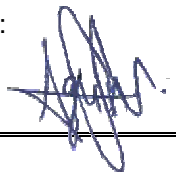
Validation report form for post-registration changes for CDM project activities

(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	Vaayu India Wind Power Project in Gujarat UNFCCC ref.No-4700
Process track	☐ Prior approval ☒ Issuance ☐ Renewal of crediting period
Version number of the validation report	02
Completion date of the validation report	12/04/2021
Type(s) of PRCs	☐ Temporary deviations from the registered monitoring plan, applied methodologies, standardized baselines or other methodological regulatory documents[1] ☒ Corrections ☐ Changes to the start date of the crediting period ☐ Inclusion of a monitoring plan ☒ Permanent changes to the registered monitoring plan, or permanent deviation of monitoring from the applied methodologies, standardized baselines or other methodological regulatory documents ☐ Changes to the project design ☐ Changes specific to afforestation and reforestation project activities
Version number of PDD to which this report applies	6
Project participants	Vaayu (India) Power Corporation Private Limited Numerco Limited, (United Kingdom) ACT Financial Solutions B.V., (Netherlands) First Climate Markets A.G. (Germany)
Host Party	India
Applied methodologies and standardized baselines	Selected Methodology: ACM0002 Version 11 – "Consolidated baseline methodology for grid-connected electricity generation from renewable sources" Selected standardized baseline: N/A
Mandatory sectoral scopes	Sectoral scope : 1- Energy industries (renewable - / non-renewable sources

[1] 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).

Conditional sectoral scopes, if applicable	NA
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 validation report	Mr. Agustín Calle de Miguel *Applus+ Certification CDM Technical Manager* Signature: 

SECTION A. Executive summary

>> The project activity consists of 64 WTGs (0.8 MW capacity each), making the total installed capacity to be 51.2 MW in the in Jamnagar district in Gujarat, India. The WTGs are supplied and maintained by Wind World (India) Limited (WWIL). The WTGs have been commissioned between 25/06/2010 to 04/07/2011.
All 64 WTGs are fully functional and the assessment team verified this during the site visit.
The basic details of the project activity are mentioned below:

Project title	Vaayu India Wind Power Project in Gujarat
UNFCCC registration number	4700
Date of registration	09/05/2011
Sectoral scope	1 – Energy industries (renewable/ non-renewable sources).
Methodology/ies applied	"Consolidated baseline methodology for grid connected electricity generation from renewable sources" ACM0002 ,Version 11
Project participant	Vaayu (India) Power Corporation Private Limited, (India) Numerco Limited, (United Kingdom) ACT Financial Solutions B.V., (Netherlands) First Climate Markets A.G. (Germany)
Location of Project Activity	Chattar, Narmana, Seth Wadala, Jam Ambardi, Mevasa, Dhun Dhoraji, Sadodar, Bodi, Padavala and Machharda villages in Jamnagar and Rajkot districts Gujarat state in India

Scope of validation

LGAI Technological Center, S.A. (hereafter referred to as Applus+ Certification) has been contracted by Vaayu (India) Power Corporation Private Limited to conduct the verification and certification of emission reductions reported for the CDM project activity "Vaayu India Wind Power Project in Gujarat" (UN ref no. 4700) in India for the period 01/04/2017 to 31/03/2018 (including both days).

During the course of verification, the PP has decided to propose Post Registration Changes to the project activity in order to address the findings raised as part of verification. The scope of validation remains limited to the proposed changes to the registered PDD. This validation is an independent and objective review of the post registration changes proposed in the revised PDD against latest CDM Validation and Verification Standard (CDM VVS for PAs version 02.0), Project Standard (CDM PS for PAs version 02.0), Project Cycle Procedures (CDM PCP for PAs version 02.0) and other related requirements, as appropriate.

Validation process

The validation process is undertaken by verification team that involved the desk review of proposed changes as submitted by the PP, undertaking site visit, interview or interactions with the representative of PP, reporting and closure of findings, as appropriate and preparing a draft validation report complying with the CDM requirements. An independent Technical Review team reviews the validation report prepared by the team. The final validation report accepted by Technical Reviewer is then approved on behalf of Applus+ Certification and processed further as per CDM procedures.

Conclusion

The description in the revised PDD, Version 6 dated 09/04/2021 meets all relevant UNFCCC requirements for the CDM and correctly applies the selected baseline and monitoring methodology.

This report is the assessment opinion for all the changes that are proposed in the registered monitoring plan and corrections in the registered PDD; the changes are permanent in nature and therefore there is no temporary deviation from the registered monitoring plan. The proposed changes to the registered PDD are covered under Appendix of the CDM Project Standard for project activities version 02.0(EB 101, Annex 01) and hence do not require prior approval by the Board.

SECTION B. Validation team, technical reviewer and approver

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B.1. Validation team member

No.	Role	L / A	Last name	First name	Affiliation	Involvement in

					(e.g. name of central or other office of DOE or outsourced entity)	Desk/document review	On-site inspection	Interviews	Verification findings
1.	Team Leader / Technical Expert	OR	Ahirwar	Vivek Kumar	GCEES	Y	Y	Y	Y
2.	Auditor in Training[2]	OR	Soni	Ravi Kant	GCEES	Y	Y	Y	Y

B.2. Technical reviewer and approver of the validation report on PRCs

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	Shen	Simon	Applus+ Certification
2.	Approver	IR	Calle de Miguel	Agustín	Applus+ Certification

SECTION C. Means of validation

C.1. Desk/document review

>> Applus+ Certification conducted a desk review as under;

- A review of the data and information presented to verify their completeness;
- A review of the monitoring plan, the monitoring methodology including applicable tool(s) and, where applicable, the applied standardized baseline, paying particular attention to the frequency of measurements, the quality of metering equipment including calibration requirements, and the quality assurance and quality control procedures;
- An evaluation of data management and the quality assurance and quality control system in the context of their influence on the generation and reporting of emission reductions;

In addition to the monitoring documentation, Applus+ Certification has reviewed;

- The registered PDD Version 04 dated 17/04/2013, revised PDD version 6, dated 09/04/2021 and the monitoring plan;
- The applied monitoring methodology (ACM0002 Version 11);
- The monitoring report (all versions) to verify that it is as per the standardized format;
- Any other information and references relevant to the project activity's emission reductions (e.g. IPCC reports, data on electricity generation in the national grid or laboratory analysis and national regulations).

The complete list of documents reviewed is included under Appendix 3.

[2] At the time of conduction of the site visit by the DOE.

C.2. On-site inspection

Duration of on-site inspection: 31/05/2018				
No.	**Activity performed on-site**	**Site location**	**Date**	**Team member**
1.	Confirm the implementation and operation of the project;	WTG project site at District- Jamnagar and Rajkot State-Gujarat ; India	31/05/2018	Vivek Kumar Ahirwar and Ravi Kant Soni
2.	Review the data flow for generating, aggregating and reporting the monitoring parameters;	WTG project site at District- Jamnagar and Rajkot State-Gujarat ; India	31/05/2018	Vivek Kumar Ahirwar and Ravi Kant Soni
3.	Confirm the correct implementation of procedures for operations and data collection;	WTG project site at District- Jamnagar and Rajkot State-Gujarat ; India	31/05/2018	Vivek Kumar Ahirwar and Ravi Kant Soni
4.	Cross-check the information provided in the MR documentation with other sources;	WTG project site at District- Jamnagar and Rajkot State-Gujarat ; India	31/05/2018	Vivek Kumar Ahirwar and Ravi Kant Soni
5.	Check the monitoring equipment against the requirements of the PDD and the approved methodology, including calibrations, maintenance, etc.;	WTG project site at District- Jamnagar and Rajkot State-Gujarat ; India	31/05/2018	Vivek Kumar Ahirwar and Ravi Kant Soni
6.	Review the calculations and assumptions used to obtain the GHG data and ER;	WTG project site at District- Jamnagar and Rajkot State-Gujarat ; India	31/05/2018	Vivek Kumar Ahirwar and Ravi Kant Soni
7.	Indentify if the quality control and quality assurance procedures are in place to prevent or correct errors or omissions in the reported parameters.	WTG project site at District- Jamnagar and Rajkot State-Gujarat ; India	31/05/2018	Vivek Kumar Ahirwar and Ravi Kant Soni

C.3. Interviews

No.	Interviewee			Date	Subject	Team member
	Last name	First name	Affiliation			
1.	Borah	Deep Jyoti	Vaayu (India) Power Corporation Private Limited	31/05/2018	Electricity Generation Records (monthly energy statements, Invoices and break up sheets), Reliability & accuracy of readings considered for emission reduction calculations, Calibration procedure	Vivek Kumar Ahirwar and Ravi Kant Soni
2	Vasara	Kishore	Vaayu (India) Power Corporation Private Limited	31/05/2018	Monitoring and measuring system, Collection of measurements, Observations of established practices and Data Verification of monitoring parameters	Vivek Kumar Ahirwar and Ravi Kant Soni
3	Kumar	Ajay	WWIL	31/05/2018	Monitoring and measuring system, Collection of measurements, Observations of established practices and Data Verification of monitoring parameters	Vivek Kumar Ahirwar and Ravi Kant Soni
4	Kumar	Dharmendra	WWIL	31/05/2018	Monitoring and measuring system, Collection of measurements, Observations of established practices and Data Verification of monitoring parameters	
5	Jadeja	M.M	WWIL	31/05/2018	QA/QC procedures, data management, internal audits to maintain data quality & reliability, maintenance Practices Consideration of monitoring period, monitoring methodology, project documentation and emission reduction calculations	Vivek Kumar Ahirwar and Ravi Kant Soni

C.4. Sampling approach

>> Not Applicable, as all monitoring data as reported in MR and ER were verified and checked from actual records.

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

Areas of validation findings	No. of CL	No. of CAR	No. of FAR
Compliance with PDD form	-	-	-
Temporary deviations from the registered monitoring plan, applied methodologies, standardized baselines or other	-	-	-

methodological regulatory documents			
Corrections	-	CAR #1	-
Changes to the start date of the crediting period	-	-	-
Inclusion of a monitoring plan	-	-	-
Permanent changes to the registered monitoring plan, or permanent deviation of monitoring from the applied methodologies, standardized baselines or other methodological regulatory documents	-	CAR #1	-
Changes to the project design	-	-	-
Changes specific to afforestation and reforestation project activities	-	-	-
Others (please specify)	-	-	-
Total	-	01	-

SECTION D. Validation findings

D.1. Compliance with PDD form

Means of validation	The project participants used a later version of the PDD form/2.6/ for the revised PDD than the version of the PDD form of the registered PDD. By means of checking updated PDD with the latest applicable and available PDD template form, version 11.0, the DOE can confirm that the information transferred to the later version of the PDD form is materially the same as that in the registered PDD besides those changes highlighted and assessed under this report.
Findings	No finding was raised
Conclusion	The updated PDD is in line with the latest applicable PDD from.

D.2. Temporary deviations from the registered monitoring plan, applied methodologies, standardized baselines or other methodological regulatory documents

Means of validation	Not Applicable
Findings	Not Applicable
Conclusion	Not Applicable

D.3. Corrections

Means of validation	The following corrections have been made in the approved registered PDD version 4, dated 17/04/2013 /1.3/: 1. There is a correction in the PDD (p.1 and section A.4) with respect to inclusion of name of aurthorized project participants. The following project participants are added in the PDD: (i) Numerco Limited (Country:United Kingdom of Great Britain and Northern Ireland) (ii) ACT Financial Solutions B.V. (Country: Netherlands) (iii) First Climate Markets A.G.(Country: Germany) The participation and aurthorization of above PPs is verified through the approvals from respective parties as aviable at UNFCCC project web page/1.5/ and found to be satisfactory,hence accepted. 2. As per the approved registered PDD, the project activity is supplying the electricity to NEWNE grid, this information was found to be consistent with the CEA Database for CO_2 emission factor, version 5 (latest version available at the time validation of project activity). In accordance with the CEA database v 05, the Indian electricity system was divided into two grids, the NEWNE and Southern Grid. However in April 2016 ,CEA has published the version 11 of Database for CO2 emission factor and as per this databse, NEWNE and Southern Grid are integrated as a single Indian Grid covering all the states. Hence the PP has updated the identification of grid in the PDD.
Findings	CAR #1 was raised and resolved.

Conclusion	The assessment team has verified the revised PDD and confirmed that all the minor editorial changes made in the revised PDD/1.7/ are in line with the actual scenario observed at the site and represent current scenario at the time of submission of the revised PDD/1.7/. This is in line with paragraph 287-289 of the VVS for project activities version 02.0/2.1/. These corrections do not require prior approval as per paragraph 1, Appendix of the CDM Project Standard for project activities version 02.0/2.2/. Further, it is confirmed that, the changes do not affect the project design and comply with Appendix of the CDM project standard for project activities version 02.0/2.2/. It is to be noted that this project is registered under the previous regulatory framework (VVM track), and the old information is transferred to the new VVS track form. The verification team confirms that the material (information) included in the new form is materially the same as the information in the registered PDD.

D.4. Changes to the start date of the crediting period

Means of validation	Not Applicable
Findings	Not Applicable
Conclusion	Not Applicable

D.5. Inclusion of a monitoring plan

Means of validation	Not Applicable
Findings	Not Applicable
Conclusion	Not Applicable

D.6. Permanent changes to the registered monitoring plan, or permanent deviation of monitoring from the applied methodologies, standardized baselines or other methodological regulatory documents

Means of validation	Permanent changes from the registered monitoring plan are identified during the current monitoring period. The monitoring plan outlined in the approved registered PDD/1.3/ mentions that the meters will be calibrated and tested once in 3 years. In the revised PDD/1.7/ the PP has updated the calibration frequency as once in 5 years. The CEA regulations 2006 (considered as national standard) issued by the Central Electricity Authority, Ministry of Power, Government of India Notification No. 502/70/CEA/DP&D dated 17/03/2006 /6.3/ clearly states that "All interface meters shall be tested at least once in five years." In accordance with the clause 6.26 of Gujarat Electricity Regulatory Commission (Electricity Supply Code and Related Matters) Regulations /6.5/, "*The licensee shall conduct periodical inspection/testing and calibration of the meters as specified by the Central Electricity Authority (Installation & Operation of Meters) Regulations, 2006 and all subsequent amendments.* *The licensee shall give the accuracy report of the meter by the laboratory to the consumer and also give periodical inspection and testing and calibration report of the meter to the consumer*". As per Article 7, clause 7.2 of the PPA /3.2/, it is stated that the meters shall be sealed by the state utility and that any meter seal shall be broken only by the representative of state utility whenever the metering systems is to be inspected, tested, adjusted, repaired or replaced. Hence it can be concluded that calibration of meters is completely under jurisdiction of state utility and PP has no control over the same. In actual practice the government officials (representative of state utility) conduct the calibration as per their convenience/ requirement and which may or may not be once in 3 years. This is verified through the interview of PPs representative and site personnel during the site visit. It is also noted that the calibration certificates issued by calibration entity (state utility) does not mention any validity date for the calibration conducted and the applied methodology ACM0002 version 11.0 does not specify any specific time period for conducting the calibration/testing of the equipment. Since calibration procedure is under the scope of state utility and not the project participant, hence the calibration practice mentioned in the registered monitoring plan cannot be followed and thus, the calibration frequency has been changed to once in a five years. Furthermore to maintain the accuracy of energy meters is in the interest of both the power off-takers (state utility) and the PP. Hence the state utility ensures that the energy meters are in proper working condition, since it has to make payments based on these meter readings. As per the clause 7.2(ii) , of the PPA , the energy meters shall be regularly checked by both the PP and the state utility representative and appropriate corrective actions would be taken in case if any malfunctioning or reasonable discrepancy in the main and check meters reading observed. It can be concluded that accuracy of the energy meter readings will not be compromised in any way by changing the calibration frequency from once in 3 years to once in a five years.
Findings	CAR #1 was raised and resolved
Conclusion	In line with the guidelines prescribed under paragraph 296-299 of CDM VVS for project activities version 02.0, the assessment team able to confirm that: (a) The changes to the registered monitoring plan are permanent in nature and do not deviates from the relevant requirements applied methodology and comply with the in the "CDM project standard for project activities". (b) The changes to the registered monitoring plan described in the revised

	PDD are in compliance with the applied methodology ACM0002 version 11.0, and do not reduce the level of accuracy of the monitoring compared with the requirements contained in the registered monitoring plan. (c) The permanent changes to the registered monitoring plan are not likely to lead to a reduction in the accuracy of the calculation of GHG emission reductions or net anthropogenic GHG removals. (d) The permanent changes comply with the relevant requirements related to the permanent changes to the registered monitoring plan in the "CDM project standard for project activities". A revised PDD reflecting the permanent changes in the monitoring plan is being submitted in line with the requirements outlined under paragraph 135-136 of CDM PCP for project activities version 02.0 /2.5/

D.7. Changes to the project design

Means of validation	Not Applicable
Findings	Not Applicable
Conclusion	Not Applicable

D.8. Changes specific to afforestation and reforestation project activities

Means of validation	Not Applicable
Findings	Not Applicable
Conclusion	Not Applicable

SECTION E. Internal quality control

>> As a final step of validation, the final documentation including the validation 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 for Issuance is submitted to the CDM-EB along with the relevant documents.

SECTION F. Validation opinion

>> Applus+certification has performed the validation of the post registration changes of the project activity 4700 "Vaayu India Wind Power Project in Gujarat". The validation was performed on the basis of rules and requirements defined by UNFCCC for the CDM project activities. The review of the revised PDD, supporting documentation and subsequent follow-up actions (including onsite visit and interviews), have provided Applus+certification with sufficient evidence to determine the fulfilment of stated criteria. The changes proposed are summarized in section D.3 and D.6 of this report.

The description in the revised PDD, Version 06 dated 09/04/2021 meets all relevant UNFCCC requirements for the CDM and correctly applies the selected baseline and monitoring methodology. This report is the assessment opinion for all the changes that are proposed in the registered PDD, the changes are permanent in nature and therefore there is no temporary deviation from the monitoring plan. All the proposed changes to the registered PDD are covered under paragraph 1 of Appendix of the CDM Project Standard for project activities version 02.0 and hence do not require prior approval by the Board. Hence revised PDD will be submitted together with request for issuance.

Appendix 1. 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 PS	Clean Development Mechanism Project Standard
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
EIL	Enercon(India) Limited
FAR	Forward Action Request
GEDA	Gujarat Electricity Development Authority
GETCO	Gujarat Electricity Transmission Company
GHG	Greenhouse Gas(es)
GUVNL	Gujarat Urja Vikas Nigam Limited
GHG	Greenhouse Gas(es)
GOI	Government of India
IRR	Internal Rate of Return
IPCC	Intergovernmental Panel on Climate Change
JMR	Joint Meter Reading
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
RMP	Revised Monitoring Plan
TR	Technical Review
UNFCCC	United Nations Framework Convention on Climate Change
VVS	Validation and Verification Standard
UID	Unique Identification number
UNFCCC	United Nations Framework Convention on Climate Change
WTG	Wind Turbine Generator
WEC	Wind Energy Convertor
WWIL	Wind World India Limited

Appendix 2. Competence of team members and technical reviewers

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

The composition of audit team shall be approved by the Applus+ Certification ensuring that the required skills are covered by the team.

The four qualification levels for team members that are assigned by formal appointment rules are as presented below:

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

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

Name	Qualification	Coverage of scope	Coverage of technical Area	Financial aspect	Host country Experience	Attendance to the On-Site Assessment
Vivek Kumar Ahirwar	Lead Auditor (LA)	Yes (1)	Yes (1.2)	N/A	Yes	Yes
Vivek Kumar Ahirwar	Technical Expert (TE)	Yes (1)	Yes (1.2)	N/A	Yes	Yes
Ravi Kant Soni	Auditor in Training (AiT)[3]	Yes (1)	Yes (1.2)	N/A	Yes	Yes
Simon Shen	Technical Reviewer (TR)	Yes (1)	Yes (1.2)	N/A	N/A	N/A

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

Vivek Kumar Ahirwar is a BEE-Certified Energy Auditor by Govt of India with over eight years of relevant experience in energy efficiency, energy audit, thermal and electrical energy generation technology from renewable source and energy conservation in energy intensive industries, designated consumers and commercial buildings, implementation of energy conservation building codes, research, process and green building projects. He is a certified lead auditor for ISO 14001 EMS and 14064. He has experience under various categories of projects stating from renewable to waste to supercritical projects and WCD. He has successfully audited more than 100 GHG (CDM/VCS/GS) projects in different states across the India. He has done Mater in Technology (Energy Management) from a premier institute, School of Energy & Environmental Studies, DAVV, Indore (M.P.), India and Bachelor of Engineering (Mechanical Engineering) from Govt. Engineering college, Rewa, RGPV, India.

[3] At the time of site visit by the DOE.

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

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

Appendix 3. Documents reviewed or referenced

No.	Author	Title	References to the document	Provider
1.	**Basic Documents (Monitoring Report, Project Design Documents, Previous Verification Reports)**			
1.0	VIPCPL	MR, version 1.1 (Published)	Dated 02/05/2018	PP
		MR, version 1.2	Dated 03/11/2018	
		MR, version 1.3	Dated 05/12/2018	
1.2	VIPCPL	MR, version (final), version 1.4	Dated 09/04/2021	PP
1.3	VIPCPL	Revised approved PDD, Version 4 (source: https://cdm.unfccc.int/PRCContainer/DB/prcp943999473/view)	Dated 17/04/2013	Other: UNFCCC
1.4	TUV Nord	Validation Opinion on PRC, Report No-8109817473 – 13/029	Dated 14/05/2013	Other: UNFCCC
1.5	UNFCCC	CDM Project activity view page "Vaayu India Wind Power Project in Gujarat" https://cdm.unfccc.int/Projects/DB/DNV-CUK1303122887.18/view	-	Other: UNFCCC
1.6	ESPL	Verification report for Fifth monitoring period (01/01/2015-31/03/2017), version 02	Dated 08/08/2017	Other: UNFCCC
1.7	VIPCPL	Revised PDD, Version 06	Dated 09/04/2021	PP
2.	**References and requirements at UNFCCC/IPCC/etc.**			
2.1	UNFCCC website	Clean Development Mechanism Validation and Verification Standard for Project Activity (CDM-VVS for PA), version 02.0 as per EB 101, Annex 2	Dated 29/11/2018	Other: UNFCCC
2.2	UNFCCC website	CDM Project Standard for Project Activity (CDM-PS for PA), version 02.0 as per EB 101, Annex 1	Dated 29/11/2018	Other: UNFCCC
2.3	UNFCCC website	Approved Consolidated Methodology ACM0002, Version 11	Dated 12/02/2010	Other: UNFCCC
2.4	UNFCCC website	Guidance to Complete "Monitoring Report Form (CDM-MR-FORM), Version 08.0" as accordance with the Attachment "Instructions for filling out the monitoring report form"	Dated 06/04/2021	Other: UNFCCC
2.5	UNFCCC website	CDM Project Cycle Procedure for Project Activity (CDM-PCP for PA), version 02.0 as per EB 101, Annex 16	Dated 29/11/2018	Other: UNFCCC
2.6	UNFCCC website	CDM-PDD-FORM, Version 11.0	Dated 31/05/2019	Other: UNFCCC
3.	**Project implementation information**			

3.1	State utility	Commissioning certificates issued by GEDA (for all 64 WTGs):	-	PP
3.2	State utility	Power Purchase Agreement between GETCO and Vaayu (India) Power Corporation Private Limited	-	PP
3.3	State utility	Monthly Share certificates issued by GETCO	For the period 01/04/2017 - 31/03/2018	PP
3.4	VIPCPL	Monthly invoices issued by PP to GETCO	For the period 01/04/2017 - 31/03/2018	PP
3.5	CEA	CEA CO_2Baseline Database for the Indian Power Sector Version 05	-	Other
3.6	Ministry of corporate Affairs, GOI	Name change consent issued by Government of India	Dated 01/01/2013	PP
3.7	State utility	Monthly JMRs issued by GETCO		PP
4.	**ER calculation and cross-checking issue**			
4.1	VIPCPL	Emission reduction calculation sheet, version 01	Dated 02/05/2018	PP
4.2	VIPCPL	Emission reduction calculation sheet, version 1.2	Dated 03/11/2018	PP
5.	**Calibration issues**			
5.1	State utility	Calibration certificates of cluster meters and substation meters. The dates of calibration have already been included in the report (Section E.7).	-	PP
6.	**Others**			
6.1	Applus+ Certification	Site Visit Attendance Sheet	31/05/2018	-
6.2	Applus+ Certification	Site Visit Photograph	-	-
6.3	CEA	Central Electricity Authority (Installation and Operation of Meters) Regulations - Notified on 17/03/2006 No.502/70/CEA/DP&D - AmendmentsNotifiedon26/06/2010No.502/6/2009/DP &D/D-I (http://www.cea.nic.in/reports/regulation/meter_reg.pdf)	17/03/2006	Other: CEA
6.4	VIPCPL	Letter to GETCO requesting to conduct calibration of meters	06/10/2017	PP
6.5	State utility	Gujarat Electricity Regulatory Commission (Electricity Supply Code and Related Matters) Regulations	Last updated on 08/11/2019	Other

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

Table 1. CLs from this validation

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

DOE assessment	**Date:** DD/MM/YYYY

Table 2. CARs from this validation

CAR ID	01	**Section no.**	E.7	**Date :** 25/03/2021

Description of CAR

The calibration of cluster meters was not done at the frequency required by the monitoring plan, and the meters have not been calibrated until the date of the end of the monitoring period. As this is a deviation from the monitoring plan, please clarify why post registration change is not requested to address this deviation in line with the guidance as outlined under paragraph 369 of VVS-PA.

Project participant response | **Date :** 05/04/2021

Section B.7.1 and B.7.3 of the registered PDD for the said project activity states that calibration/testing of energy meters will be done once in three years. There is delay in calibration of cluster meters as these cluster meters have not been calibrated since year 2013. It may be noted here that the calibration/testing of the meters is conducted by the concerned State Utility as per provisions of the Power Purchase Agreement (PPA). As per signed PPA, the energy meters shall be jointly inspected and sealed on behalf of both parties (State Utility and Project Participant (PP)); and shall not be interfered with except in the presence of representatives of both the parties. Essentially, the State Utility has to conduct the calibration of energy meters and representative of PP has to be present during the process. PP can request the state utility to conduct the calibration/testing of the energy meters at the scheduled time but cannot by any means force the state utility to conduct the calibration/testing. PP has intimated the utility regarding the delay in calibration of meters, but same has not been done yet. Hence it is not possible for project participant to conduct calibration once in 3 years as per registered monitoring plan.

The applied methodology ACM0002 version 11 does not specify any specific time period for conducting the calibration/testing of the equipment. The CEA Notification No. 502/70/CEA/DP&D dated 17/03/2006, which is considered as National Standard mentions that “All interface meters shall be tested at least once in five years.” Therefore, by applying guidelines for assessing compliance with the calibration frequency requirements and applicable national guidelines for calibration/testing of energy meters, a deviation is being requested to change the calibration/testing frequency from once in three year to once in five years.

Documentation provided by project participant

4700 MR version 1.4
4700 ER sheet version 1.3
Vaayu Guj PDD Version 5

DOE assessment | **Date:** 07/04/2021

The PP has revised the PDD updating the calibration frequency from once in 3 years to once in 5 years, considering this change as permanent change to the registered monitoring plan.
The PP has requested to change the calibration frequency from annual to once in 5 years as the same is not under control of PP, hence it is not possible to calibrate the meters in line with the frequency as outlined in the registered monitoring plan. Accordance with the guidelines as state under section 3.2.3 of CEA Notification No. 502/70/CEA/DP&D dated 17/03/2006 which is considered as national standard “All interface meters shall be tested at least once in five years.” Hence, the calibration frequency of once in 5 year, mentioned in the revised PDD for the meters is appropriate.
As per the appendix of CDM PS-PA version 02, the changes made in the registered PDD don’t require prior approval of the board, hence revised PDD will be submitted together with request for issuance.

Please address the following issues:

1. Please clarify why the latest version of the CDM-MR-FORM is not referred
2. Name of PPs is added in the registered PDD and identification of grid is updated. Kindly clarify why these changes are not mentioned under Appendix-7 of the revised PDD

CAR #1 is open

Project participant response | **Date :** 09/04/2021

1. PP has revised CDM MR as per latest version of the CDM-MR-FORM template.
2. Since name of PPs and identification of grid is updated in revised PDD, PP has provided the details of these changes under Appendix-7 of the revised PDD.

Documentation provided by project participant

Final 4700 MR version 1.4
Vaayu Guj PDD Version 6

DOE assessment	Date: 11/04/2021
The PP has updated the MR referring the latest version of CDM-MR-FORM found to be appropriate,hence accepted. The PP has appropriately described all the corrections identified in the registered PDD , under Appendix-7 of the revised PDD. CAR #1 is closed.	

Table 3. FARs from this validation

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

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Document information

Version	*Date*	*Description*
03.0	31 May 2019	Revision to: • Ensure consistency with version 02.0 of the "CDM validation and verification standard for project activities" (CDM-EB93-A05-STAN); • Make editorial improvements.
02.0	31 October 2017	Revision to align with the requirements in 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: Registration
Keywords: post-registration change, project activities, validation report