2019	04/02/2019	2020	15/05/2020		
	16/05/2019				

Assessment team also observed that meter change for check meter was happened on 24/07/2020 and old check meter No. 07022924 with new meter no. 19008132. This meter change do not have any impact on current monitoring period as meter replacement happened after current monitoring period end date.

The calibration details for the bulk meters (both main & check meters) in feeder-2 (the WTGs of Generacion Eolica India Limited is connected to feeder-2) at 220 kV sub-station is as follows:

Meter Type	Meter Serial No.	Calibration date		Next Calibration due on	
Main Meter	07022908	2012	25/09/2012	2013	24/09/2013
		2013	Calibration certificates not available	2014	NA
		2014	Calibration certificates not available	2015	NA
		2015	Calibration certificates not available	2016	NA
		2016	Calibration certificates not available	2017	NA
		2017	Calibration certificates not available	2018	NA
		2018	27/09/2018	2019	26/09/2019
		2019	09/09/2019	2020	08/09/2020

Check Meter	07022915	2012	25/09/2012	2013	24/09/2013
		2013	Calibration certificates not available	2014	NA
		2014	Calibration certificates not available	2015	NA
		2015	Calibration certificates not available	2016	NA
		2016	Calibration certificates not available	2017	NA
		2017	Calibration certificates not available	2018	NA
		2018	27/09/2018	2019	26/09/2019
		2019	09/09/2019	2020	08/09/2020

During interviews with PP it was also noted that the all 39 WTGs of the project activity are connected to Feeder 2 only at 220 kV sub-station. Thus, only feeder 2 readings are used for transmission loss calculations by the state electricity board.

As per the registered PDD, calibration frequency of monitoring meters is once in each year. The monitoring meters located at 33 kV were calibrated periodically, and yearly frequency of calibration is followed. Calibrations are found to be carried out as per the registered monitoring plan and no delay in calibration is observed. The test results are within the permissible limit and are found to be accepted.

Further, Bulk meters (both main and check) were calibrated annually by electricity transmission utility but the calibration certificates are not available for the period 01/09/2013 to 30/09/2018 as confirmed during the Interview with PP representative. Hence, permissible error factor of 0.2% has been applied to the values of transmission losses for this period. Thus, delayed calibration is addressed in line with para 366 (a) of the "CDM validation and verification standard for project activities, Version 02.0" by applying maximum permissible error for complete delayed period as conservative approach. Same was accepted by the assessment team being inline with standard and most conservative approach.

E.8. Assessment of data and calculation of emission reductions or net removals

E.8.1. Calculation of baseline GHG emissions or baseline net GHG removals by sinks

Means of verification	The verification team assessed whether the data and calculations of GHG emission reductions achieved resulting from the registered CDM project activity. The verification team has checked whether calculations of baseline GHG emissions have been carried out in accordance with the formulae and methods described in the registered monitoring plan.
Findings	CAR 04 was raised during the verification process. The description of the CAR and its closure is described below in Appendix 4 of this report.
Conclusion	<p>The baseline is the MWh produced by the project activity multiplied by an emission coefficient (measured in tonnes CO₂/MWh) calculated in a transparent and conservative manner as the weighted average emissions (in tonnes CO₂/MWh) as described in approved PDD. The baseline emissions for the monitoring period are calculated as follows:</p> <p>The parameter Combined Margin Emission Factor of Southern Regional Electricity Grid, $EF_{grid, CM, y}$ (tCO₂e/MWh) is fixed ex-ante parameter and remain same throughout the crediting period. The Net Electricity supplied to grid by the project activity is calculated as follows;</p> $EG_y \text{ (MWh)} = G_{pe} \text{ (MWh)} - 115\% * G_{pi} \text{ (MWh)} - Li \text{ (MWh)}$ $= 352,070.55 - 115\% * 249.60 - 2641.19$ $= 349,142.32 \text{ (MWh)}$ <p>Grid emission factor is determined ex-ante and fixed as 0.92694</p>

	<p>tCO₂e/MWh throughout the first crediting period.</p> <p>The emission reduction is calculated as follows:</p> <p>Baseline emission = Net electricity supplied to the grid by the Project, EG_y (MWh) x Combined Margin Emission Factor of Southern Electricity Grid, EF_{CM, y}</p> <p>= 349,142.32 (MWh) X 0.92694 tCO₂e/MWh</p> <p>= 323,633 tCO₂e (Rounded down)</p> <p>As per methodology, leakage emissions and project emissions are zero. Thus emission reductions are calculated as follow:</p> <p>Emission reductions = Baseline emissions – Project emissions – Leakage emissions</p> <p>= 323,633 – 0 – 0</p> <p>= 323,633 tCO₂e</p> <p>Calculations of baseline GHG emissions, project GHG emissions and leakage GHG emissions have been carried out in accordance with the formulae and methods described in the registered monitoring plan.</p>
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E.8.2. Calculation of project GHG emissions or actual net anthropogenic GHG removals by sinks

Means of verification	The verification team assessed whether the data and calculations of GHG emission reductions achieved resulting from the registered CDM project activity. The verification team has checked whether calculations of project GHG emissions have been carried out in accordance with the formulae and methods described in the registered monitoring plan.
Findings	No findings raised
Conclusion	The project emissions are regarded as zero according to the applied methodology and registered PDD.

E.8.3. Calculation of leakage GHG emissions

Means of verification	The verification team assessed whether the data and calculations of GHG emission reductions achieved resulting from the registered CDM project activity. The verification team has checked whether calculations of baseline GHG emissions, project GHG emissions and leakage GHG emissions have been carried out in accordance with the formulae and methods described in the registered monitoring plan.
Findings	No findings were raised.
Conclusion	The leakage emissions are regarded as zero according to the applied methodology and registered PDD.

E.8.4. Summary calculation of GHG emission reductions or net anthropogenic GHG removals by sinks

Means of verification	The verification team assessed whether the data and calculations of GHG emission reductions achieved resulting from the registered CDM project activity. The verification team has checked whether calculations of baseline GHG emissions, project GHG emissions and leakage GHG emissions have been carried out in accordance with the formulae and methods described in the registered monitoring plan.
Findings	There is no CAR/CL raised in this section.
Conclusion	<p>Emission reductions in this monitoring period are:</p> <p>Total Baseline Emissions: 323,633 tCO₂e</p> <p>Total Project Emission: 0 tCO₂e</p> <p>Total Leakage: 0</p> <p>Total Emission Reduction: Emission reduction calculation is done based on following formula,</p>

	$\text{Emission reduction (ER}_y\text{)} = \text{Baseline Emission (BE}_y\text{)} - \text{Project Emission (PE}_y\text{)}$ $= 323,633 \text{ tCO}_2 - 0 \text{ tCO}_2$ $= 323,633 \text{ tCO}_2\text{e}$
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E.8.5. Comparison of actual GHG emission reductions or net anthropogenic GHG removals by sinks with estimates in registered PDD

Means of verification	The verification team has determined the emission reductions achieved during this monitoring period with the estimated value and reason for increase if any.
Findings	There is no CAR/CL raised in this section.
Conclusion	The Emission Reduction (ER) value in the monitoring period is 27.9% ⁵ lower as compared to the value estimated in the registered PDD.

E.8.6. Remarks on difference from estimated value in registered PDD

Means of verification	The verification team has determined the emission reductions achieved during this monitoring period with the estimated value and reason for increase if any.
Findings	There is no CAR/CL raised in this section.
Conclusion	The Emission Reduction (ER) value in the monitoring period is 27.9% lower as compared to the value estimated in the registered PDD. Such variation has been due to lower electricity generation based on low wind availability. Hence accepted by verification team.

E.8.7. Actual GHG emission reductions or net anthropogenic GHG removals by sinks during the first commitment period and the period from 1 January 2013 onwards

Means of verification	The verification team has determined the CER achieved during first commitment period and second commitment period
Findings	There is no CAR/CL raised in this section.
Conclusion	1. GHG emission reductions or net GHG removals by sinks reported up to 31 December 2012: 0 tCO ₂ e 2. GHG emission reductions or net GHG removals by sinks reported from 1 January 2013 onwards: 323,633 tCO ₂ e (Monitoring period starting from 01/01/2013)

E.9. Assessment of reported sustainable development co-benefits

Means of verification	Not applicable for the present monitoring period
Findings	Not applicable for the present monitoring period
Conclusion	Not applicable for the present monitoring period

E.10. Global stakeholder consultation

Means of verification	Not applicable for the present monitoring period
Findings	Not applicable for the present monitoring period
Conclusion	Not applicable for the present monitoring period

⁵ Calculated based on 2556 monitoring days and annual estimated emission reductions 64,095 tCO₂e and estimated ER for this monitoring period as 448,841 tCO₂e.

SECTION F. Internal quality control

As a final step of verification, the final documentation including the verification report has to undergo an internal quality control by the Technical Reviewer. Then each report has to be finally approved either by the DOE's Technical Manager or the Deputy. In case one of these two persons is part of the assessment team, the approval can only be given by the person who is not a part of the assessment team. If the documents have been satisfactorily approved, the request of issuance is submitted to CDM EB along with the requisite documents. Internal quality control ensures impartiality and quality of the report.

SECTION G. Verification opinion

Applus+ Certification has been engaged by Generacion Eolica India Limited to perform the 3rd periodical verification of the "GEI Wind Power Project in Karnataka, India" (UNFCCC Ref. No. 4144).

The management of Generacion Eolica India Limited is responsible for the preparation of the GHG emissions data and the reported GHG emissions reductions on the basis set out within the project's Monitoring Plan in the registered approved PDD version 7.0 dated 25/02/2011 and the applied methodology ACM0002, "Consolidated baseline methodology for grid connected electricity generation from renewable sources" (Version 11.0).

Our verification approach was based on the requirements as defined under the Kyoto Protocol, Marrakesh accord, as well as those defined by the CDM Executive Board. Our approach is risk-based, drawing on an understanding of the risks associated with reporting GHG emissions data and the controls in place to mitigate these. The verification can confirm that:

- the project is operated as planned and described in the project design document approved by the EB;
- the monitoring plan is as per the applied methodology;
- the monitoring in Monitoring Report is as per the PDD and the monitoring plan approved by the EB;
- the development and maintenance of records and reporting procedures are in accordance with the registered monitoring plan;
- the installed equipment being essential for generating emission reduction runs reliably;
- the monitoring system is in place and generates GHG emission reductions data;
- the GHG emission reductions are calculated without material misstatements.

In our opinion, the GHG emission reductions for "GEI Wind Power Project in Karnataka, India" for the monitoring period 01/01/2013 to 31/12/2019; as reported in Monitoring Report, prepared on the basis of the project's Monitoring Plan are fairly stated.

Based on the information we have seen and evaluated, we confirm the following statement:

Reporting period: From 01/01/2013 to 31/12/2019;

Verified emissions in the above reporting period:

Leakage emissions	0 tCO ₂ equivalents
Project emissions	0 tCO ₂ equivalents
Baseline emissions	323,633 tCO ₂ equivalents
Emission reductions	323,633 tCO ₂ equivalents

SECTION H. Certification statement

Same as above

Appendix 1. Abbreviations

Abbreviations	Full texts
BM	Build Margin
CAR	Corrective Action Request
CER	Certified Emission Reduction(s)
CEA	Central Electricity Authority
CL	Clarification request
CM	Combined Margin
CO ₂	Carbon dioxide
CO ₂ e	Carbon dioxide equivalent
DNA	Designated National Authority
DOE	Designated Operational Entity
DR	Document Review
EF	Emission Factor
ER	Emission Reductions sheet
FAR	Forward Action Request
JMR	Joint Meter reading
GHG	Greenhouse gas(es)
GWP	Global Warming potential
HESCL	Hubali Electricity Supply Company Limited
PP	Project Participant
PPA	Power purchase agreement

Appendix 2. Competence of team members and technical reviewers

1. **Dr. Atul Takarkhede**, counts with 10 years of experience in field of Environmental Auditing, consulting and accreditation. He is an Expert in ISO 9001-14001, CO₂/GHG Reporting, Carbon Foot Print, Energy, Water and Waste Management Reporting for organizations environmental performance. His professional portfolio is mainly related with carrying out EIA, conducting QA/QC of EIA Reports; Conducting Environmental/water Audits; NABET requirements appliance. Furthermore, he counts with solid experience on CDM-VCS-GS consultancy and auditing. He has Ph.D. (Environmental Science) from Institute of Science, RTM Nagpur University, Nagpur, and he has already published different technical reports related to environmental science. Currently he is associated with True Quality Certifications Private Limited and is empanelled with APPLUS certification to carry out GHG audit.
2. **Mr. Denny Xue** has a Bachelor's Degree on Thermal Energy Engineering and Master's Degree on Environmental Engineering. He has more than 10 years of experience on CDM project development. Before he joined Applus+ LGAI, he has been worked for Shanghai Chuanji Investment and Management which is a CDM consultancy company as a project manager for CDM project development. He is working with Applus+ since 2011 carrying out Validation and verification for CDM/GS/VCS project under scope 1 and 13 as auditor, lead auditor, technical expert and technical reviewer.

Appendix 3. Documents reviewed or referenced

No.	Author	Title	References to the document	Provider
1.	NA	Commissioning certificates	Commissioning Certificates of the project activity	Project participant
2.	NA	Contract of the project participant with the DOE	Contract document signed between PP and DOE	Project participant
3.	NA	CDM VVS	CDM validation and verification standard for project activities, Version 02	UNFCCC
4.	NA	Joint Meter Reading (JMR)	JMR reports for the project activity covering complete monitoring period	Project participant
5.	NA	Invoices/ Obligation Reports	Invoices for the complete monitoring period raised by PP	Project participant
6.	NA	MR version 01 (Draft) MR version 02 (Revised) MR version 02 (Final)	MR version 01 dated 21/03/2020 MR version 02 dated 24/08/2020 MR version 03 dated 01/10/2020	Project participant
7.	NA	ER sheet version 01	version 01 dated 21/03/2020	Project participant
8.	NA	ER sheet version 02	Version 02 dated 01/10/2010	Project Participant
9.	NA	Break Down details of plant	Log book records onsite maintained by O&M contractor	Project participant
10.	NA	Application of materiality	Guidelines for Application of materiality in verifications version 2.0	UNFCCC
11.	NA	Registered documents of the project activity	Registered PDD version 07 dated 25/02/2011 Validation Report (No.53602009-09-99) dated 09/03/2011 02 nd Verification Monitoring report version 3.0 dated 10/04/2013 & Verification Report (No.2013-9157) dated 19/04/2013	UNFCCC website
12.	NA	Approved methodology	ACM0002, "Consolidated baseline methodology for grid connected electricity generation from renewable sources" (Version 11.0)	UNFCCC
13.	NA	Calibration certificates	Calibration certificates for the Main and Check meters	Project participant
14.	NA	PPA	Copy of Power Purchase Agreement (PPA)	Project participant
15.	NA	Training record	Training records of the O&M personals.	Project participant
16.	NA	Grievance records	Grievance/feedback register	Project participant
17.	NA	Site Photos	Recent Photographs/videos submitted by PP of the project activity	Project participant
18.	NA	Meter replacement record	Meter replacement record for old check meter No. 07022924 with new meter no. 19008132 on 24/07/2020 vide HESCL letter dated 29/07/2020	Project participant
19.	NA	ERPA	ERPA signed for supply of credits from project activity dated 21/12/2019	Project participant

Appendix 4. Clarification requests, corrective action requests and forward action requests

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

FAR ID	XX	Section no.	-	Date: DD/MM/YYYY
Description of FAR				
No FAR is remaining from validation or previous verifications.				
Project participant response				Date: DD/MM/YYYY
NA				
Documentation provided by project participant				
NA				
DOE assessment				Date: DD/MM/YYYY
NA				

Table 2. CL from this verification

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

Table 3. CAR from this verification

CAR ID	01	Section no.	E.1	Date: 12/08/2020
Description of CAR				
Following inconsistencies observed during review of the MR:				
<ol style="list-style-type: none"> 1. Throughout monitoring report Date format is not consistent and in line with instructions to complete MR. 2. Monitoring report number is not applicable to the project activity. 3. Weblink for reference of applied tools missing in MR. 4. Reference of the connected grid not in line with current situation. 				
Correction sought.				
Project participant response				Date: 24/08/2020
<ol style="list-style-type: none"> 1. Date format has been made consistent throughout the monitoring report 2. Monitoring report number has been removed as it is not applicable here 3. Weblink for reference of applied methodology and tools have been provided in Section A.4 of Monitoring Report 4. Reference of the connected grid has been revised in line with current situation (i.e. synchronization of erstwhile Southern and NEWNE grids to form INDIAN grid) 				
Documentation provided by project participant				
Monitoring Report v02				
DOE assessment				Date: 23/09/2020
<ol style="list-style-type: none"> 1. Date format has been corrected throughout the MR in in line with the instructions to complete the MR. Hence OK. 2. PP has removed the monitoring report number. Hence OK. 3. Weblink for reference of applied tools have been added now in section A.4 of revised MR. 4. Reference of the connected grid has been added in Section A.1 of revised MR. Verification team reviewed the CEA "CO₂ baseline database guidance" and confirms that Southern grid and North-East-West and North Eastern (NEWNE) grid have been synchronized since 2013 to form INDIAN grid. 				
CAR closed.				

CAR ID	02	Section no.	E.6.2	Date: 12/08/2020
Description of CAR				
PP requested to submit all JMR in support of electricity exported, imported & transmission losses and invoices for crosscheck for the project activity.				
Project participant response				Date: 24/08/2020
1. JMRs having data of electricity exported, imported and transmission losses have been provided 2. Electricity sales invoices for the entire monitoring period have been provided.				
Documentation provided by project participant				
1. JMRs(B-FORMs) by Hubli Electricity Supply Company Limited 2. Electricity sales invoices of Generacion Eolica India Limited				
DOE assessment				Date: 23/09/2020
1. PP has provided the copies of JMRs. Verification team has checked the electricity exported, imported and transmission losses and found correct and consistent with ER sheets. 2. PP has also provided the copies of invoices. Verification team has cross checked electricity exported and Imported and found that the import of electricity for the month of November 2018 is not correct. CAR Remains Open.				
Project participant response				Date: 01/10/2020
1. Copies of invoices have been provided 2. Value of import of electricity for the month of November 2018 has been revised in ER sheet				
Documentation provided by project participant				
1. Revised MR (v03) 2. Revised ER sheet v02				
DOE assessment				Date: 05/10/2020
PP has corrected the import of electricity for the month of November 2018. Hence, Ok. CAR closed.				

CAR ID	03	Section no.	E.7	Date: 12/08/2020
Description of CAR				
PP requested to submit all Calibration certificates of monitoring meters covering complete monitoring period. Further, PP also requested to justify annual calibration frequency and address delay in calibration inline with VVS. PP also requested to submit meter change records for check meter in July 2020. Following documents are requested for further analysis: 1. Commissioning certificates of WTGs. 2. PPA for the project activity				
Project participant response				Date: 24/08/2020
1. Calibration certificates of monitoring meters throughout the monitoring period have been provided 2. The annual calibration frequency has been justified in Section D.2 of Monitoring Report along with justification that there has not been any delay in calibration 3. Meter change records for check meter has been provided and the same has been mentioned in Section D.2 of Monitoring Report 4. Commissioning Certificates of WTGs have been provided 5. PPA for the Project activity has been provided				
Documentation provided by project participant				
1. Monitoring Report v02 2. Calibration certificates of the monitoring meters for 2012, 2013, 2014, 2014, 2015, 2016, 2017, 2018 and 2019 3. Meter replacement record of Check Meter in July 2020 4. Commissioning Certificates and commissioning approval by KPTCL 5. PPA with Hubli Electricity Supply Company Limited (2007 and renewed in 2019)				
DOE assessment				Date: 23/09/2020
1. PP has provided calibration certificates of meters installed at 33 kV side Metering yard owned by Wind World (India) formally Enercon. The calibration dates have been added in revised MR. However, the details of the bulk meters installed at 220 kV metering point not provided in MR. Corrective action is sought. 2. PP has submitted the copy of PPA. Verification team has reviewed the same and confirms that the PPA has been signed between Hubli Electricity Supply Company and M/s Generation Eolica India Pvt Ltd. On 22/11/2007 and the same was renewed on 25/01/2019. CAR remains open.				
Project participant response				

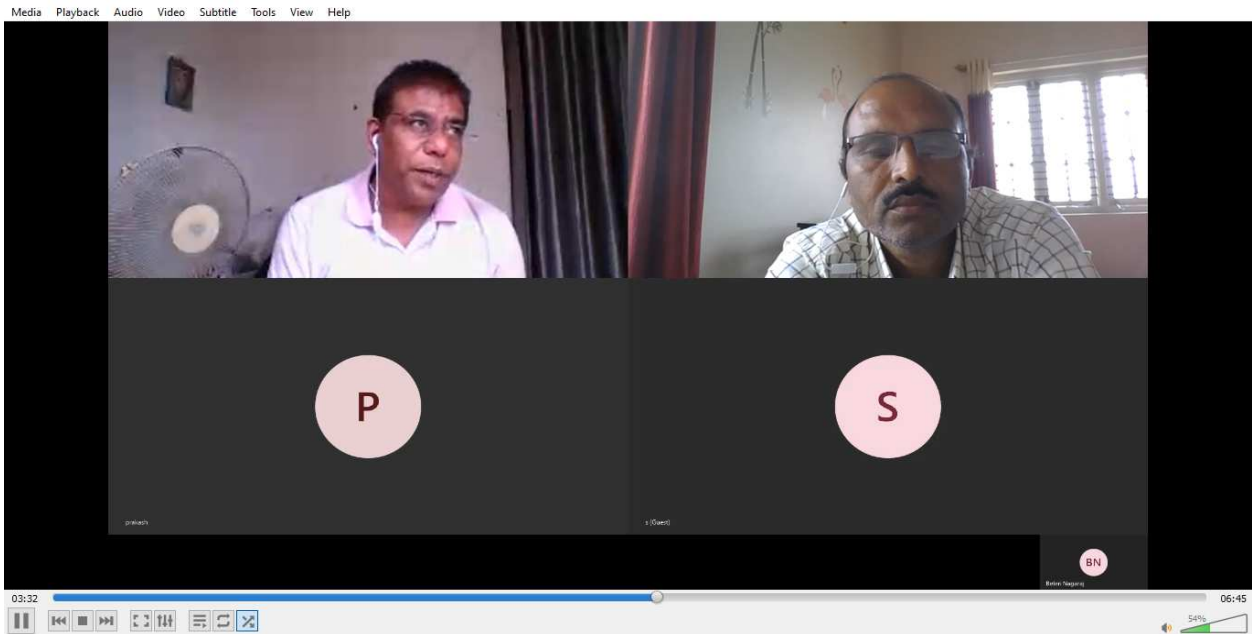
Details of bulk meters at 220 kV metering point have been provided in Section C of MR	
Documentation provided by project participant	Date : 01/10/2020
1. Revised MR (v03) 2. Calibration certificates of bulk meter located in feeder-2 for 2018 and 2019	
DOE assessment	Date: 05/10/2020
1. Details of the bulk meters installed at 220 kV metering point is not included in Section C of the revised MR. Hence, CAR closed.	

CAR ID	04	Section no.	E.8	Date: 12/08/2020
Description of CAR				
PP also requested to submit ER reduction calculation sheet to assessment team.ER are reserved for the same.				
Project participant response				Date: 24/08/2020
Ex-post ER calculation sheet has been provided				
Documentation provided by project participant				
Ex-post ER calculation sheet				
DOE assessment				Date: 23/09/2020
PP has submitted the ER sheet. CAR closed.				

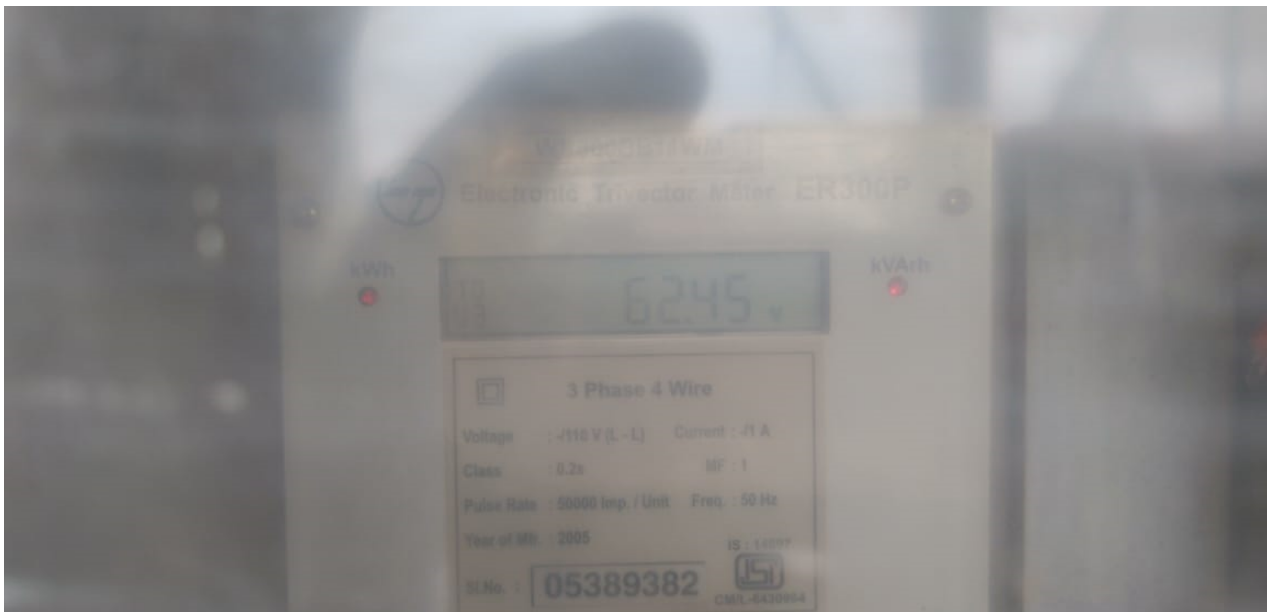
Table 4. FAR from this verification

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

Appendix 5. Remote Audit Screenshots & Some Site Snaps









Document information

<i>Version</i>	<i>Date</i>	<i>Description</i>
03.0	31 May 2019	Revision to: <ul style="list-style-type: none"> • Ensure consistency with version 02.0 of the “CDM validation and verification standard for project activities” (CDM-EB93-A05-STAN); • Make structural and editorial improvements.
02.1	11 January 2018	Editorial revision to correct the numbering of appendices in the instructions.
02.0	31 October 2017	Revision to align with the requirements of the “CDM validation and verification standard for project activities” (version 01.0).
01.0	23 March 2015	Initial publication.
Decision Class: Regulatory Document Type: Form Business Function: Issuance Keywords: project activities, verifying and certifying		